eurofins | Air Toxics

Electronic Comprehensive Validation Package (eCVP)

eurofins | Air Toxics

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 1607235A

	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	31
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)	32	43
b. Surrogate Recover Summary Form (If Applicable)	44	44
c. Internal Standard Summary Form (If Applicable)	45	45
d. Duplicate Results Summary Sheet	46	47
e. Matrix Spike/Matrix Spike Duplicate (Results + Raw Data	--	--
f. Initial Calibration Data (Summary Sheet + Raw Data)	48	335
g. MDL Study (If Applicable)	336	359
h. Continuing Calibration Verification Data (Summary Sheet	360	375
i. Second Source LCS(Summary + Raw Data)	376	403
j. Extraction Logs	--	--
k. Instrument Run Logs/Software Verification	404	405
l. GC/MS Tune (Results + Raw Data)	406	445
4. Shipping/Receiving Documents		
a. Login Receipt Summary Sheet	446	447
b. Chain-of-Custody Records	448	449
c. Sample Log-In Sheet	450	450
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	451	453
c. Manual Calculations	--	--
d. Canister Dilution Factors	454	455
e. Laboratory Corrective Action Request	--	--
f. CAS Number Reference	456	457
g. Variance Table	--	--
h. Canister Certification	458	499
i. Data Review Check Sheet	500	501

Comments:

Completed by:

Vera Belitsky	Vera Belitsky / Document Control	7/22/16
(Signature)	(Print Name & Title)	(Date)

CONFIDENTIALITY NOTICE: This communication and any accompanying documents are confidential and privileged. The proprietary information contained in this e-mail message, and any files transmitted with it, is intended for the use of the recipient(s) named above. If you received this transmission in error, you are advised that any disclosure, copying, distribution, or the taking of any action in reliance upon the communication is strictly prohibited. If you have received this communication in error, please contact Eurofins Air Toxics, Inc. at (916)-985-1000.

eurofins | Air Toxics

WORK ORDER #: 1607235A

Work Order Summary

CLIENT:	Mr. Terry Taylor Anderson Mulholland & Associates, Inc. 2700 Westchester Avenue Suite 417 Purchase, NY 10577	**BILL TO:**	Accounts Payable Anderson Mulholland & Associates, Inc. 2700 Westchester Avenue Suite 417 Purchase, NY 10577
PHONE:	(914) 251-0400	**P.O. #**	
FAX:		**PROJECT #**	Building 18 VI
DATE RECEIVED:	07/14/2016	**CONTACT:**	Brian Whittaker
DATE COMPLETED:	07/15/2016		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
07A	B30IA-1 (070816)	Modified TO-15	5.7 "Hg	4.8 psi
08A	Lab Blank	Modified TO-15	4.7 "Hg	15.1 psi
09A	CCV	Modified TO-15	4.7 "Hg	14.8 psi
10A	LCS	Modified TO-15	4.7 "Hg	15.1 psi
10AA	LCSD	Modified TO-15	4.7 "Hg	15.1 psi

CERTIFIED BY: Heidi Mayo

Technical Director

DATE: 07/15/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
Anderson Mulholland & Associates, Inc.
Workorder# 1607235A

One 6 Liter Summa Canister (100% Certified) sample was received on July 14, 2016. 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

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

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.

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
B30IA-1 (070816)	1607235A-07A	7/ 9/2016	7/14/2016	NA	5	7/14/2016	NA	Good
Lab Blank	1607235A-08A	NA	NA	NA	NA	7/14/2016	NA	Good
CCV	1607235A-09A	NA	NA	NA	NA	7/14/2016	NA	Good
LCS	1607235A-10A	NA	NA	NA	NA	7/14/2016	NA	Good
LCSD	1607235A-10AA	NA	NA	NA	NA	7/14/2016	NA	Good

Sample Results and Raw Data

eurofins | Air Toxics

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

Client Sample ID: B30IA-1 (070816)

Lab ID#: 1607235A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.39	0.81	1.9
Chloromethane	0.82	0.60 J	1.7	1.2 J
Freon 11	0.16	0.26	0.92	1.4
Ethanol	0.82	5.8	1.5	11
Freon 113	0.16	0.070 J	1.2	0.54 J
Acetone	0.82	6.8	1.9	16
2-Propanol	0.82	3.0	2.0	7.3
Carbon Disulfide	0.82	0.65 J	2.6	2.0 J
Methylene Chloride	0.33	0.074 J	1.1	0.26 J
2-Butanone (Methyl Ethyl Ketone)	0.82	1.2	2.4	3.6
Carbon Tetrachloride	0.16	0.066 J	1.0	0.42 J
Benzene	0.16	0.073 J	0.52	0.23 J
4-Methyl-2-pentanone	0.16	0.12 J	0.67	0.49 J
Toluene	0.16	0.18	0.62	0.70
2-Hexanone	0.82	0.17 J	3.4	0.70 J
m,p-Xylene	0.16	0.12 J	0.71	0.54 J

eurofins | Air Toxics

Client Sample ID: B30IA-1 (070816)

Lab ID#: 1607235A-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e071418**	**Date of Collection:**	**7/9/16 6:12:00 PM**
Dil. Factor:	**1.64**	**Date of Analysis:**	**7/14/16 09:54 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.39	0.81	1.9
Freon 114	0.16	Not Detected	1.1	Not Detected
Chloromethane	0.82	0.60 J	1.7	1.2 J
Vinyl Chloride	0.16	Not Detected	0.42	Not Detected
1,3-Butadiene	0.16	Not Detected	0.36	Not Detected
Bromomethane	0.82	Not Detected	3.2	Not Detected
Chloroethane	0.82	Not Detected	2.2	Not Detected
Freon 11	0.16	0.26	0.92	1.4
Ethanol	0.82	5.8	1.5	11
Freon 113	0.16	0.070 J	1.2	0.54 J
1,1-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Acetone	0.82	6.8	1.9	16
2-Propanol	0.82	3.0	2.0	7.3
Carbon Disulfide	0.82	0.65 J	2.6	2.0 J
3-Chloropropene	0.82	Not Detected	2.6	Not Detected
Methylene Chloride	0.33	0.074 J	1.1	0.26 J
Methyl tert-butyl ether	0.16	Not Detected	0.59	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Hexane	0.16	Not Detected	0.58	Not Detected
1,1-Dichloroethane	0.16	Not Detected	0.66	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.82	1.2	2.4	3.6
cis-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Tetrahydrofuran	0.82	Not Detected UJ	2.4	Not Detected UJ
Chloroform	0.16	Not Detected	0.80	Not Detected
1,1,1-Trichloroethane	0.16	Not Detected	0.89	Not Detected
Cyclohexane	0.16	Not Detected	0.56	Not Detected
Carbon Tetrachloride	0.16	0.066 J	1.0	0.42 J
2,2,4-Trimethylpentane	0.82	Not Detected	3.8	Not Detected
Benzene	0.16	0.073 J	0.52	0.23 J
1,2-Dichloroethane	0.16	Not Detected	0.66	Not Detected
Heptane	0.16	Not Detected	0.67	Not Detected
Trichloroethene	0.16	Not Detected	0.88	Not Detected
1,2-Dichloropropane	0.16	Not Detected	0.76	Not Detected
1,4-Dioxane	0.16	Not Detected	0.59	Not Detected
Bromodichloromethane	0.16	Not Detected	1.1	Not Detected
cis-1,3-Dichloropropene	0.16	Not Detected	0.74	Not Detected
4-Methyl-2-pentanone	0.16	0.12 J	0.67	0.49 J
Toluene	0.16	0.18	0.62	0.70
trans-1,3-Dichloropropene	0.16	Not Detected	0.74	Not Detected
1,1,2-Trichloroethane	0.16	Not Detected	0.89	Not Detected
Tetrachloroethene	0.16	Not Detected	1.1	Not Detected
2-Hexanone	0.82	0.17 J	3.4	0.70 J

eurofins | Air Toxics

Client Sample ID: B30IA-1 (070816)

Lab ID#: 1607235A-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e071418**	**Date of Collection:**	**7/9/16 6:12:00 PM**
Dil. Factor:	**1.64**	**Date of Analysis:**	**7/14/16 09:54 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.16	Not Detected	1.4	Not Detected
1,2-Dibromoethane (EDB)	0.16	Not Detected	1.3	Not Detected
Chlorobenzene	0.16	Not Detected	0.76	Not Detected
Ethyl Benzene	0.16	Not Detected	0.71	Not Detected
m,p-Xylene	0.16	0.12 J	0.71	0.54 J
o-Xylene	0.16	Not Detected	0.71	Not Detected
Styrene	0.16	Not Detected	0.70	Not Detected
Bromoform	0.16	Not Detected	1.7	Not Detected
Cumene	0.16	Not Detected	0.81	Not Detected
1,1,2,2-Tetrachloroethane	0.16	Not Detected	1.1	Not Detected
Propylbenzene	0.16	Not Detected	0.81	Not Detected
4-Ethyltoluene	0.16	Not Detected	0.81	Not Detected
1,3,5-Trimethylbenzene	0.16	Not Detected	0.81	Not Detected
1,2,4-Trimethylbenzene	0.16	Not Detected	0.81	Not Detected
1,3-Dichlorobenzene	0.16	Not Detected	0.99	Not Detected
1,4-Dichlorobenzene	0.16	Not Detected	0.99	Not Detected
alpha-Chlorotoluene	0.16	Not Detected	0.85	Not Detected
1,2-Dichlorobenzene	0.16	Not Detected	0.99	Not Detected
1,2,4-Trichlorobenzene	0.82	Not Detected	6.1	Not Detected
Hexachlorobutadiene	0.82	Not Detected	8.7	Not Detected
Naphthalene	0.82	Not Detected	4.3	Not Detected

J = Estimated value.
UJ = Analyte associated with low bias in the CCV.
Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	98	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/14Jul2016.b/e071418.d
Lab Smp Id: 1607235A-07A
Inj Date : 14-JUL-2016 21:54
Operator : gh Inst ID: msde.i
Smp Info : 250mL# 6L0493
Misc Info : 5.7"Hg -> 4.8psi
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/14Jul2016.b/e16l0317f.m
Meth Date : 14-Jul-2016 14:31 efinn Quant Type: ISTD
Cal Date : 24-MAY-2016 10:14 Cal File: e052406.d
Als bottle: 2
Dil Factor: 1.64000
Integrator: HP RTE Compound Sublist: TO15NMDL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
11 Freon 12						CAS #: 75-71-8		
5.221	5.220	(0.339)	85	22115	0.23879	0.3916	80.00- 120.00	100.00
5.196	5.196	(0.338)	87	8132			2.00- 62.00	36.77
17 Chloromethane						CAS #: 74-87-3		
6.932	6.932	(0.450)	50	6430	0.36592	0.6001	80.00- 120.00	100.00(aM)
6.932	6.932	(0.450)	52	1349			5.50- 65.50	20.98
35 Freon 11						CAS #: 75-69-4		
10.747	10.747	(0.698)	101	15778	0.15822	0.2595	80.00- 120.00	100.00
10.747	10.747	(0.698)	103	10473			37.17- 97.17	66.38
42 Ethanol						CAS #: 64-17-5		
11.681	11.680	(0.759)	45	25757	3.56448	5.846	80.00- 120.00	100.00
11.681	11.680	(0.759)	46	10763			6.61- 66.61	41.79
11.681	11.680	(0.759)	43	10248			0.00- 54.66	39.79
49 Freon 113						CAS #: 76-13-1		
12.081	12.080	(0.785)	151	3212	0.04298	0.07049	80.00- 120.00	100.00(a)
12.081	12.080	(0.785)	153	1644			33.64- 93.64	51.20

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

   49 Freon 113 (continued)
 12.062  12.080 (0.784)   101      3043                    80.40- 140.40    94.73
-------------------------------------------------------------------------------
   52 Acetone                                     CAS #: 67-64-1
 12.366  12.366 (0.803)    58     50181 4.11795    6.753  80.00- 120.00   100.00
 12.366  12.366 (0.803)    43    191180                   321.47- 381.47   380.98
-------------------------------------------------------------------------------
   56 Carbon Disulfide                            CAS #: 75-15-0
 12.443  12.442 (0.808)    76     36741 0.39559   0.6488  80.00- 120.00   100.00(a)
-------------------------------------------------------------------------------
   57 2-Propanol                                  CAS #: 67-63-0
 12.728  12.728 (0.827)    45     67546 1.81197    2.972  80.00- 120.00   100.00
 12.728  12.728 (0.827)    43     20878                     0.00-  54.09    30.91
 12.747  12.728 (0.828)    59      3161                     0.00-  34.43     4.68
-------------------------------------------------------------------------------
   66 Methylene Chloride                          CAS #: 75-09-2
 13.149  13.176 (0.854)    84      1324 0.04534  0.07436  80.00- 120.00   100.00(a)
 13.149  13.176 (0.854)    49      1489                    63.99- 123.99   112.43
  0.000  13.176 (0.000)    51         0                     0.29-  60.29     0.00
-------------------------------------------------------------------------------
   92 2-Butanone                                  CAS #: 78-93-3
 15.047  15.047 (0.978)    72     11044 0.75239    1.234  80.00- 120.00   100.00
 15.047  15.047 (0.978)    43     34656                   262.26- 322.26   313.79
 15.047  15.047 (0.978)    57      3030                     0.00-  55.71    27.44
-------------------------------------------------------------------------------
*  98 Bromochloromethane                          CAS #: 74-97-5
 15.391  15.391 (1.000)   130    110110 5.00000           80.00- 120.00   100.00
 15.391  15.391 (1.000)   128     78196                   52.25- 112.25    71.02
 15.391  15.391 (1.000)    49     72970                   89.81- 149.81    66.27
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                        CAS #: 56-23-5
 15.854  15.884 (1.030)   119      3671 0.04053  0.06648  80.00- 120.00   100.00(a)
 15.885  15.884 (1.032)   117      3545                    74.09- 134.09    96.57
-------------------------------------------------------------------------------
  116 Benzene                                     CAS #: 71-43-2
 16.183  16.183 (0.967)    78      4202 0.04438  0.07278  80.00- 120.00   100.00(a)
 16.207  16.207 (0.968)    77      1242                     0.00-  53.97    29.57
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                       CAS #: 17060-07-0
 16.183  16.207 (1.051)    65    170180 5.38370    5.384  80.00- 120.00   100.00
 16.183  16.207 (1.051)    67     78506                   21.16-  81.16    46.13
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                         CAS #: 540-36-3
 16.737  16.737 (1.000)   114    395118 5.00000           80.00- 120.00   100.00
 16.737  16.737 (1.000)    88     59506                     0.00-  45.20    15.06
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
18.984	18.984 (1.134)	43	3583	0.07333	0.1203	80.00- 120.00	100.00(a)
18.984	18.984 (1.134)	58	1263			15.64- 75.64	35.27
18.984	19.006 (1.134)	85	1164			0.00- 56.71	32.50
$ 146 Toluene-d8					CAS #: 2037-26-5		
19.276	19.275 (1.152)	98	375329	4.83674	4.837	80.00- 120.00	100.00
19.276	19.275 (1.152)	70	41597			0.00- 40.11	11.08
19.276	19.275 (1.152)	100	251649			37.58- 97.58	67.05
147 Toluene					CAS #: 108-88-3		
19.410	19.432 (1.160)	91	12745	0.11301	0.1853	80.00- 120.00	100.00
19.432	19.432 (1.161)	92	8296			28.92- 88.92	65.09
158 2-Hexanone					CAS #: 591-78-6		
20.768	20.795 (0.937)	58	2994	0.10423	0.1709	80.00- 120.00	100.00(a)
20.795	20.795 (0.939)	43	4881			140.44- 200.44	163.01
20.768	20.795 (0.937)	100	1025			0.00- 59.62	34.23
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.157	22.177 (1.000)	117	370312	5.00000		80.00- 120.00	100.00
22.157	22.177 (1.000)	82	182868			20.64- 80.64	49.38
169 m,p-Xylene					CAS #: 108-38-3		
22.468	22.467 (1.014)	106	4345	0.07665	0.1257	80.00- 120.00	100.00(a)
22.468	22.467 (1.014)	91	8195			166.46- 226.46	188.61
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
23.856	23.856 (1.077)	174	247996	4.88064	4.881	80.00- 120.00	100.00
23.856	23.856 (1.077)	95	240516			77.42- 137.42	96.98
23.856	23.856 (1.077)	176	237796			65.38- 125.38	95.89

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e071418.d
Lab Smp Id: 1607235A-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msde.i/14Jul2016.b/e16l0317f.m
Misc Info: 5.7"Hg -> 4.8psi

Calibration Date: 14-JUL-2016
Calibration Time: 08:35

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	131815	79089	184541	110110	-16.47
123 1,4-Difluorobenze	469034	281420	656648	395118	-15.76
163 Chlorobenzene-d5	419401	251641	587161	370312	-11.70

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.16	-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: 15-Jul-2016 07:16

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 14Jul2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1607235A-07A
Level: LOW
Operator: gh
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT09Bromo.spk
Quant Type: ISTD
Sublist File: TO15NMDL.sub
Method File: /chem/msde.i/14Jul2016.b/e16l0317f.m
Misc Info: 5.7"Hg -> 4.8psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	5.000	5.384	107.67	70-130
$ 146 Toluene-d8	5.000	4.837	96.73	70-130
$ 177 4-Bromofluorobenze	5.000	4.881	97.61	70-130

Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

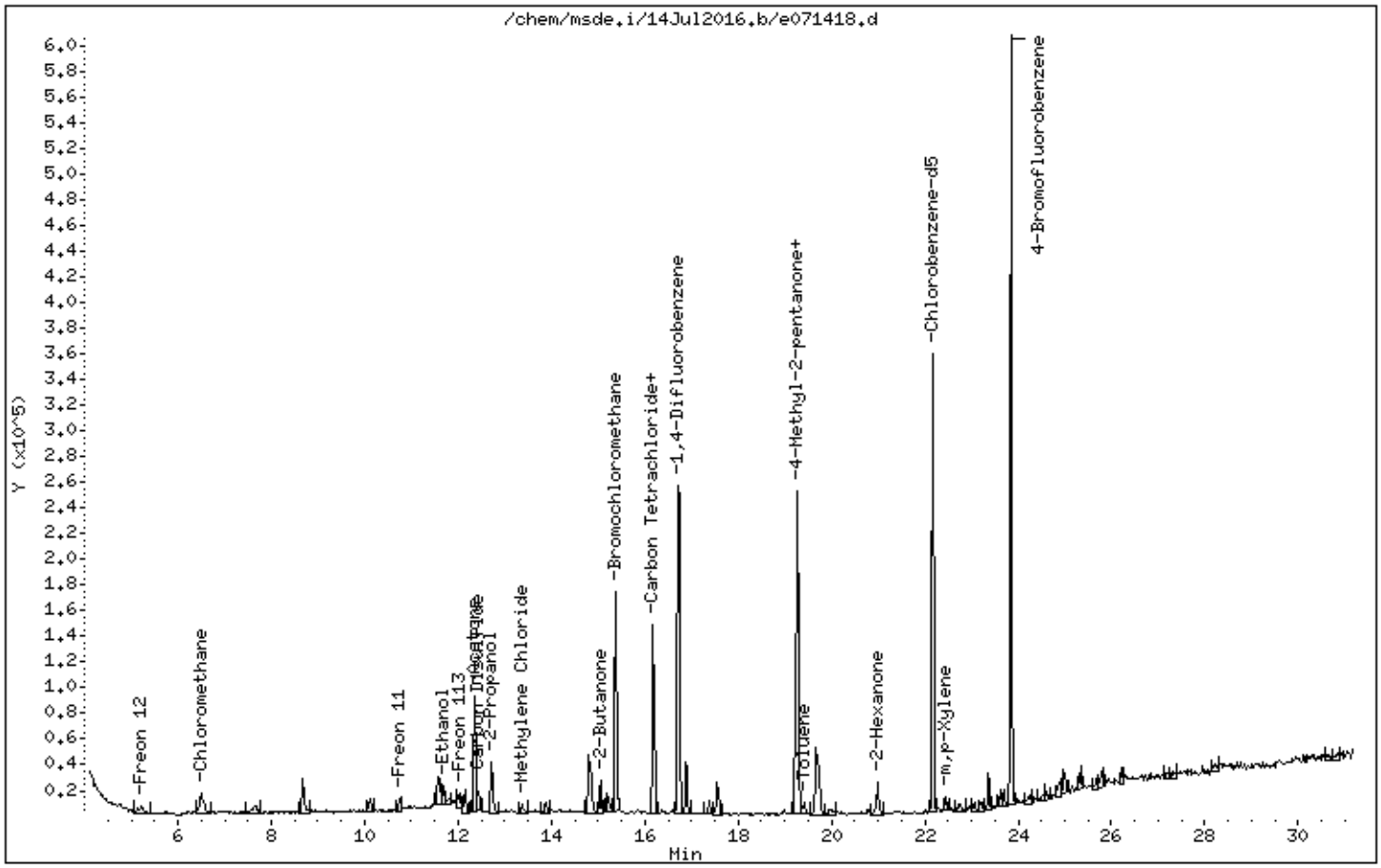
Instrument: msde.i

Sample Info: 250mL# 6L0493

Operator: gh

Column phase: RTX-624

Column diameter: 0.32



Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

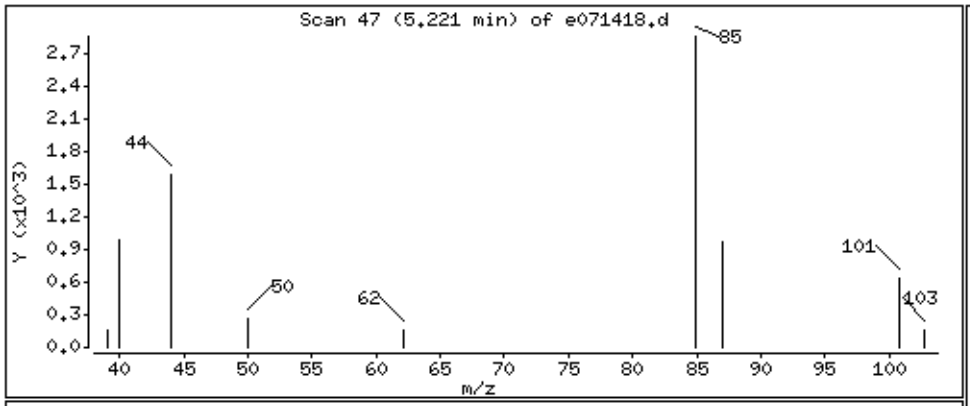
Operator: gh

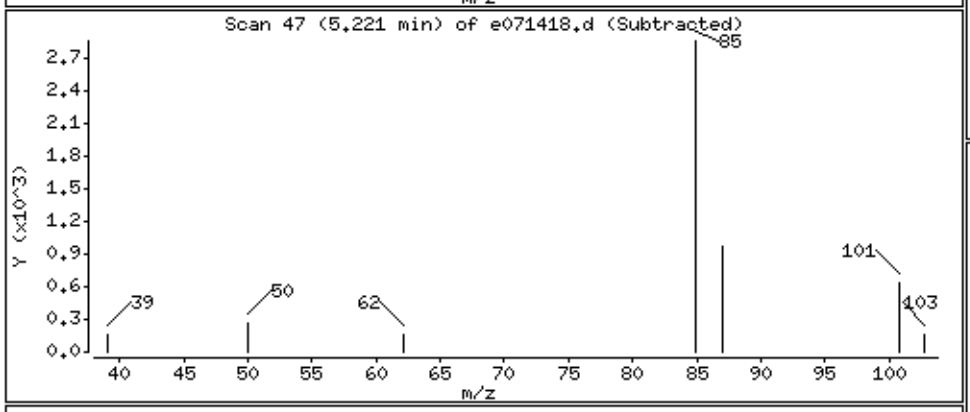
Column phase: RTX-624

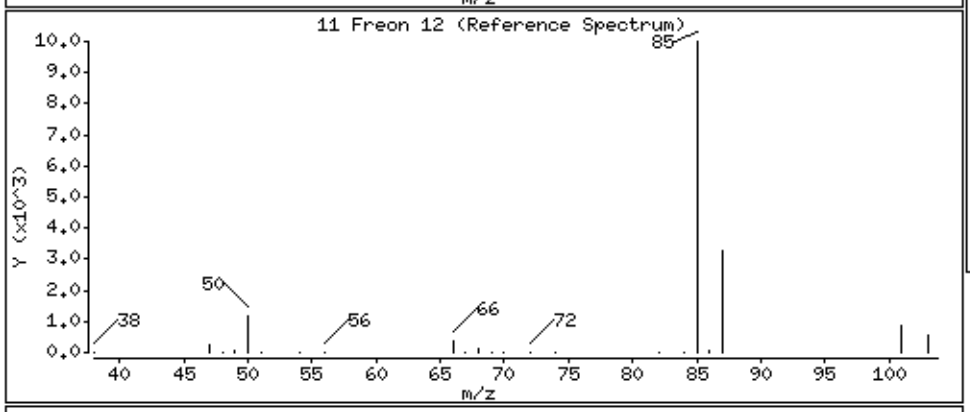
Column diameter: 0.32

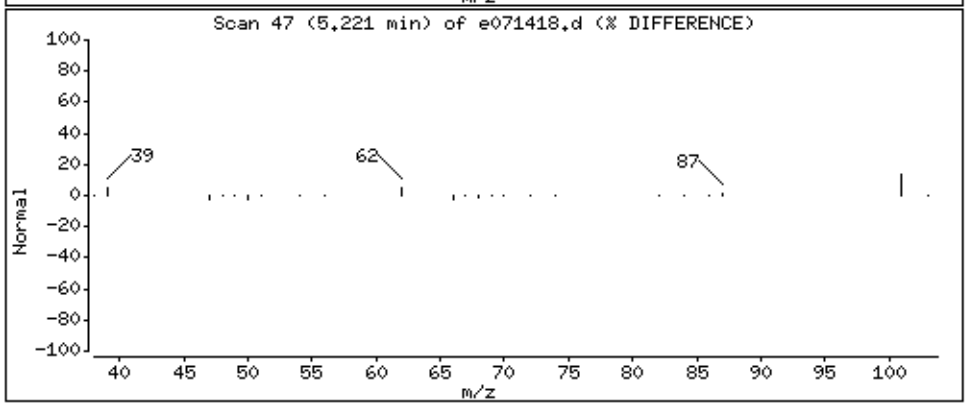
11 Freon 12

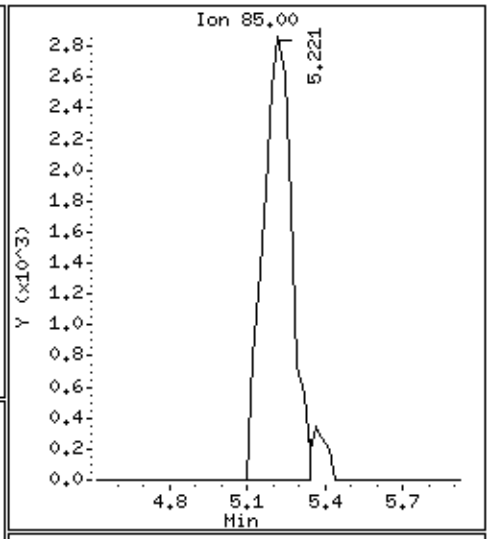
Concentration: 0.3916 PPBV

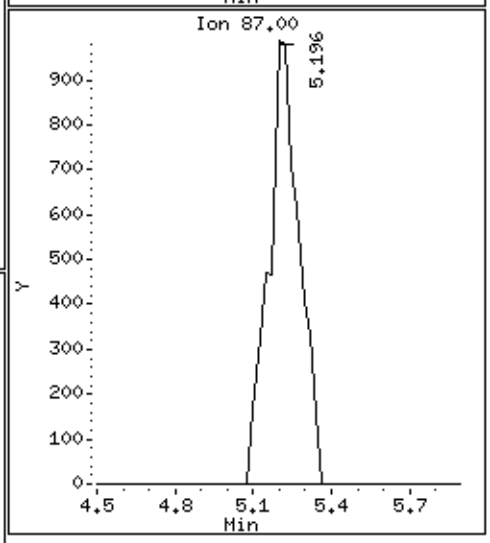












Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

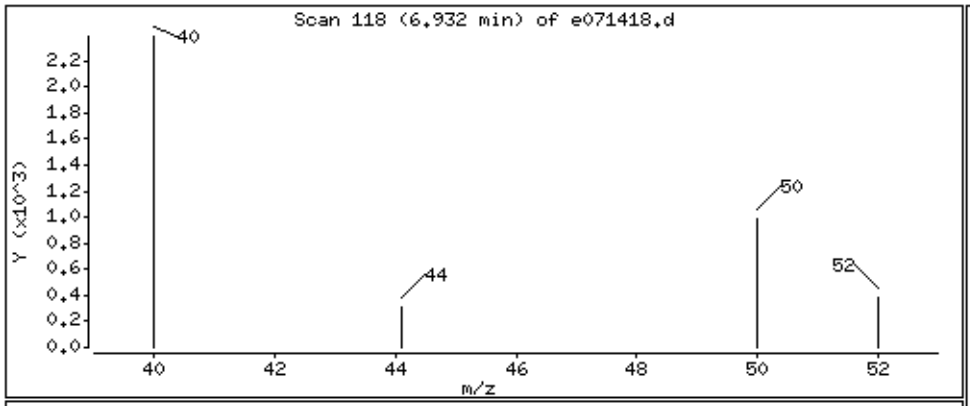
Operator: gh

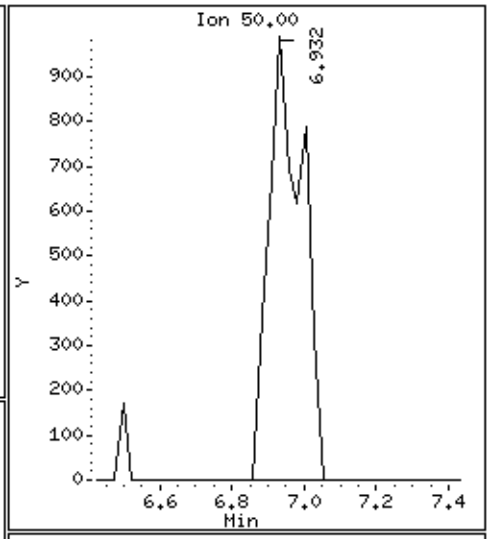
Column phase: RTX-624

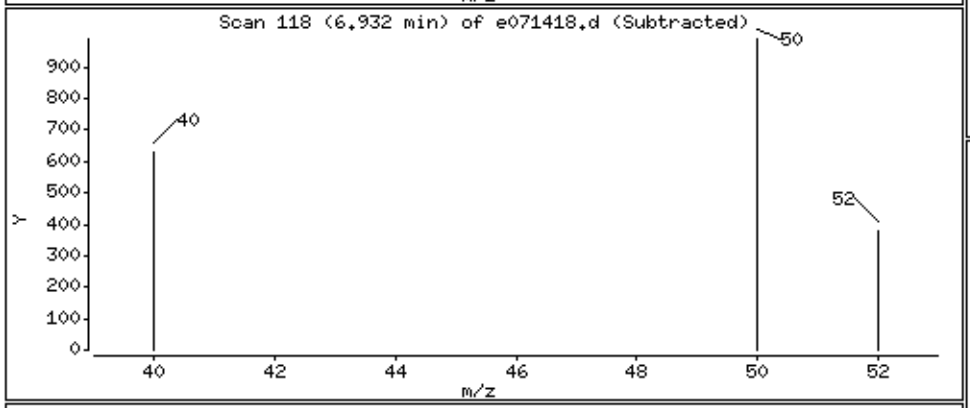
Column diameter: 0.32

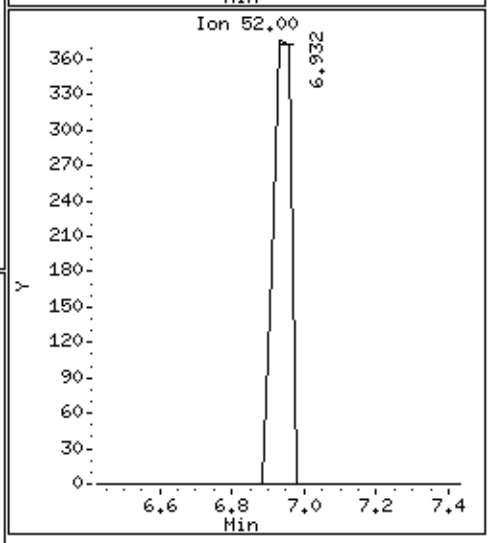
17 Chloromethane

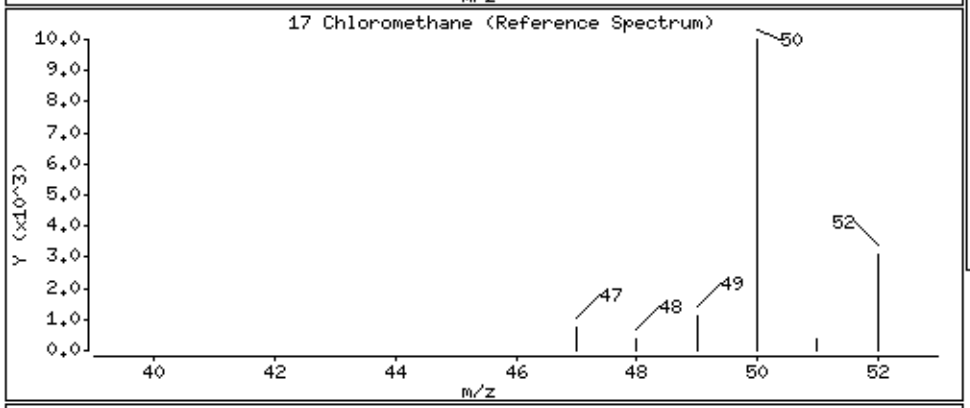
Concentration: 0.6001 PPBV

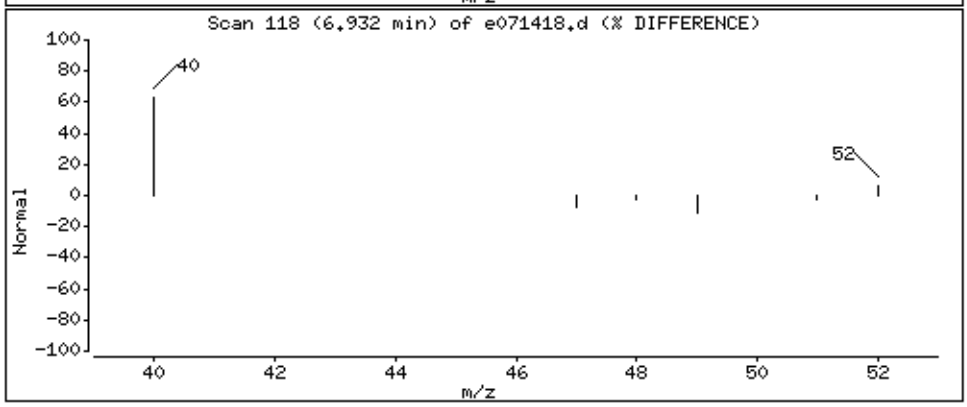












Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

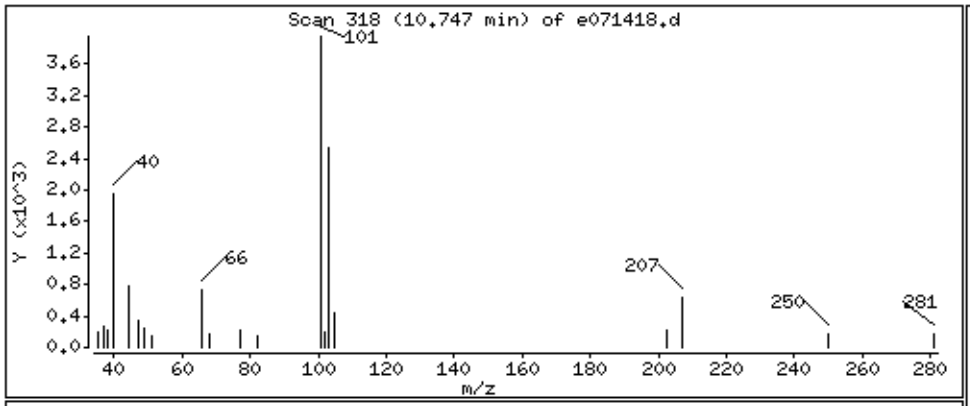
Operator: gh

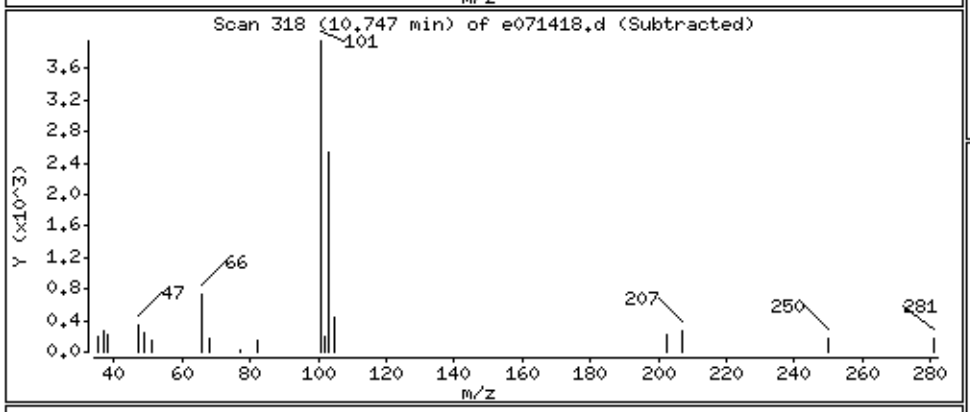
Column phase: RTX-624

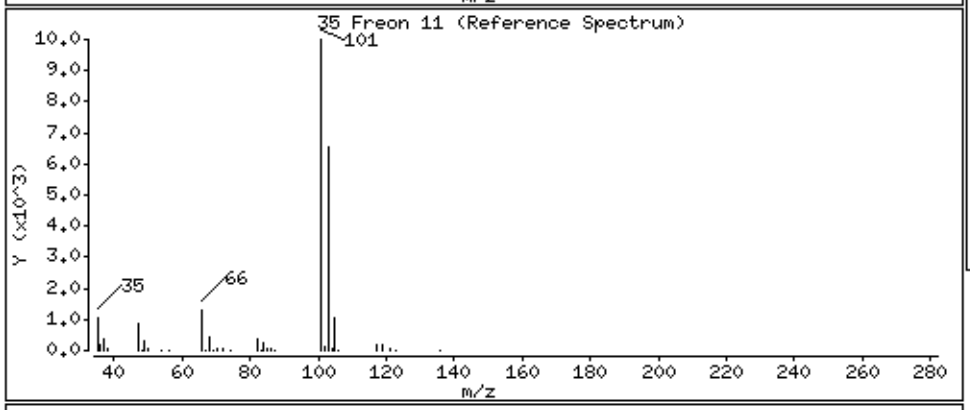
Column diameter: 0.32

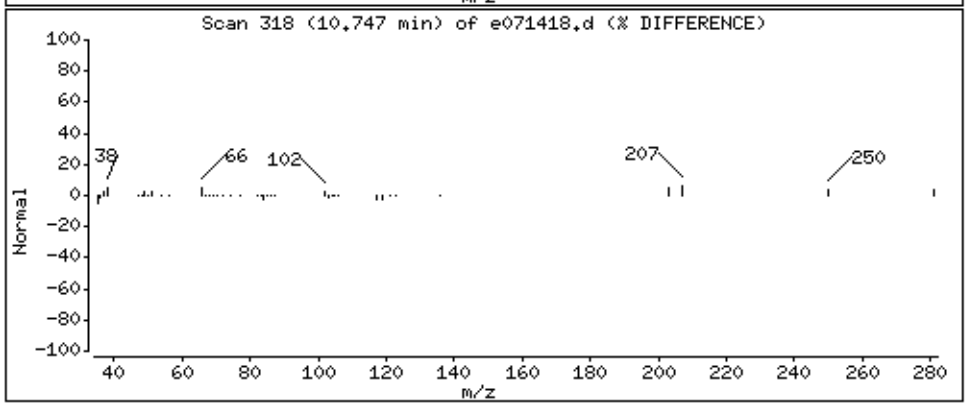
35 Freon 11

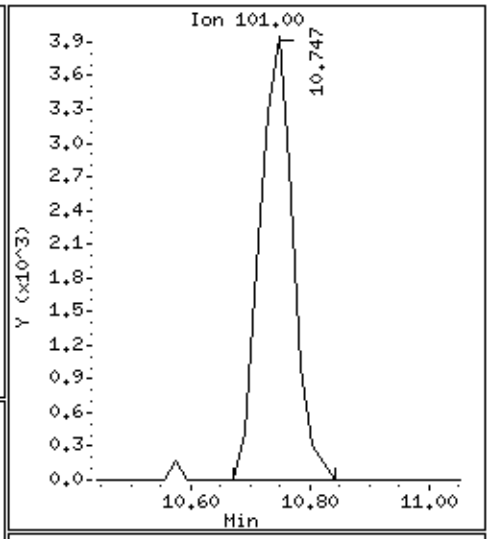
Concentration: 0.2595 PPBV

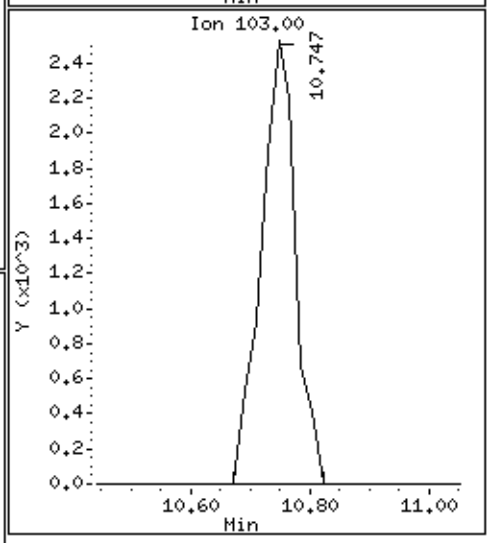












Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

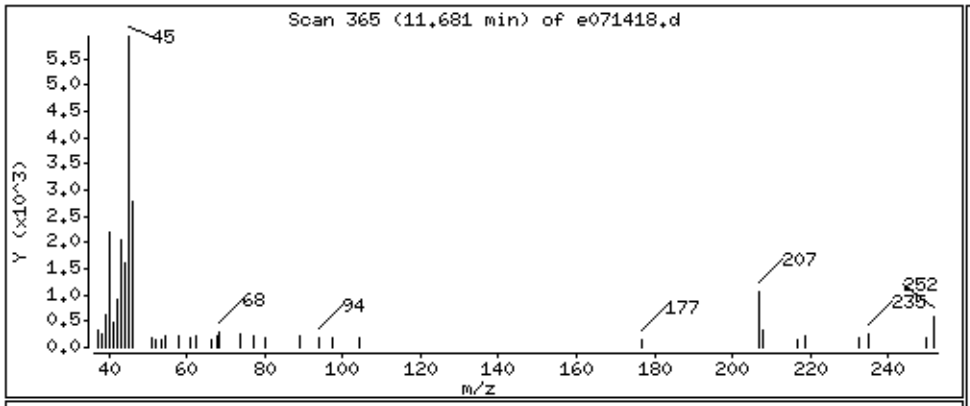
Operator: gh

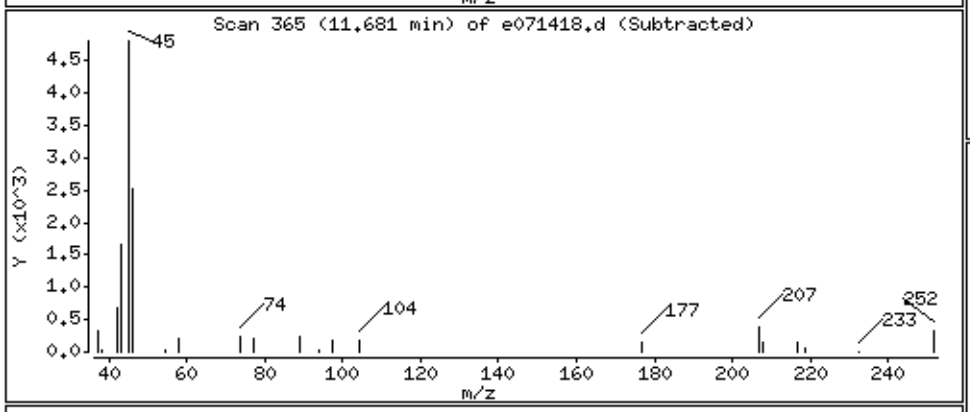
Column phase: RTX-624

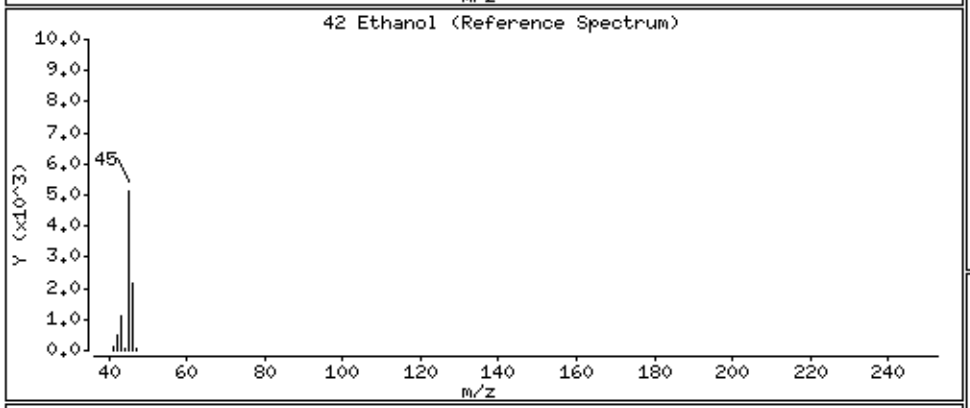
Column diameter: 0.32

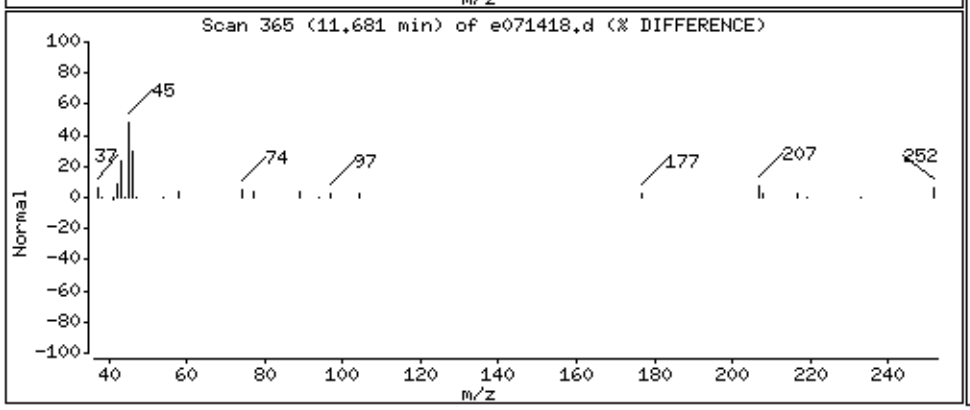
42 Ethanol

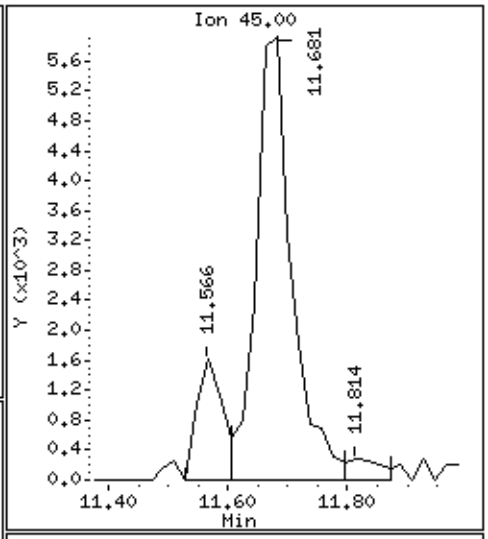
Concentration: 5.846 PPBV

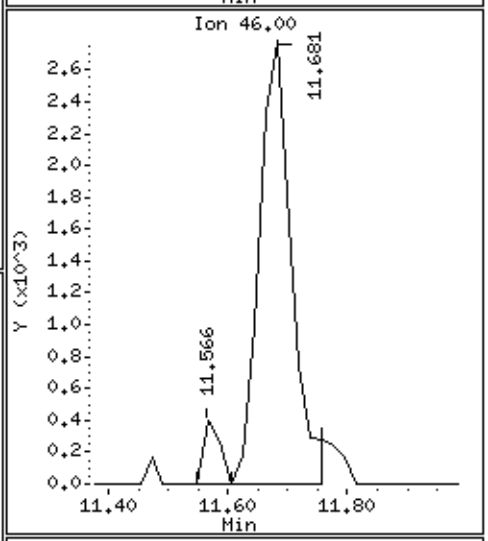


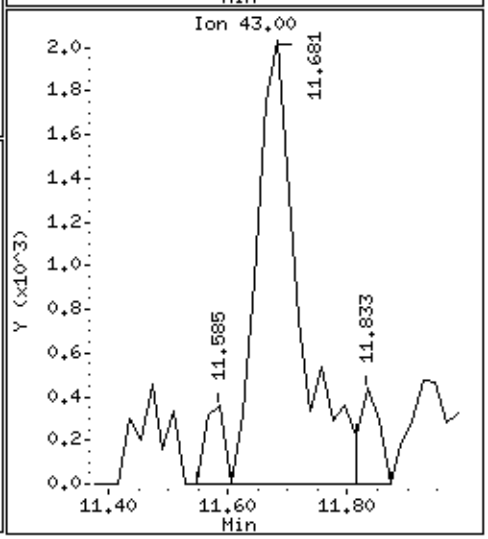












Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

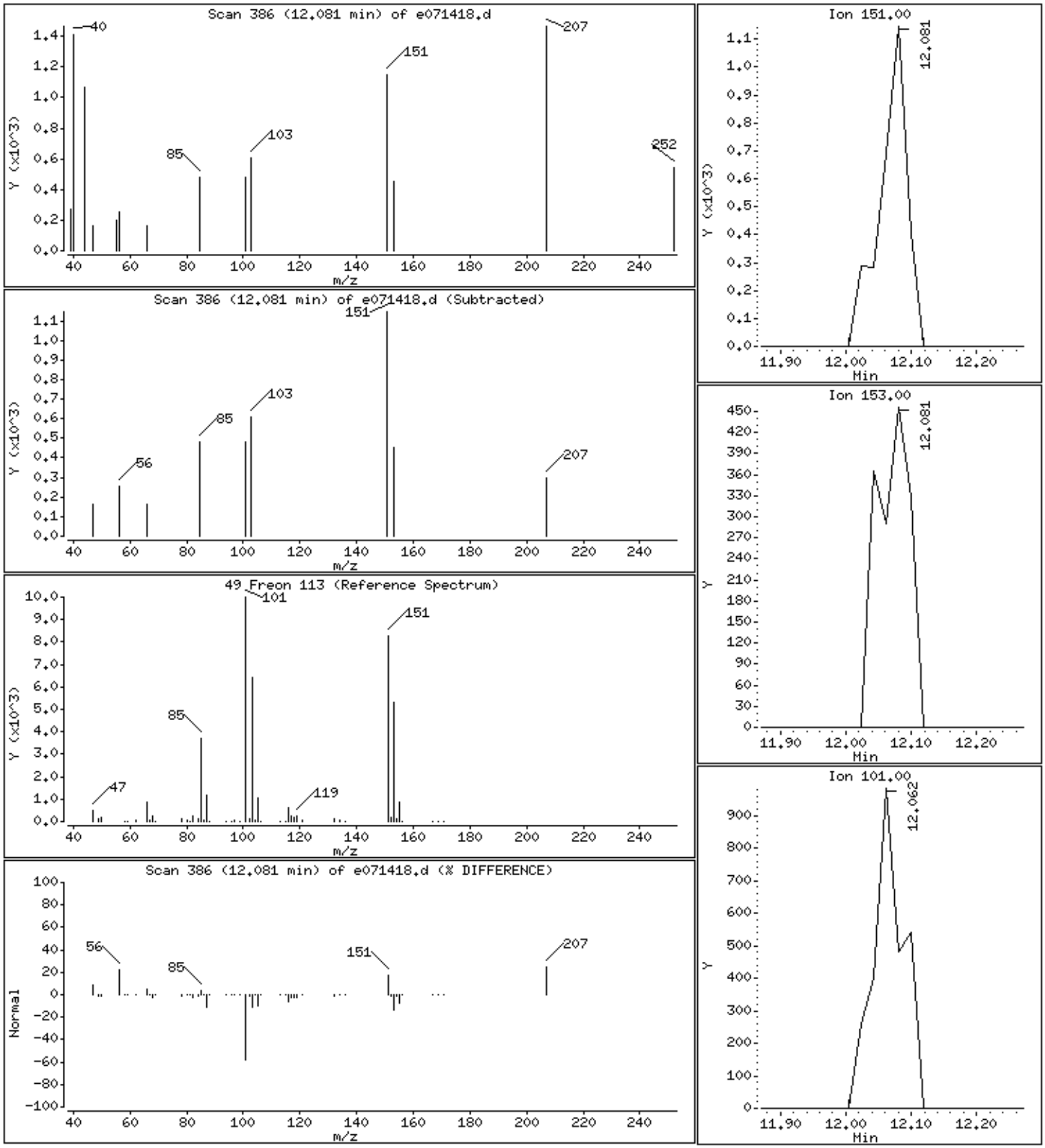
Operator: gh

Column phase: RTX-624

Column diameter: 0.32

49 Freon 113

Concentration: 0.07049 PPBV



Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

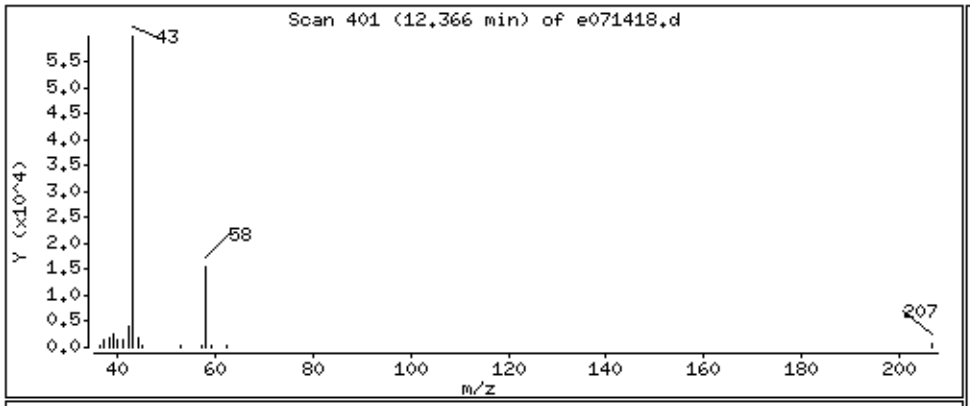
Operator: gh

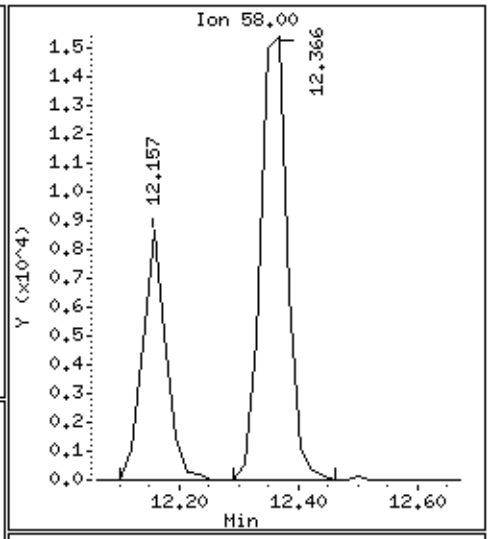
Column phase: RTX-624

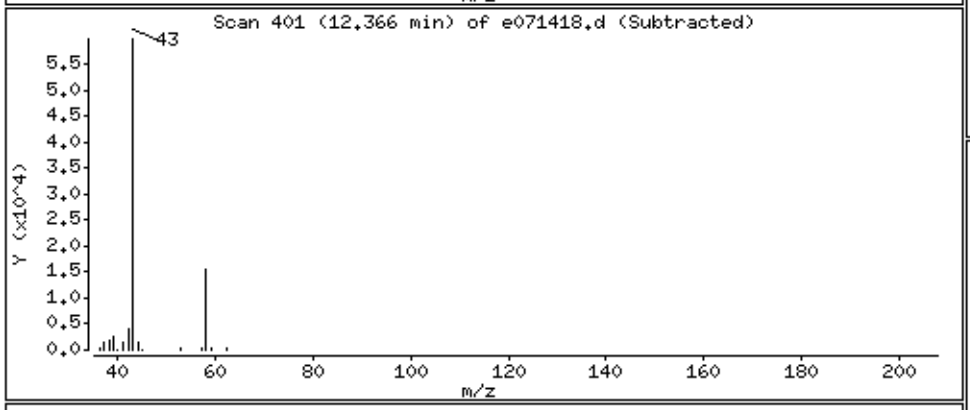
Column diameter: 0.32

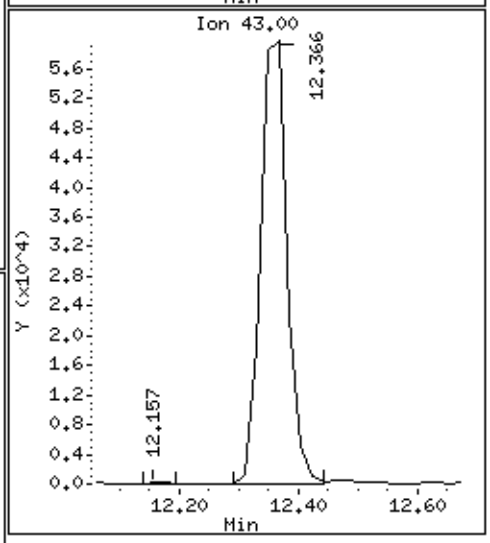
52 Acetone

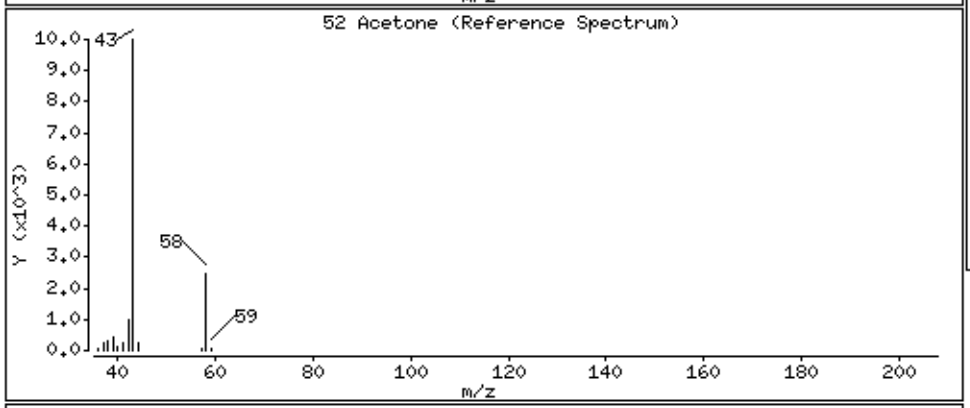
Concentration: 6.753 PPBV

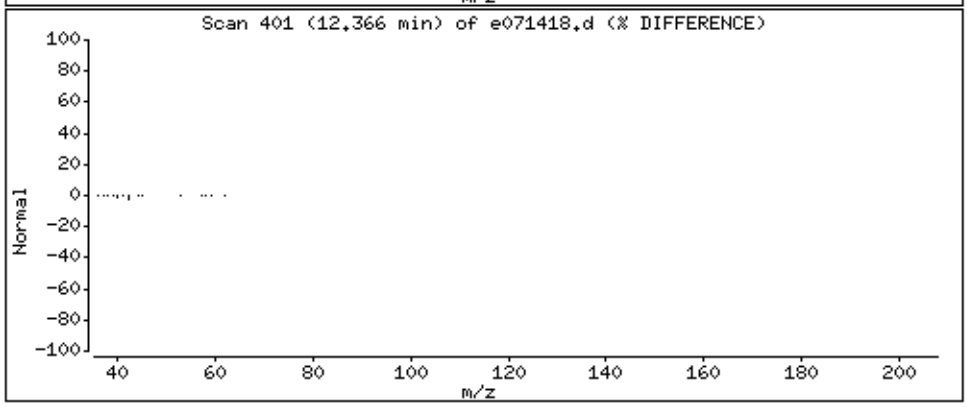












Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

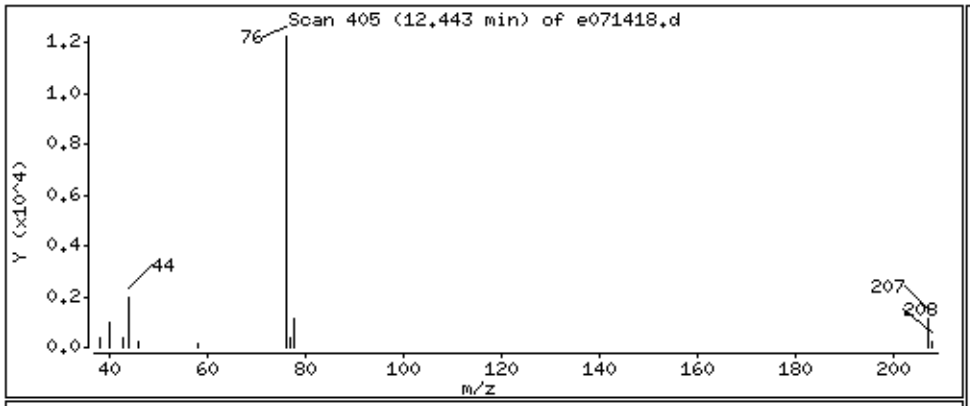
Operator: gh

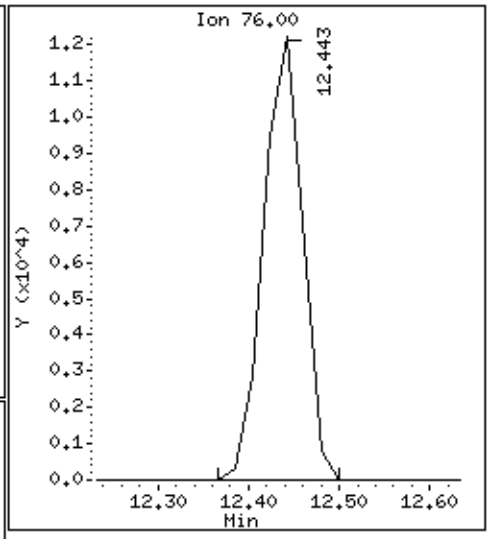
Column phase: RTX-624

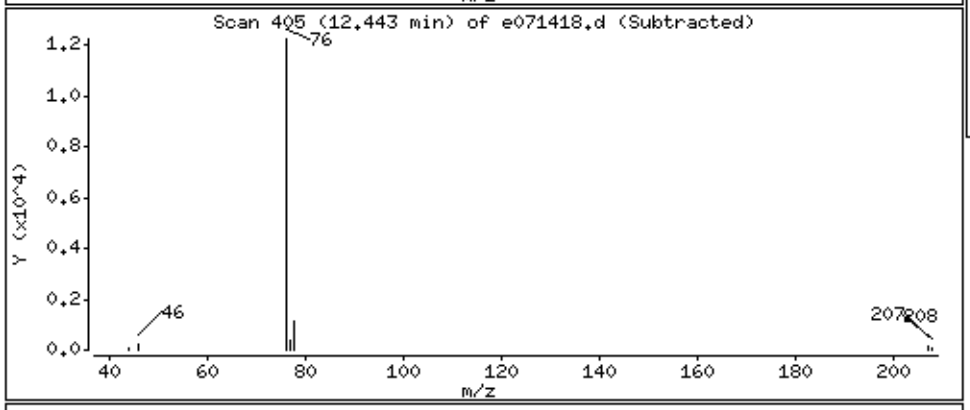
Column diameter: 0.32

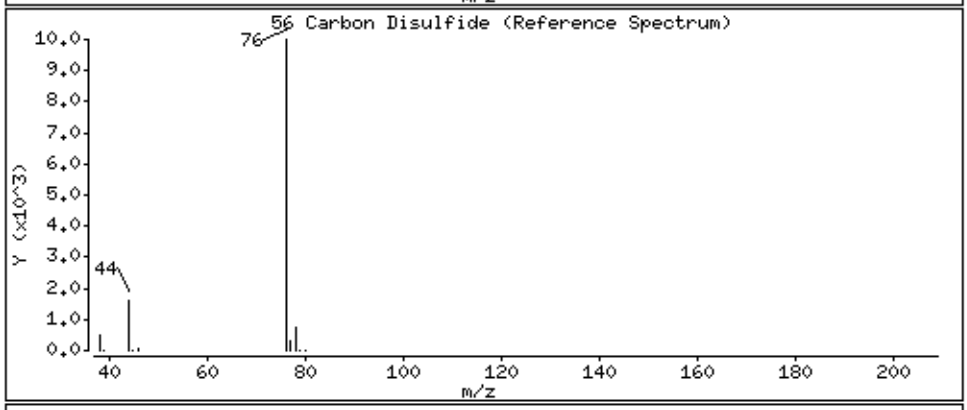
56 Carbon Disulfide

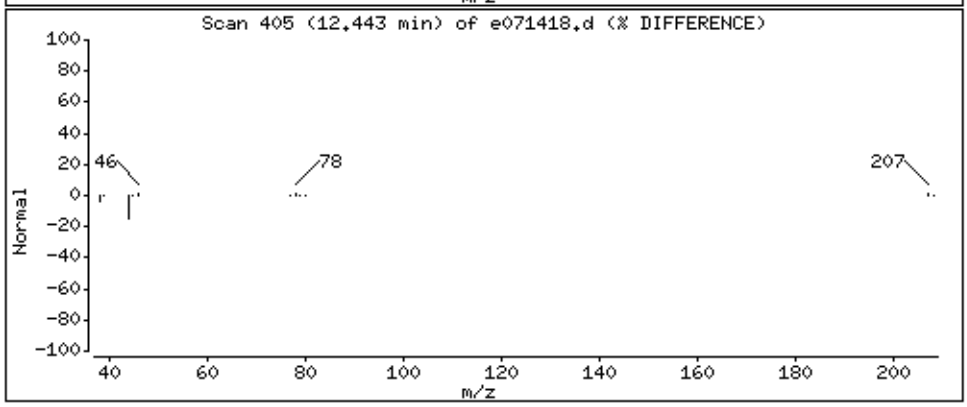
Concentration: 0.6488 PPBV











Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

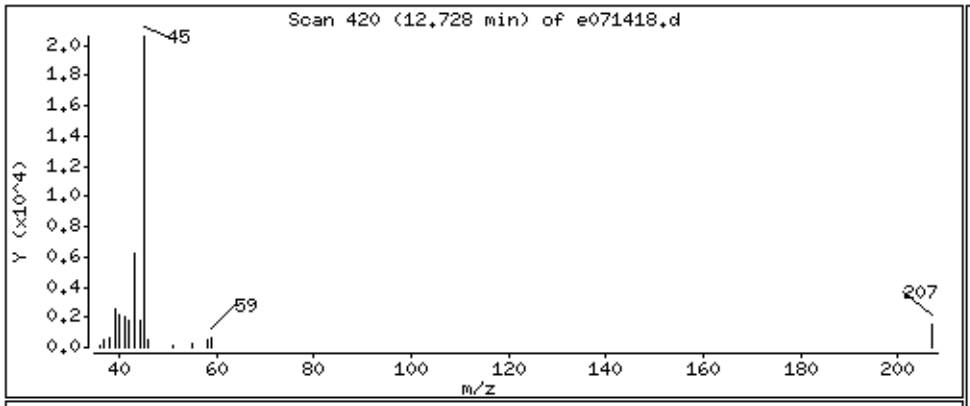
Operator: gh

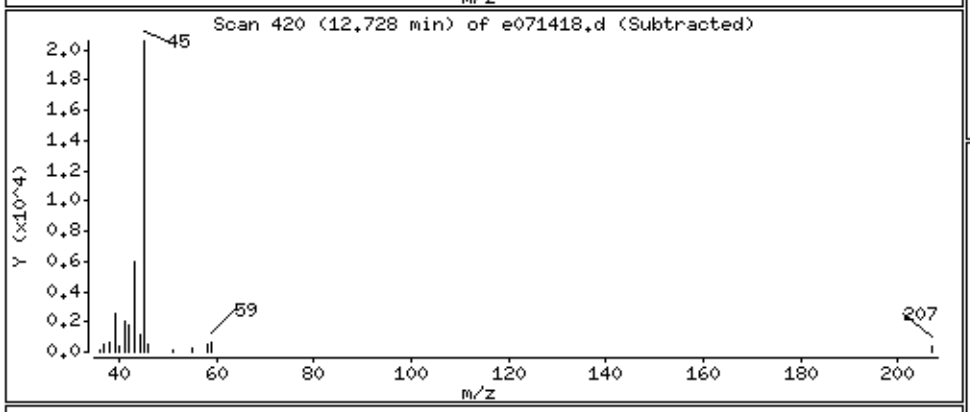
Column phase: RTX-624

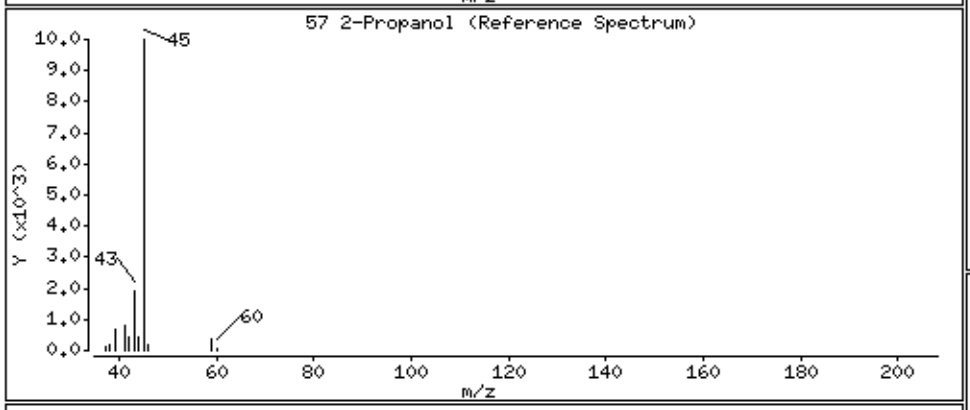
Column diameter: 0.32

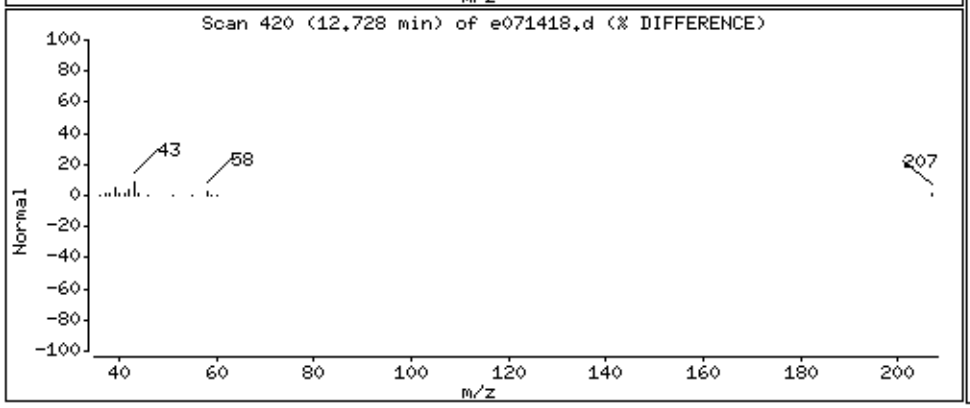
57 2-Propanol

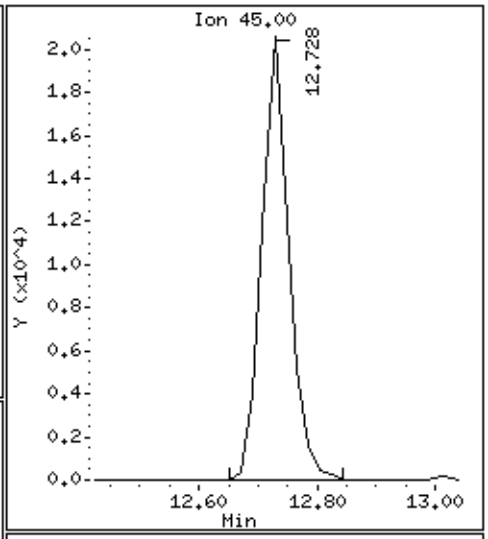
Concentration: 2.972 PPBV

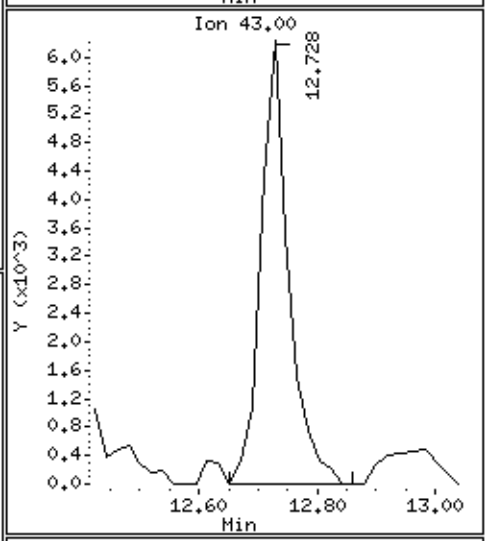


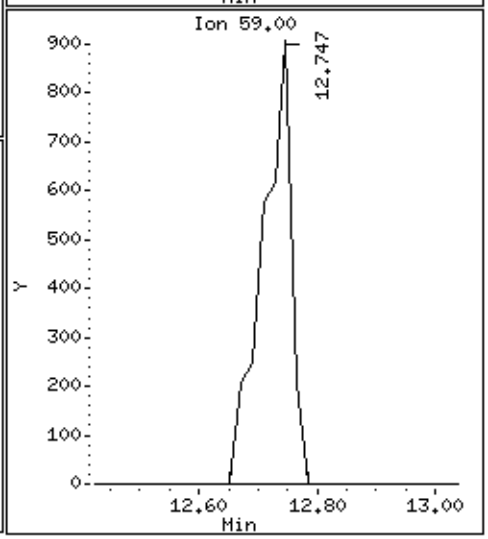












Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

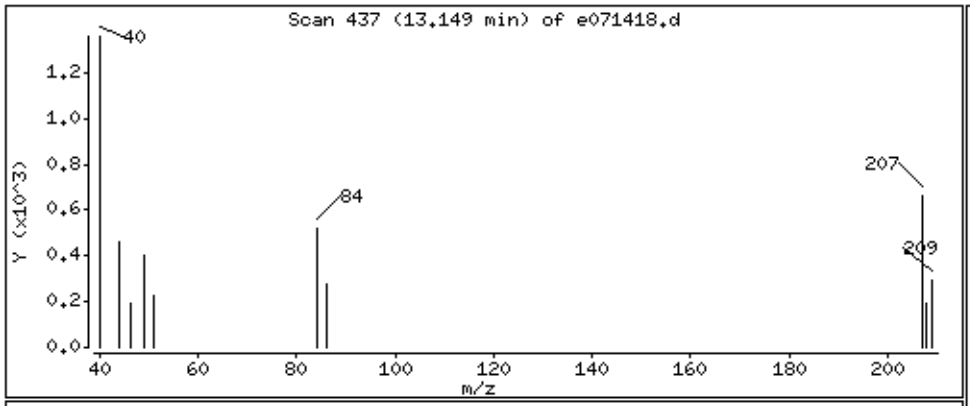
Operator: gh

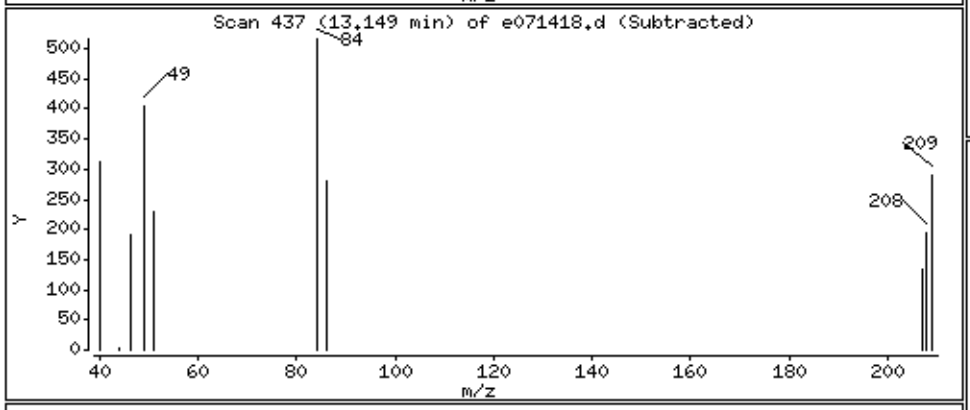
Column phase: RTX-624

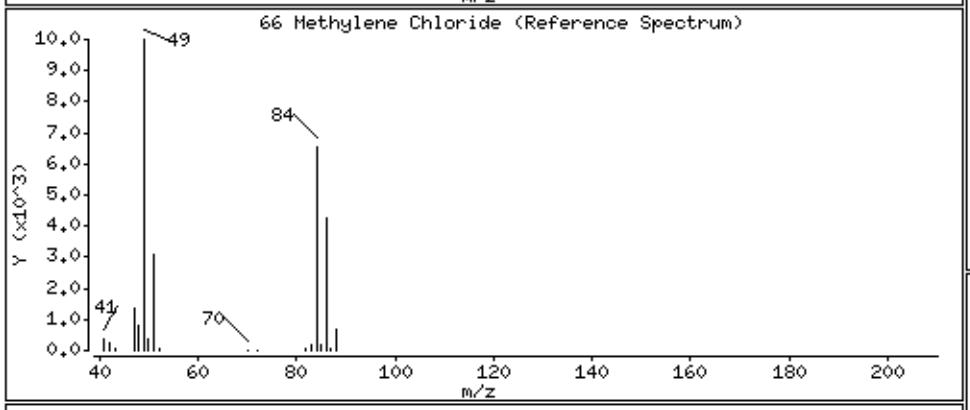
Column diameter: 0.32

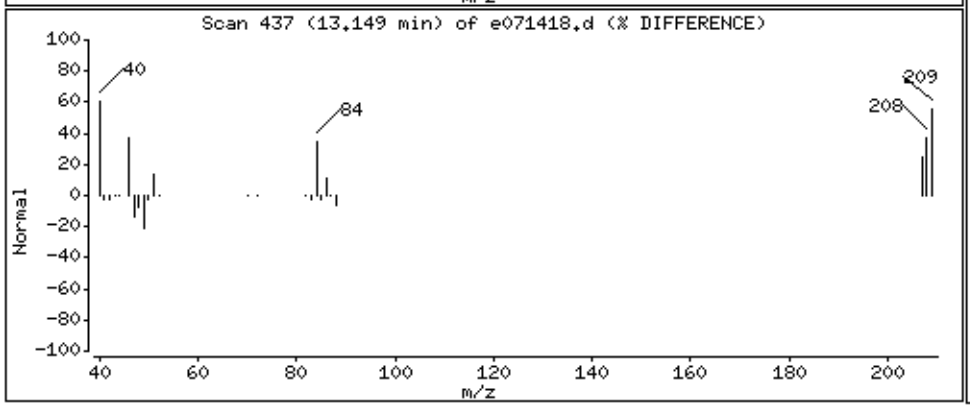
66 Methylene Chloride

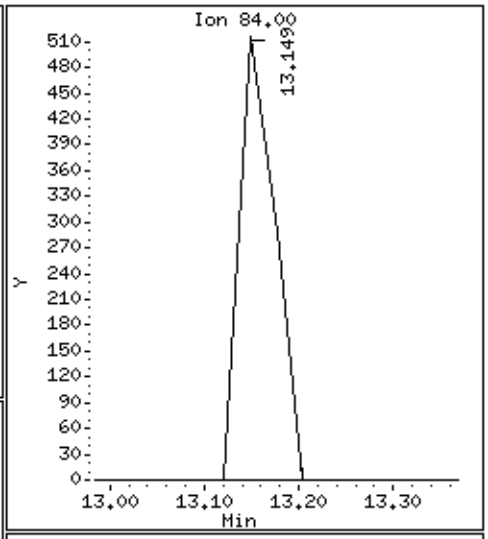
Concentration: 0.07436 PPBV

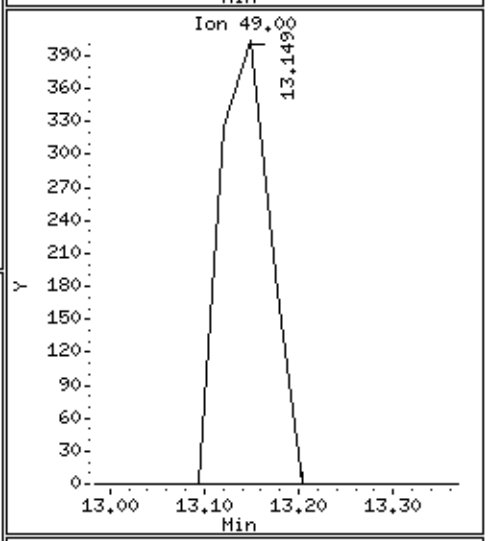


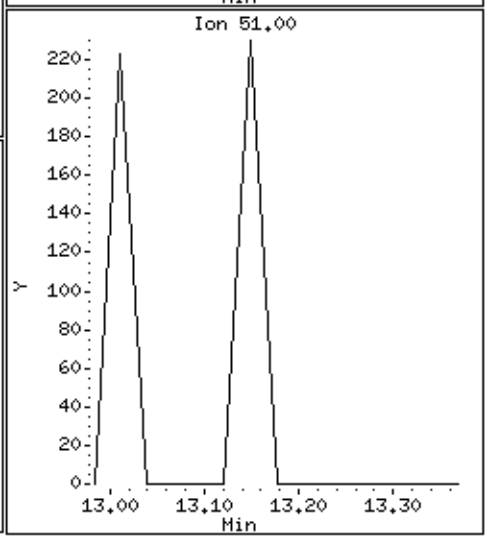












Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

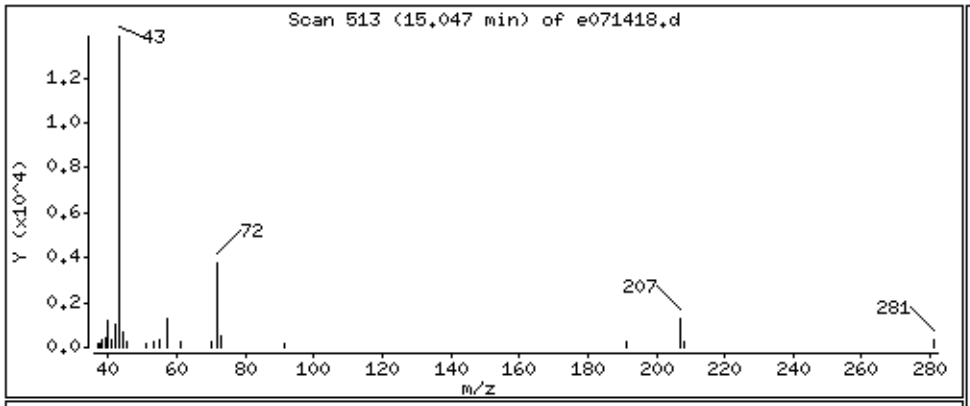
Operator: gh

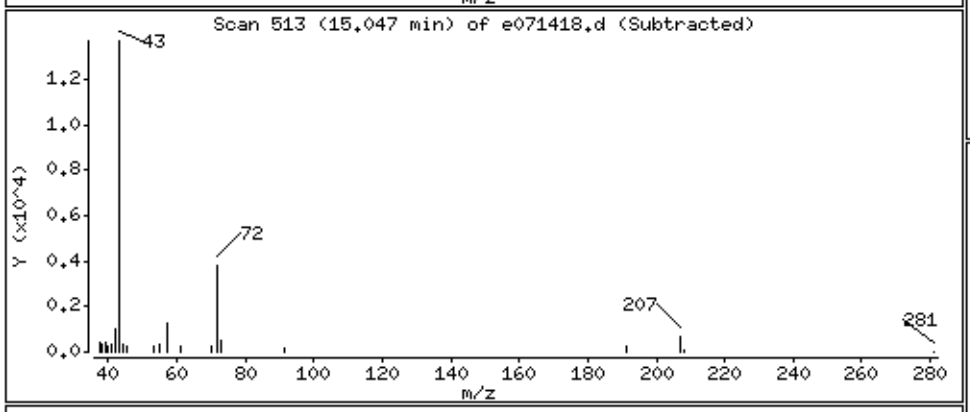
Column phase: RTX-624

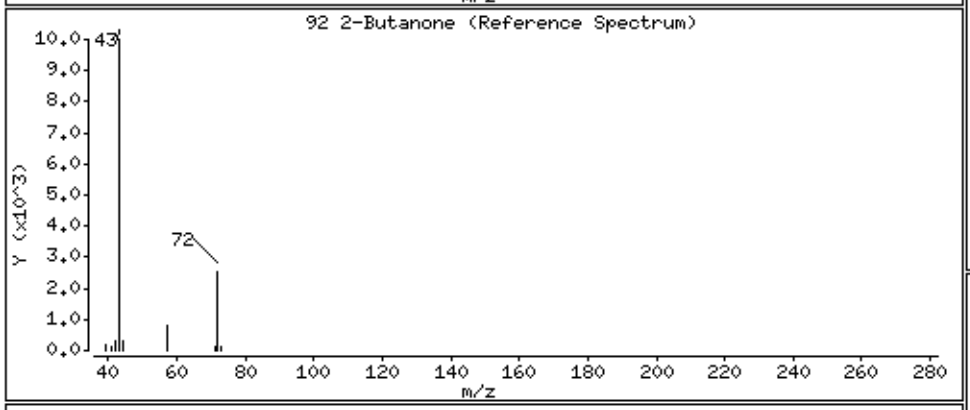
Column diameter: 0.32

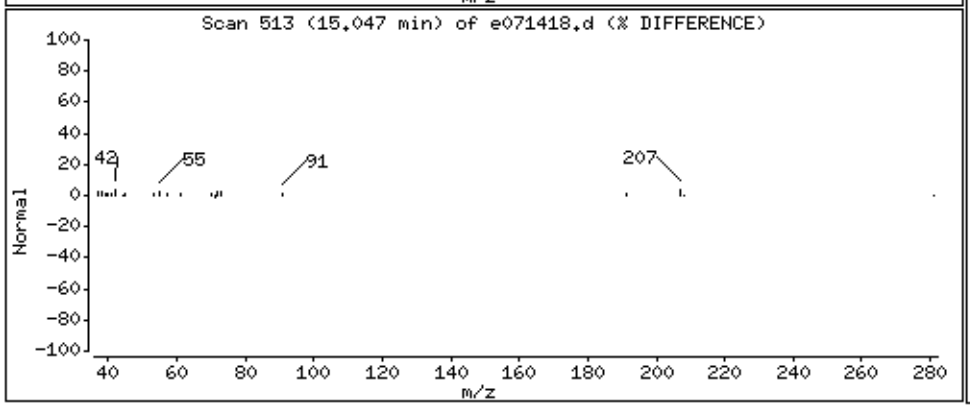
92 2-Butanone

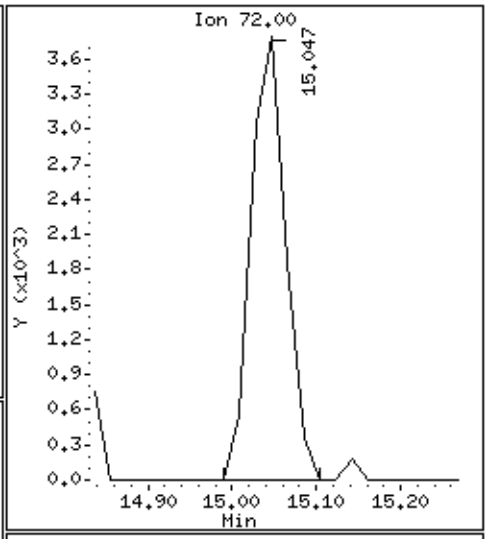
Concentration: 1.234 PPBV

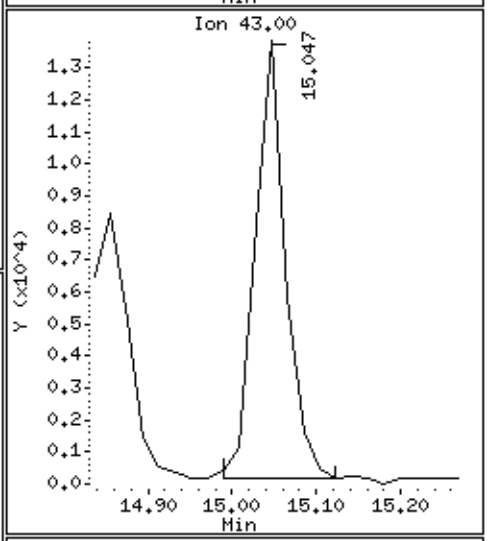


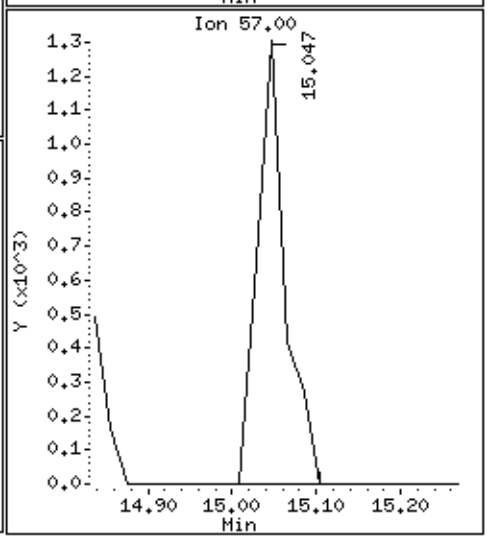












Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

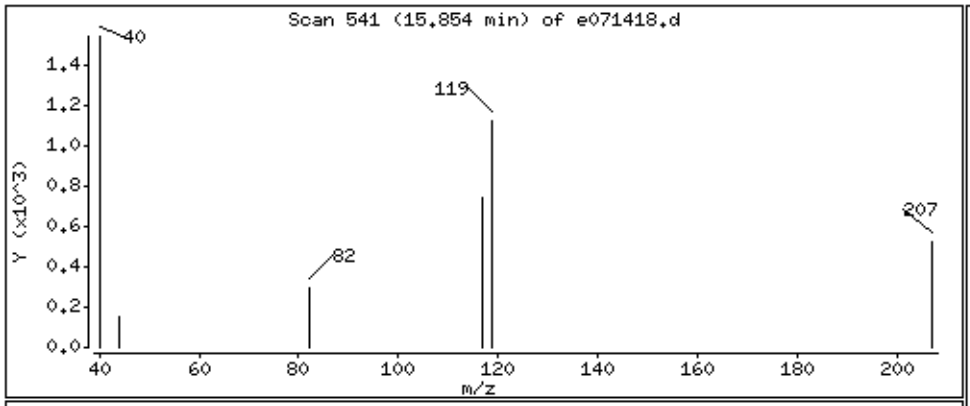
Operator: gh

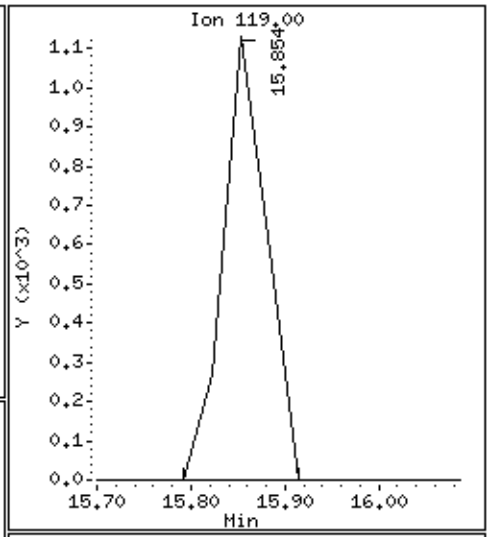
Column phase: RTX-624

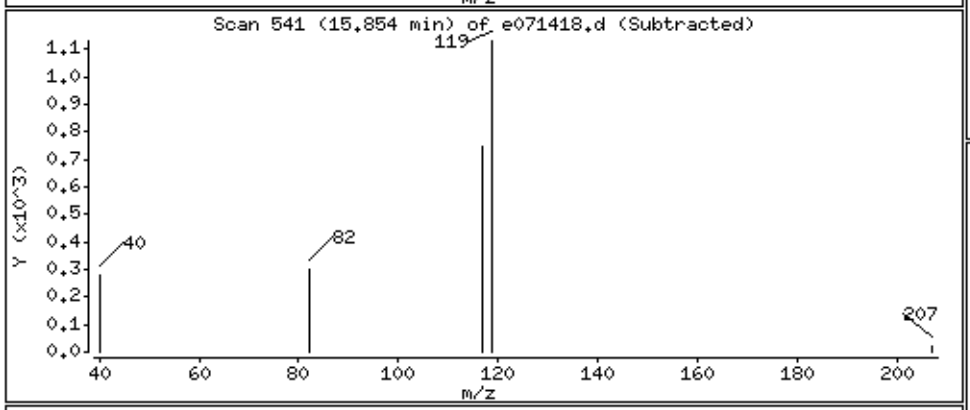
Column diameter: 0.32

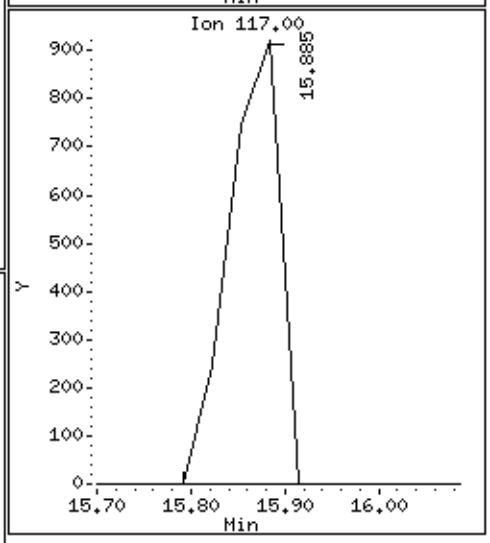
106 Carbon Tetrachloride

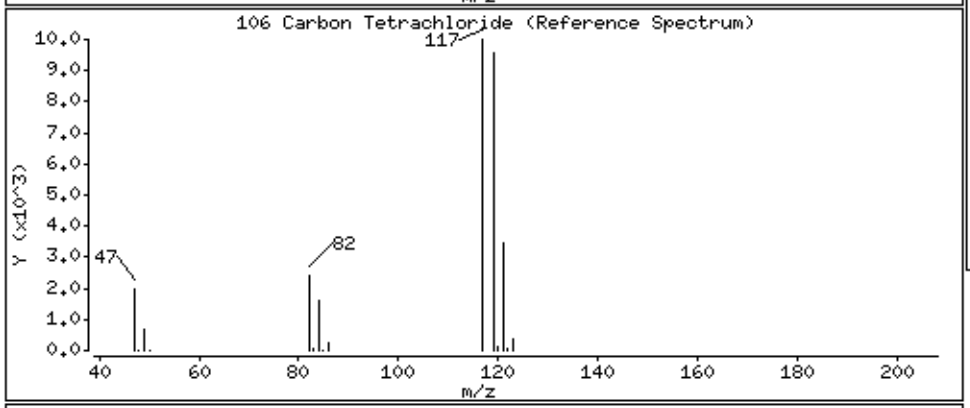
Concentration: 0.06648 PPBV

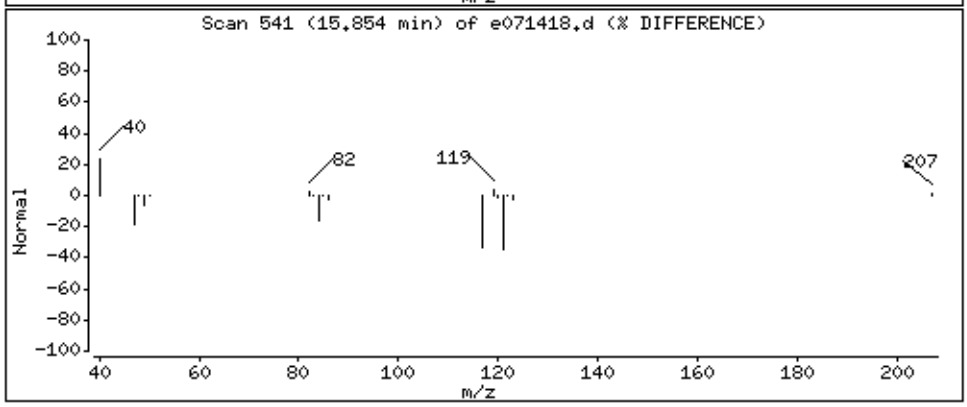












Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

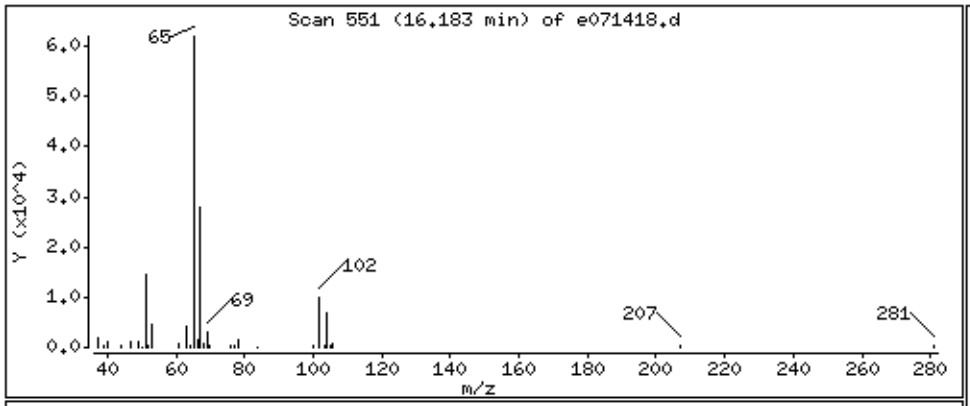
Operator: gh

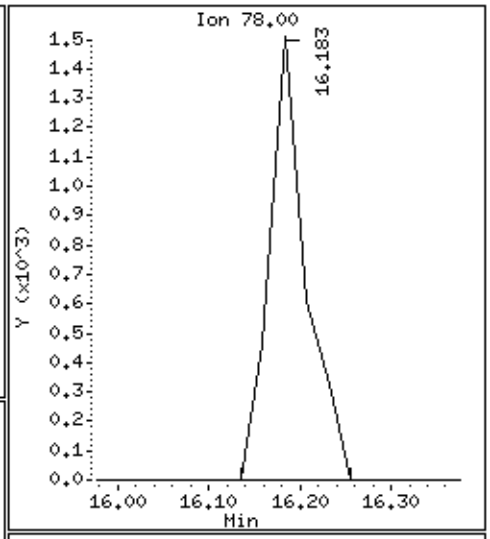
Column phase: RTX-624

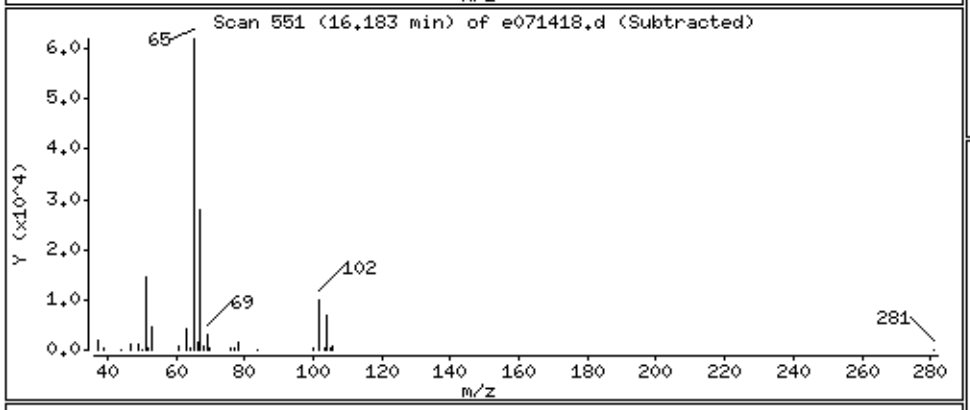
Column diameter: 0.32

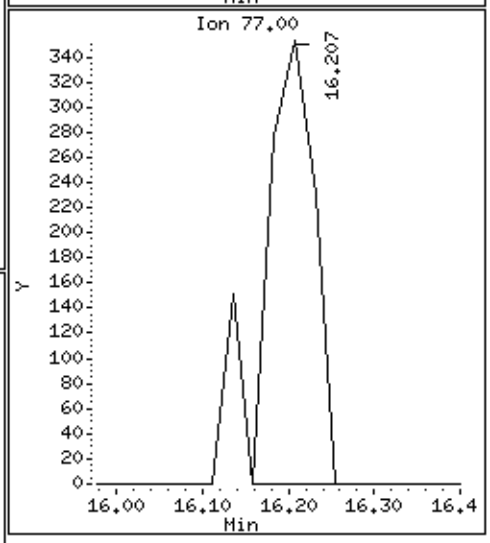
116 Benzene

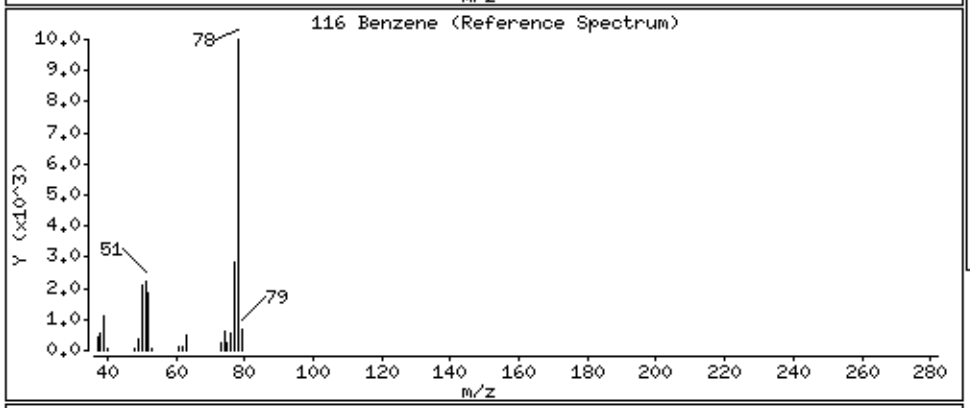
Concentration: 0.07278 PPBV

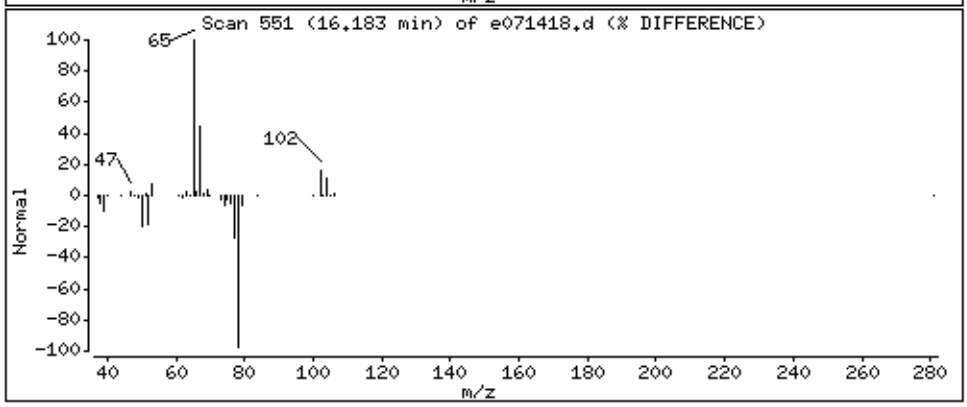












Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

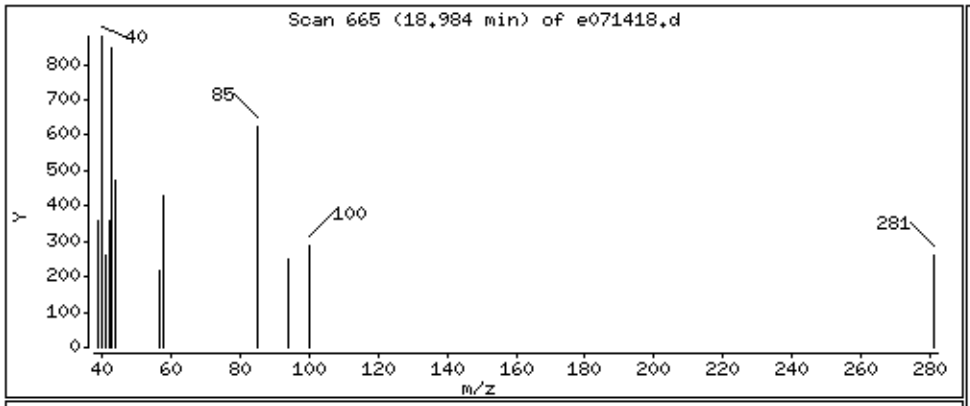
Operator: gh

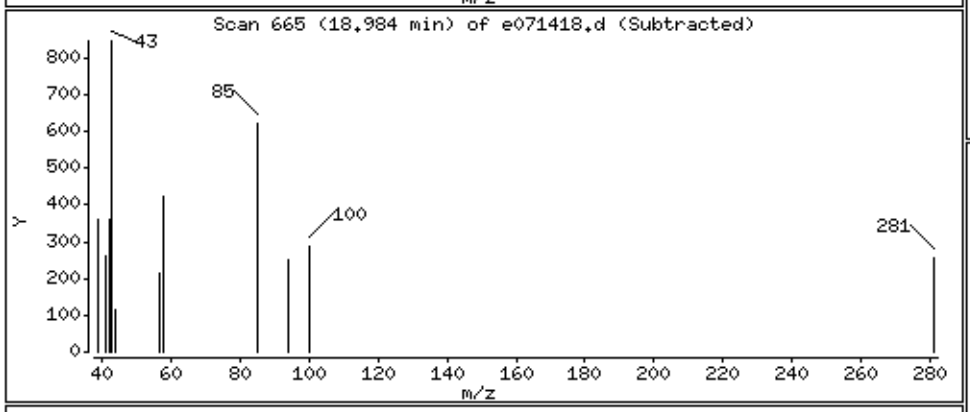
Column phase: RTX-624

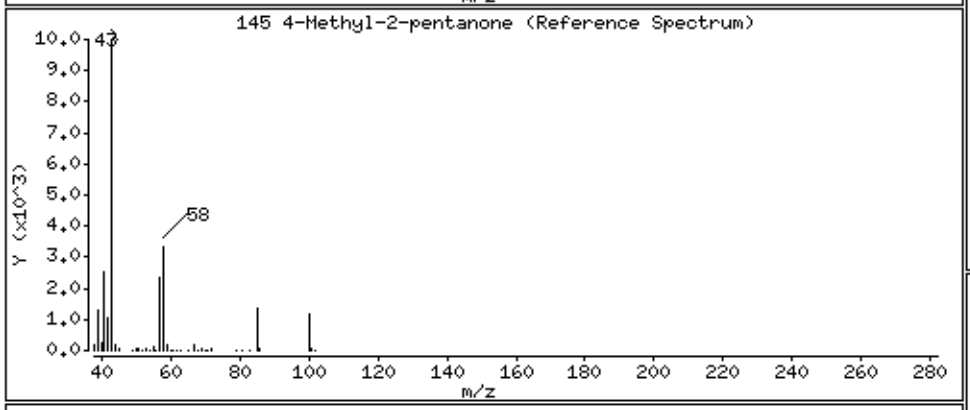
Column diameter: 0.32

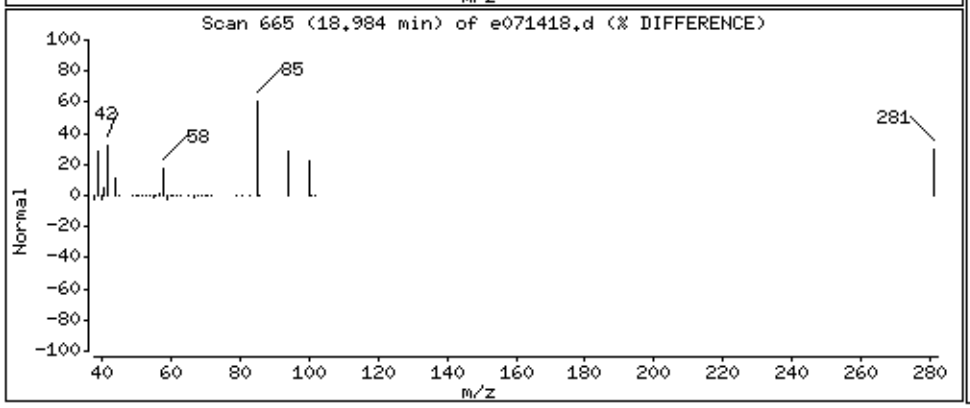
145 4-Methyl-2-pentanone

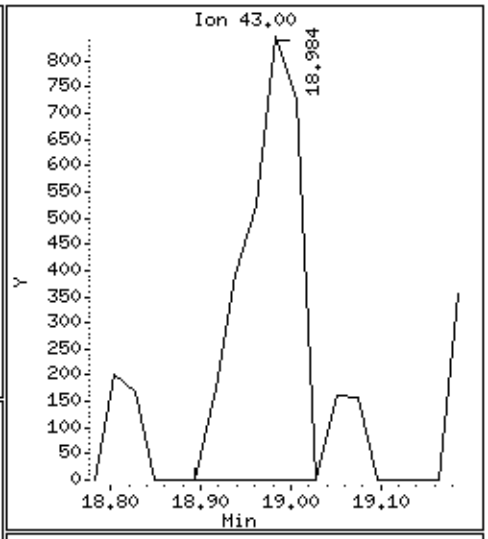
Concentration: 0.1203 PPBV

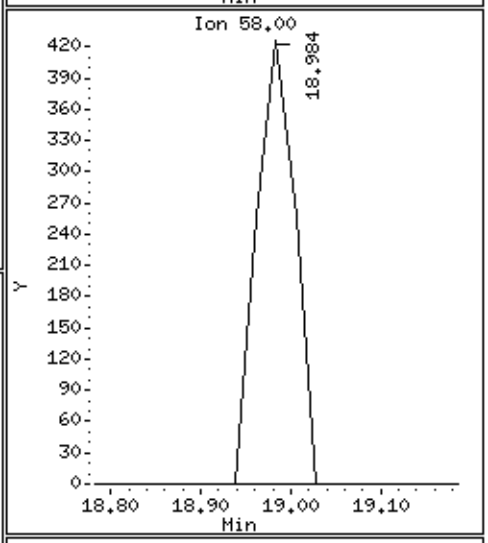


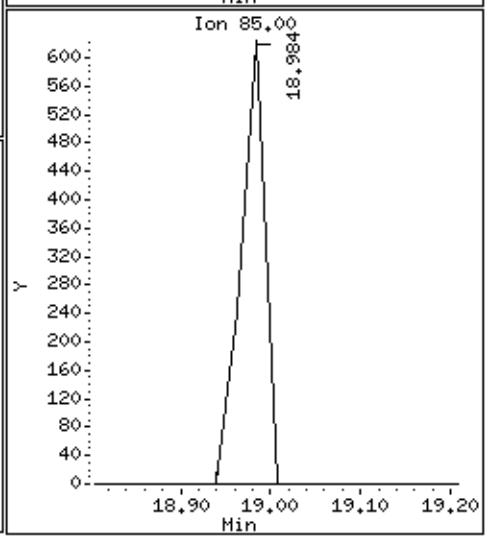












Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

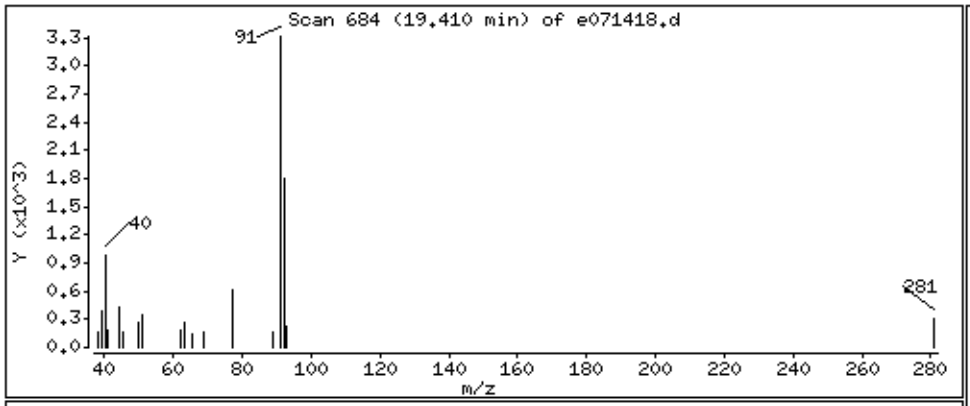
Operator: gh

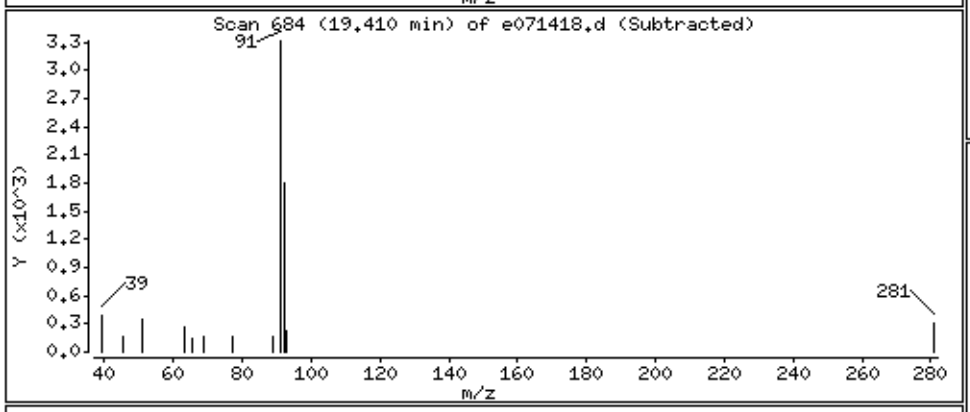
Column phase: RTX-624

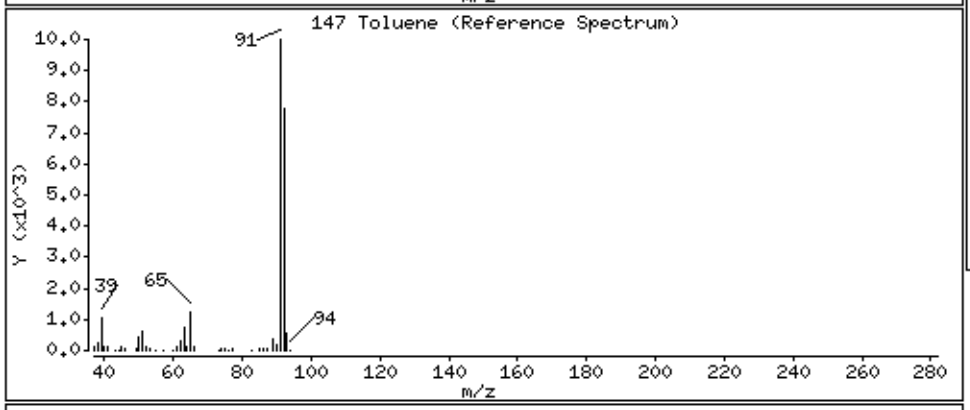
Column diameter: 0.32

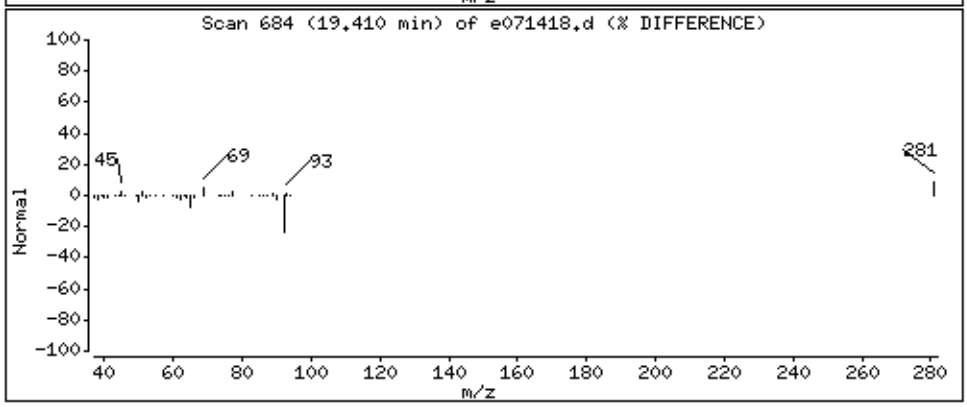
147 Toluene

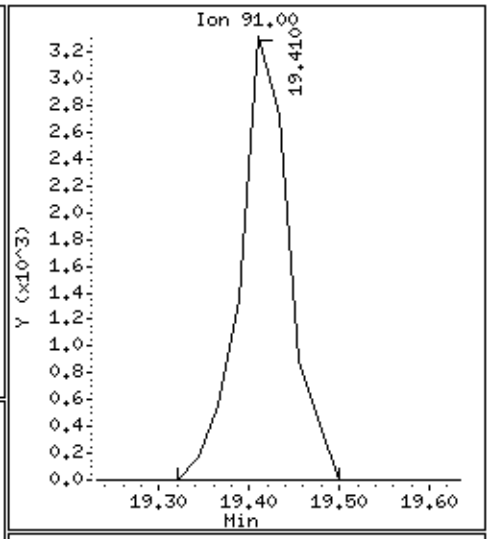
Concentration: 0.1853 PPBV

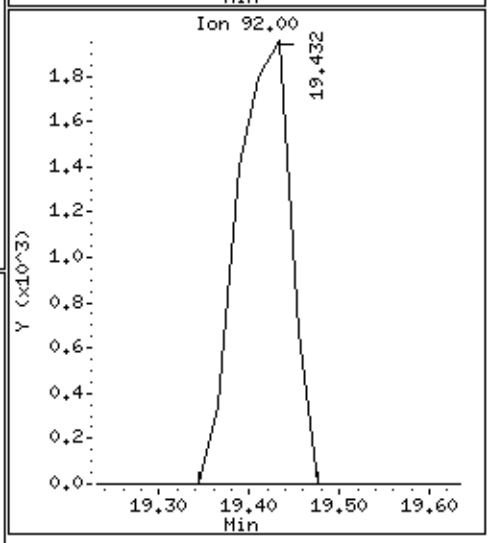












Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

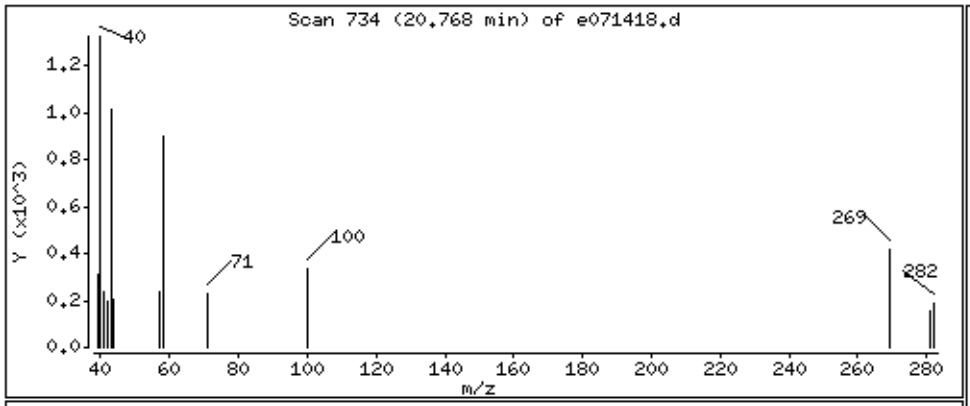
Operator: gh

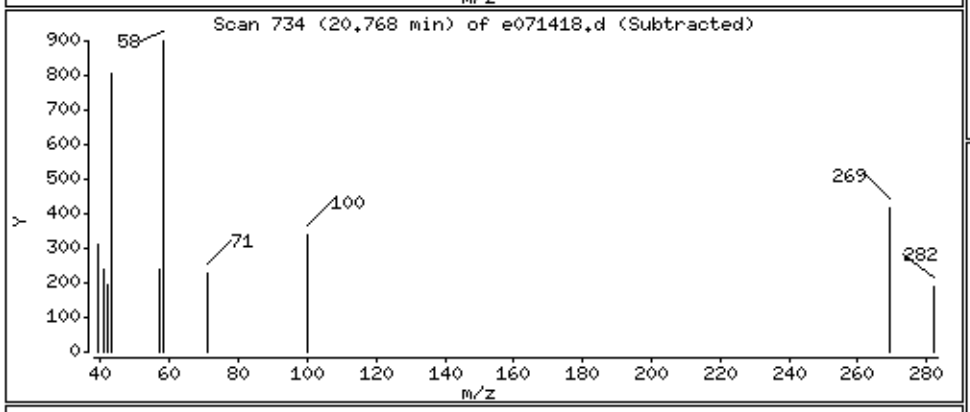
Column phase: RTX-624

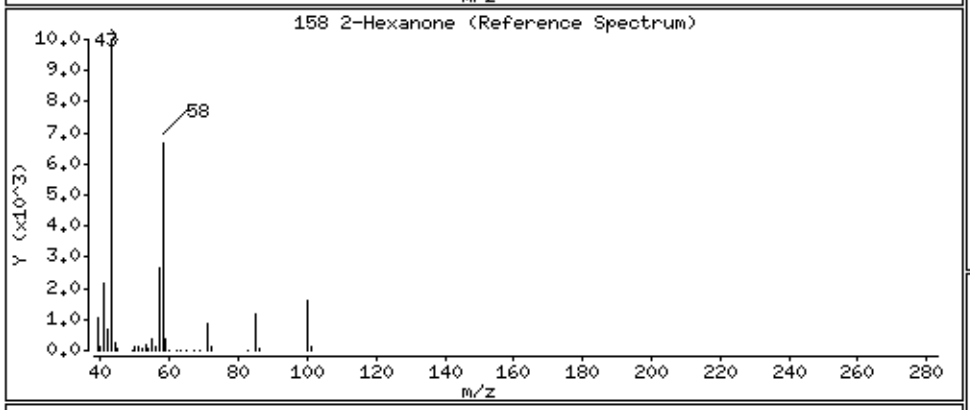
Column diameter: 0.32

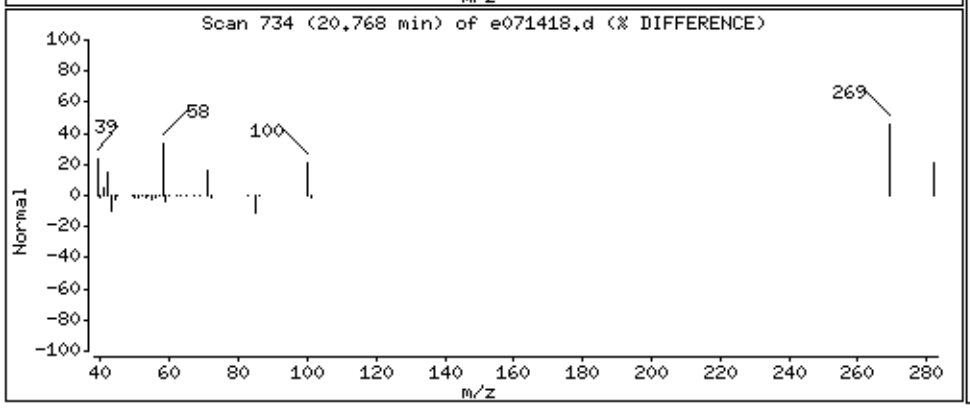
158 2-Hexanone

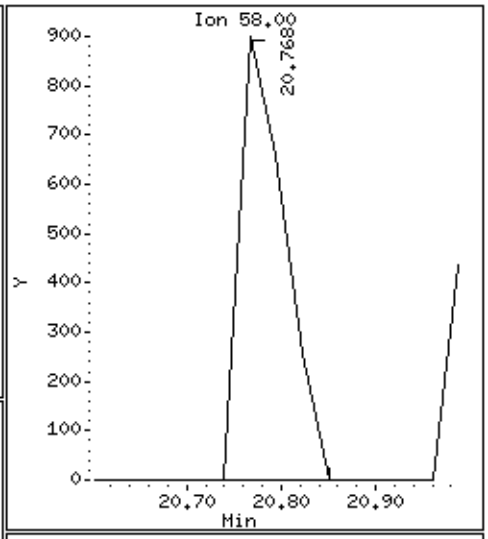
Concentration: 0.1709 PPBV

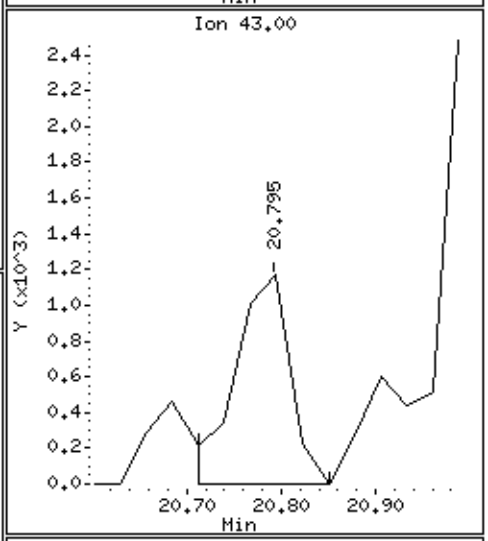


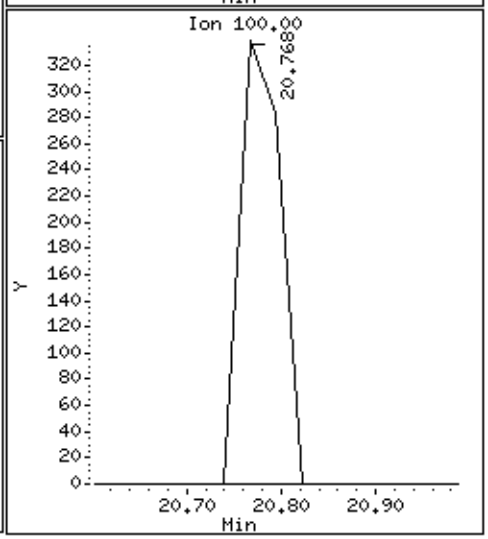












Data File: /chem/msde.i/14Jul2016.b/e071418.d

Date : 14-JUL-2016 21:54

Client ID:

Instrument: msde.i

Sample Info: 250mL# 6L0493

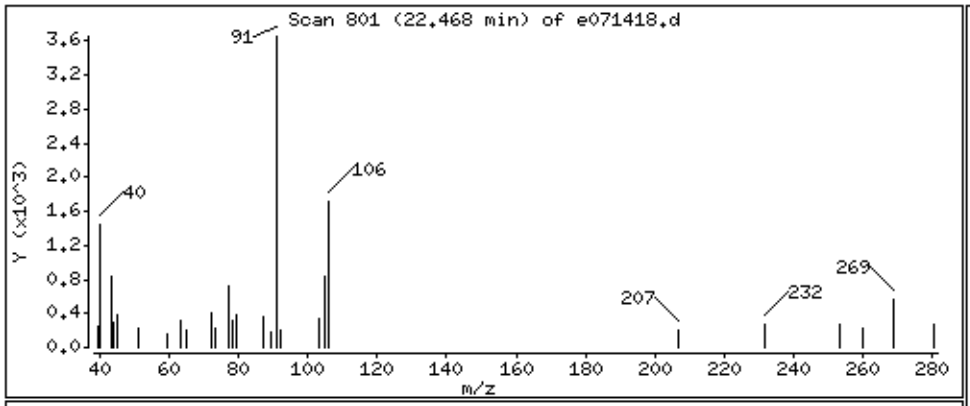
Operator: gh

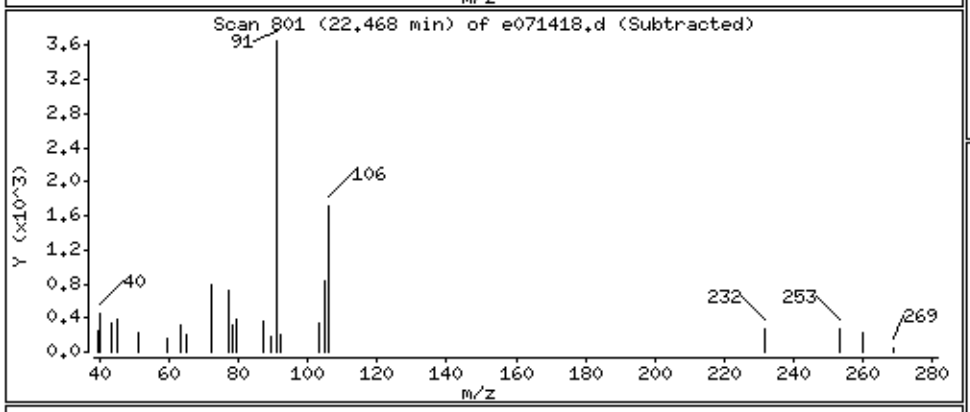
Column phase: RTX-624

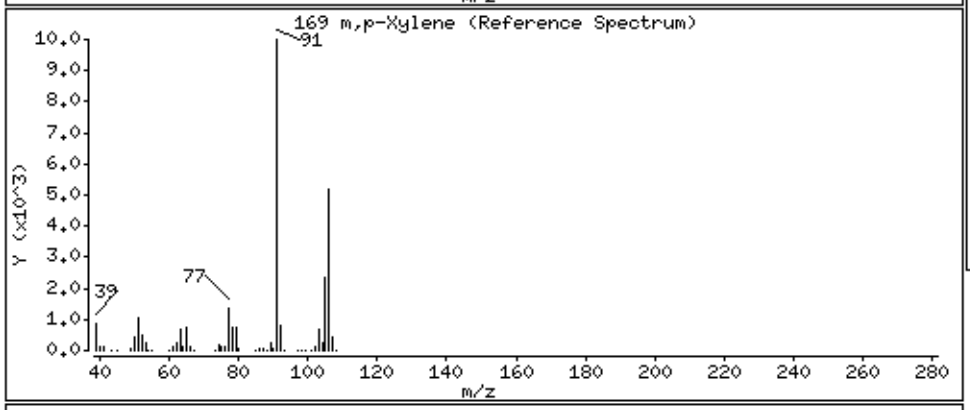
Column diameter: 0.32

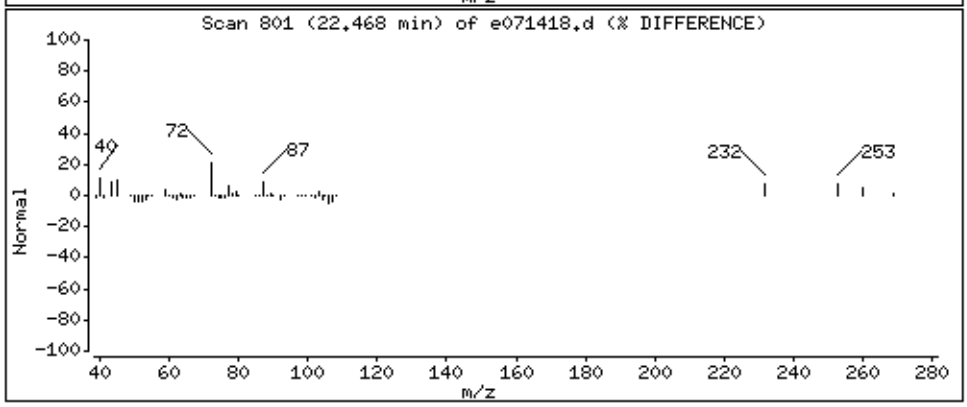
169 m,p-Xylene

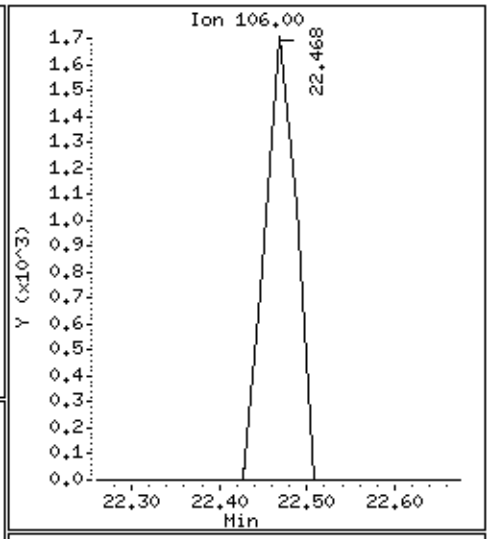
Concentration: 0.1257 PPBV

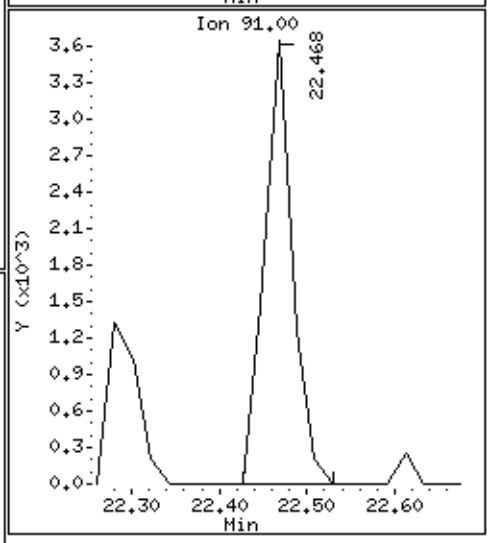












QC Results and Raw Data

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1607235A-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e071408c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/14/16 01:47 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.10	Not Detected	0.49	Not Detected
Freon 114	0.10	Not Detected	0.70	Not Detected
Chloromethane	0.50	Not Detected	1.0	Not Detected
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
1,3-Butadiene	0.10	Not Detected	0.22	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.10	Not Detected	0.56	Not Detected
Ethanol	0.50	Not Detected	0.94	Not Detected
Freon 113	0.10	Not Detected	0.77	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Acetone	0.50	0.20 J	1.2	0.49 J
2-Propanol	0.50	Not Detected	1.2	Not Detected
Carbon Disulfide	0.50	0.35 J	1.6	1.1 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 UJ	1.5	Not Detected UJ
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	0.037 J	0.32	0.12 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

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1607235A-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e071408c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/14/16 01:47 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.10	Not Detected	0.85	Not Detected
1,2-Dibromoethane (EDB)	0.10	Not Detected	0.77	Not Detected
Chlorobenzene	0.10	Not Detected	0.46	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	Not Detected	0.43	Not Detected
o-Xylene	0.10	Not Detected	0.43	Not Detected
Styrene	0.10	Not Detected	0.42	Not Detected
Bromoform	0.10	Not Detected	1.0	Not Detected
Cumene	0.10	Not Detected	0.49	Not Detected
1,1,2,2-Tetrachloroethane	0.10	Not Detected	0.69	Not Detected
Propylbenzene	0.10	Not Detected	0.49	Not Detected
4-Ethyltoluene	0.10	Not Detected	0.49	Not Detected
1,3,5-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,2,4-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,3-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
1,4-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
alpha-Chlorotoluene	0.10	Not Detected	0.52	Not Detected
1,2-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
1,2,4-Trichlorobenzene	0.50	0.070 J	3.7	0.52 J
Hexachlorobutadiene	0.50	Not Detected	5.3	Not Detected
Naphthalene	0.50	Not Detected	2.6	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	96	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/14Jul2016.b/e071408c.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 14-JUL-2016 13:47
Operator : ef Inst ID: msde.i
Smp Info : 250mL# 35248
Misc Info : Humid
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/14Jul2016.b/e16l0317f.m
Meth Date : 14-Jul-2016 14:31 efinn Quant Type: ISTD
Cal Date : 24-MAY-2016 10:14 Cal File: e052406.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TO15NMDL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
52 Acetone						CAS #: 67-64-1	
12.366	12.366 (0.803)	58	2665	0.20546	0.2054	80.00- 120.00	100.00(a)
12.366	12.366 (0.803)	43	11323			321.47- 381.47	424.82
56 Carbon Disulfide						CAS #: 75-15-0	
12.442	12.442 (0.808)	76	34419	0.34815	0.3482	80.00- 120.00	100.00(a)
* 98 Bromochloromethane						CAS #: 74-97-5	
15.391	15.391 (1.000)	130	117205	5.00000		80.00- 120.00	100.00
15.391	15.391 (1.000)	128	91262			52.25- 112.25	77.87
15.391	15.391 (1.000)	49	84381			89.81- 149.81	71.99
116 Benzene						CAS #: 71-43-2	
16.183	16.183 (0.967)	78	3823	0.03725	0.03725	80.00- 120.00	100.00(a)
0.000	16.207 (0.000)	77	0			0.00- 53.97	0.00
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.183	16.207 (1.051)	65	186994	5.55751	5.558	80.00- 120.00	100.00
16.183	16.207 (1.051)	67	89225			21.16- 81.16	47.72

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
16.737	16.737 (1.000)	114	428278	5.00000		80.00- 120.00	100.00
16.737	16.737 (1.000)	88	63328			0.00- 45.20	14.79
$ 146 Toluene-d8						CAS #: 2037-26-5	
19.275	19.275 (1.152)	98	399653	4.75143	4.751	80.00- 120.00	100.00
19.275	19.275 (1.152)	70	44024			0.00- 40.11	11.02
19.275	19.275 (1.152)	100	277293			37.58- 97.58	69.38
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
22.156	22.177 (1.000)	117	397670	5.00000		80.00- 120.00	100.00
22.156	22.177 (1.000)	82	204414			20.64- 80.64	51.40
$ 177 4-Bromofluorobenzene						CAS #: 460-00-4	
23.856	23.856 (1.077)	174	261767	4.79724	4.797	80.00- 120.00	100.00
23.856	23.856 (1.077)	95	258797			77.42- 137.42	98.87
23.856	23.856 (1.077)	176	250300			65.38- 125.38	95.62
226 1,2,4-Trichlorobenzene						CAS #: 120-82-1	
27.421	27.398 (1.238)	180	2928	0.06991	0.06991	80.00- 120.00	100.00(a)
27.421	27.398 (1.238)	182	2529			66.05- 126.05	86.36

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: e071408c.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/14Jul2016.b/e16l0317f.m
Misc Info: Humid

Calibration Date: 14-JUL-2016
Calibration Time: 08:35
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	131815	79089	184541	117205	-11.08
123 1,4-Difluorobenze	469034	281420	656648	428278	-8.69
163 Chlorobenzene-d5	419401	251641	587161	397670	-5.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.16	-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: 14-Jul-2016 20:16

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 14Jul2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Level: LOW
Operator: ef
Data Type: MS DATA
SampleType: BLANK
SpikeList File: AT09Bromo.spk
Quant Type: ISTD
Sublist File: TO15NMDL.sub
Method File: /chem/msde.i/14Jul2016.b/e16l0317f.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	5.000	5.558	111.15	70-130
$ 146 Toluene-d8	5.000	4.751	95.03	70-130
$ 177 4-Bromofluorobenze	5.000	4.797	95.94	70-130

Data File: /chem/msde.i/14Jul2016.b/e071408c.d

Date : 14-JUL-2016 13:47

Client ID: Lab Blank

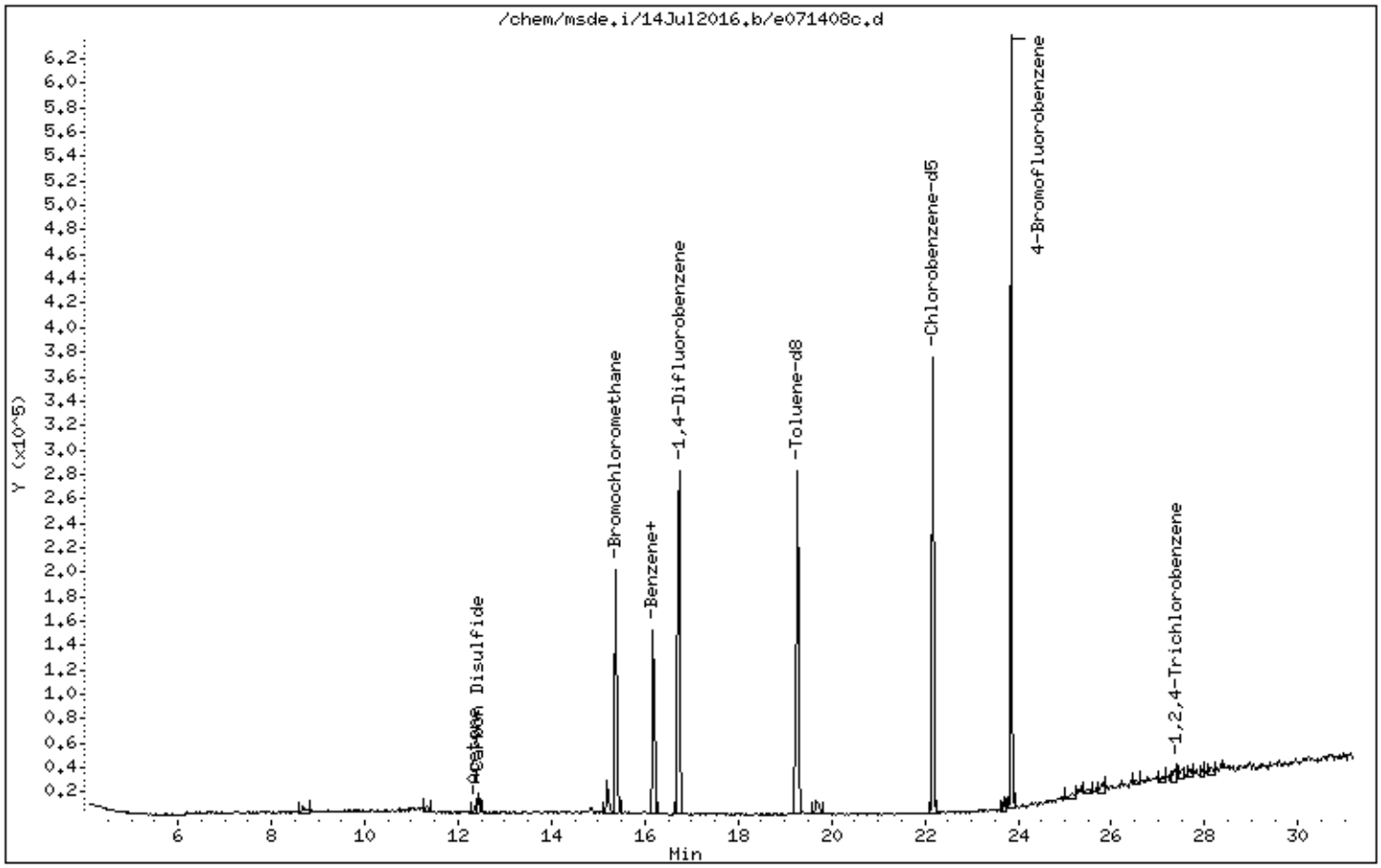
Instrument: msde.i

Sample Info: 250mL# 35248

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Data File: /chem/msde.i/14Jul2016.b/e071408c.d

Date : 14-JUL-2016 13:47

Client ID: Lab Blank

Instrument: msde.i

Sample Info: 250mL# 35248

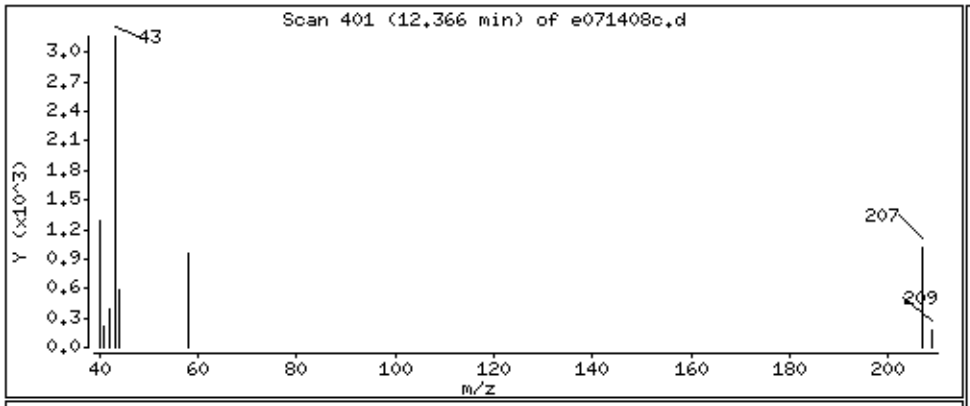
Operator: ef

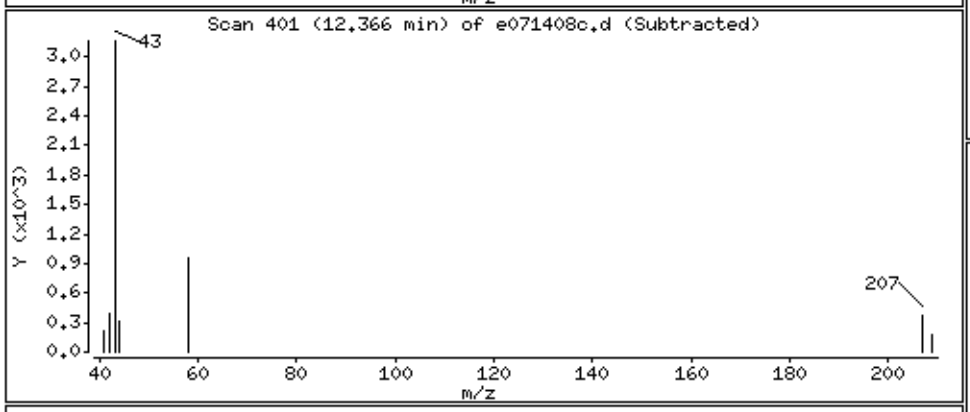
Column phase: RTX-624

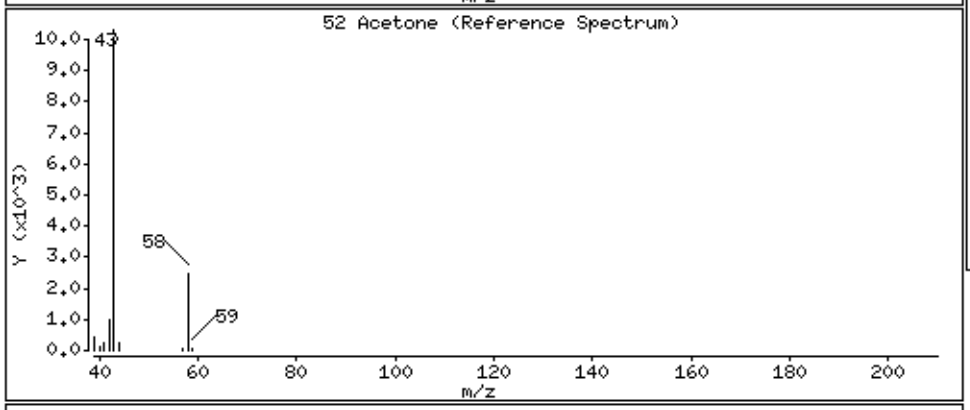
Column diameter: 0.32

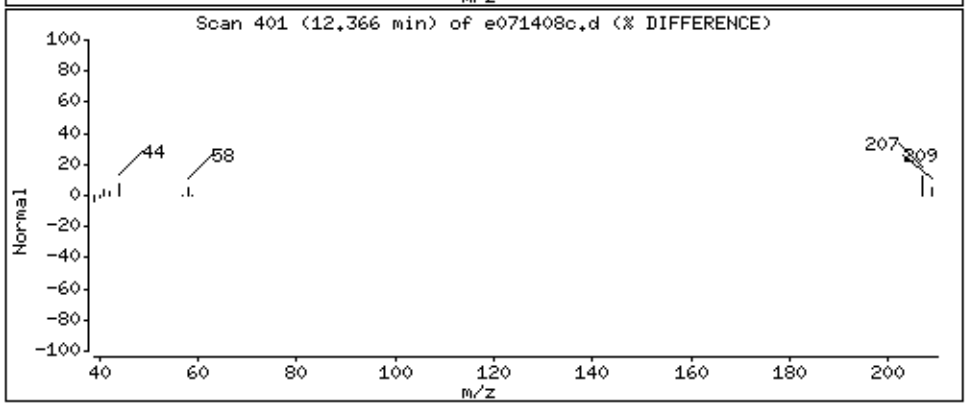
52 Acetone

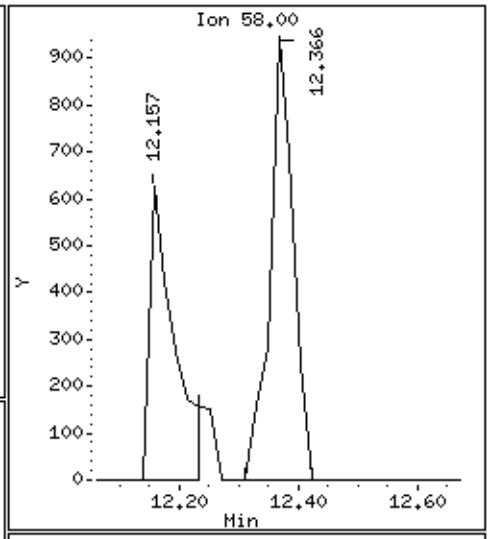
Concentration: 0.2054 PPBV

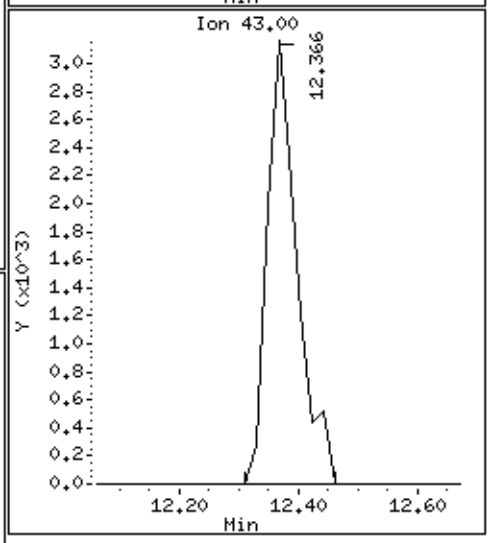












Data File: /chem/msde.i/14Jul2016.b/e071408c.d

Date : 14-JUL-2016 13:47

Client ID: Lab Blank

Instrument: msde.i

Sample Info: 250mL# 35248

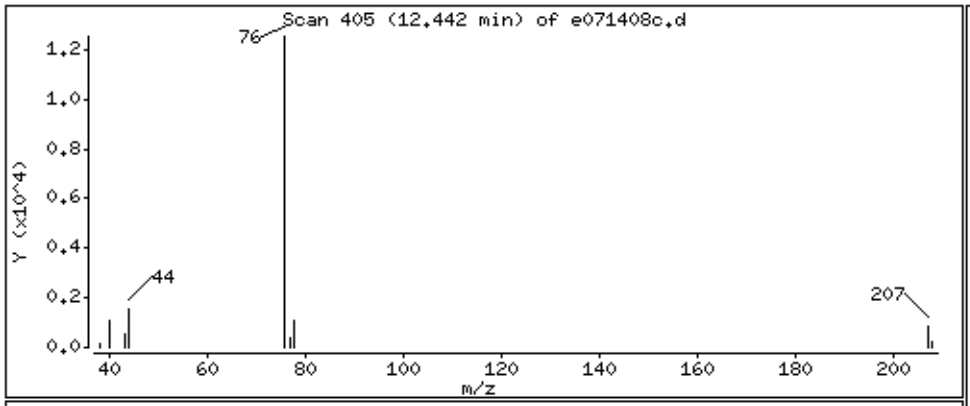
Operator: ef

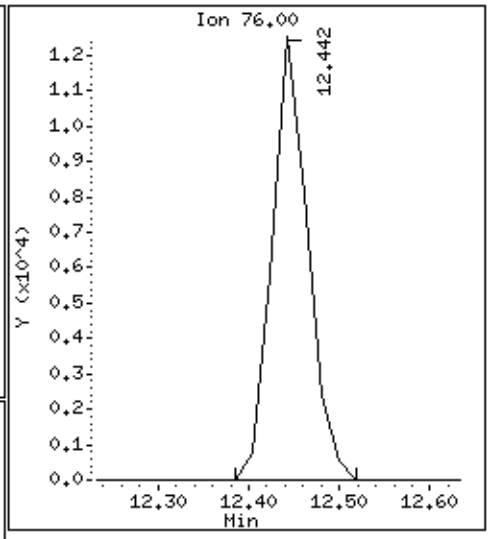
Column phase: RTX-624

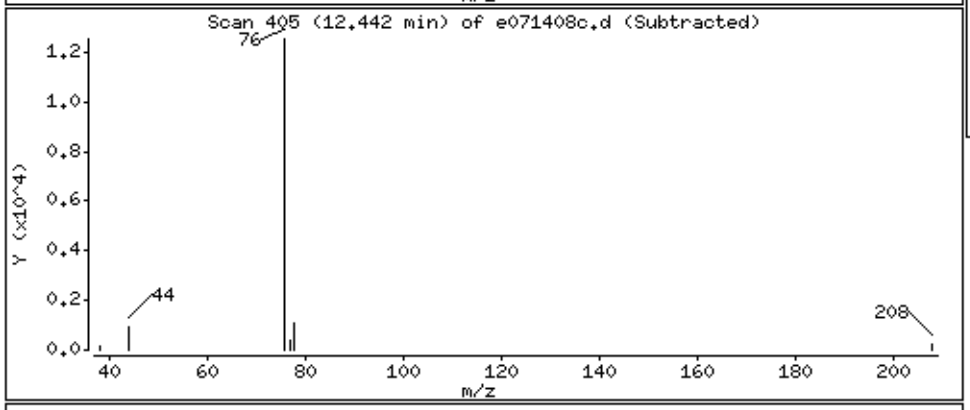
Column diameter: 0.32

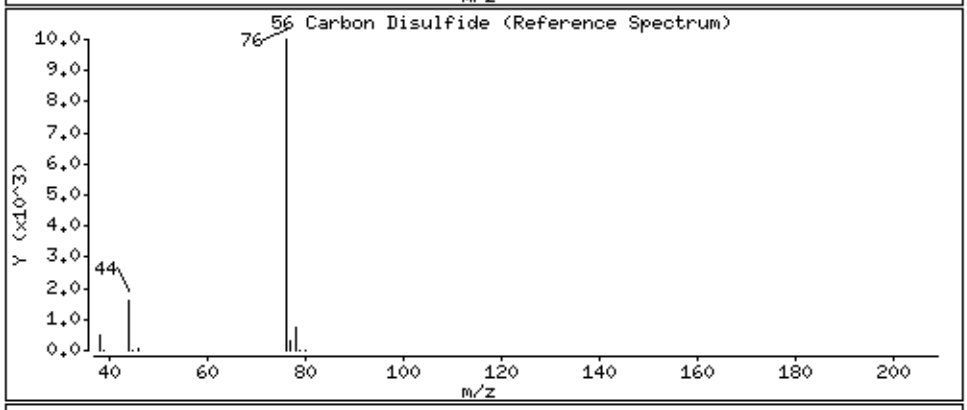
56 Carbon Disulfide

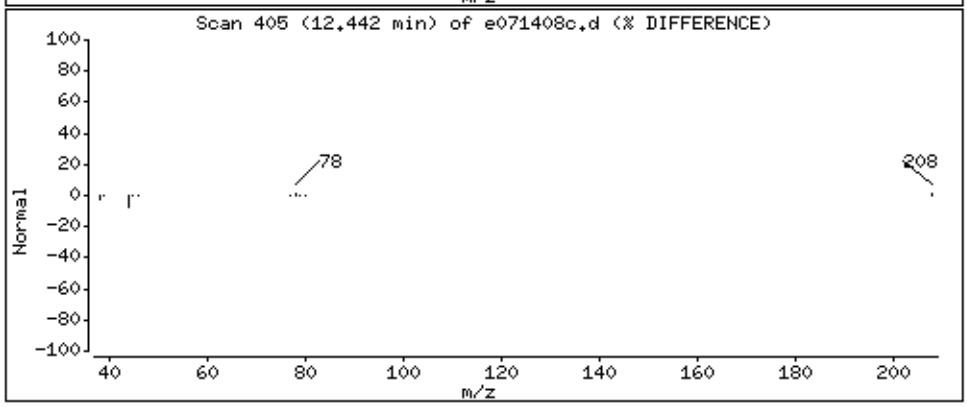
Concentration: 0.3482 PPBV











Data File: /chem/msde.i/14Jul2016.b/e071408c.d

Date : 14-JUL-2016 13:47

Client ID: Lab Blank

Instrument: msde.i

Sample Info: 250mL# 35248

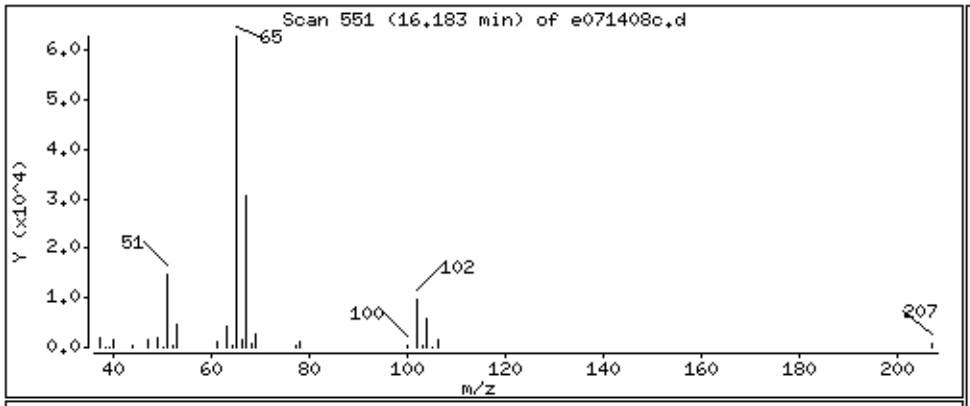
Operator: ef

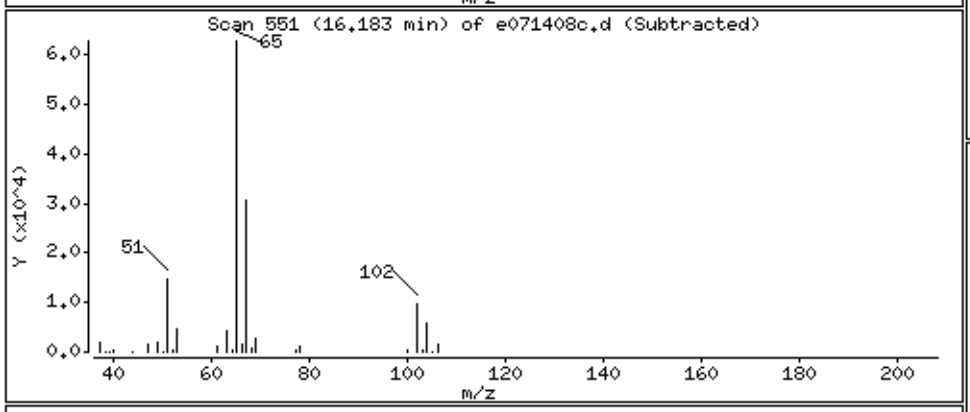
Column phase: RTX-624

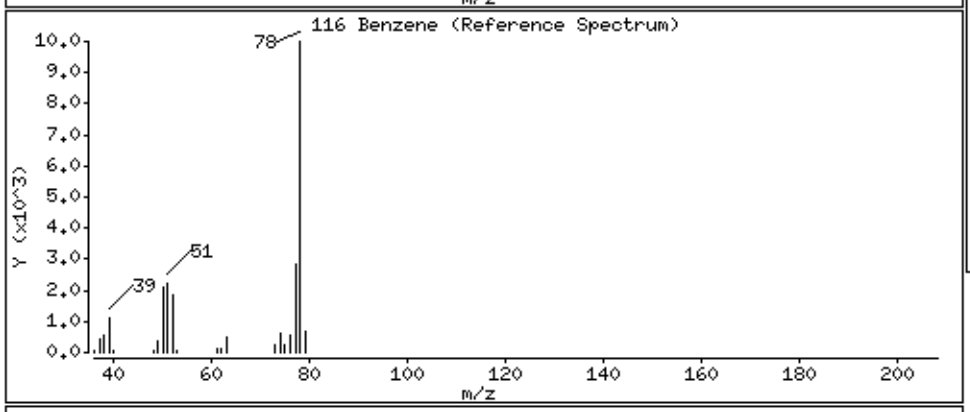
Column diameter: 0.32

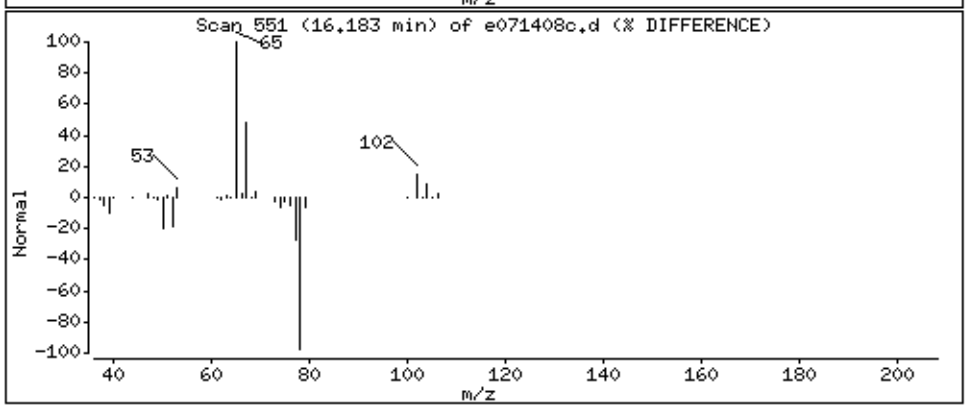
116 Benzene

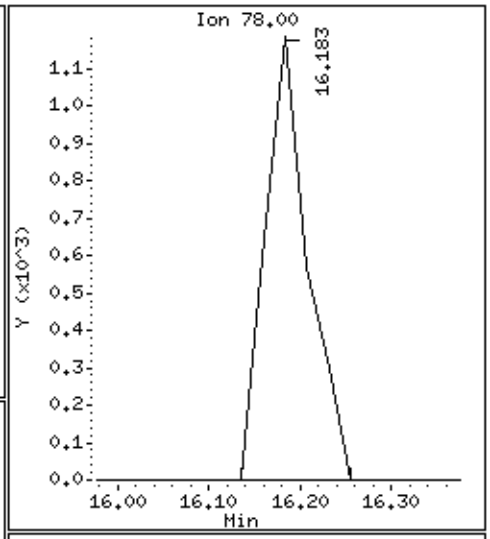
Concentration: 0.03725 PPBV

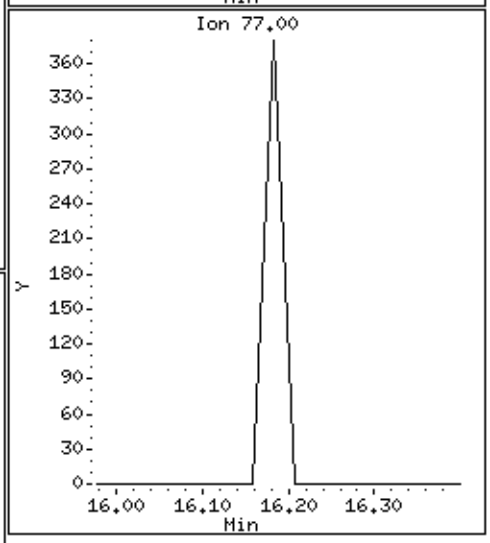












Data File: /chem/msde.i/14Jul2016.b/e071408c.d

Date : 14-JUL-2016 13:47

Client ID: Lab Blank

Instrument: msde.i

Sample Info: 250mL# 35248

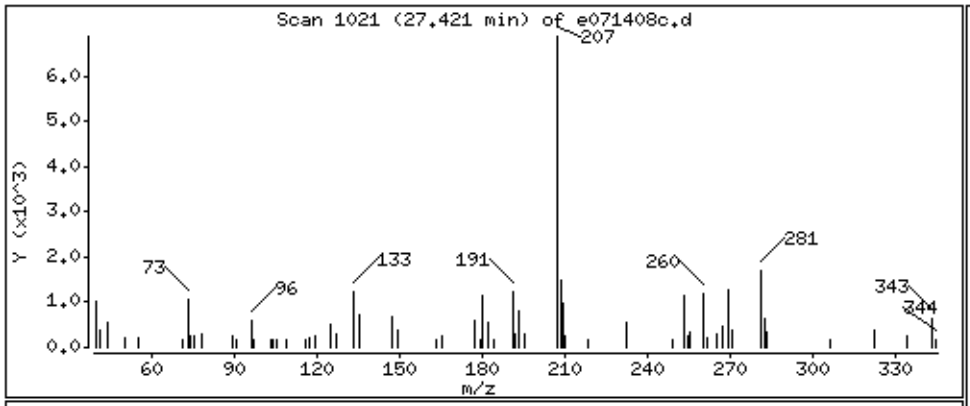
Operator: ef

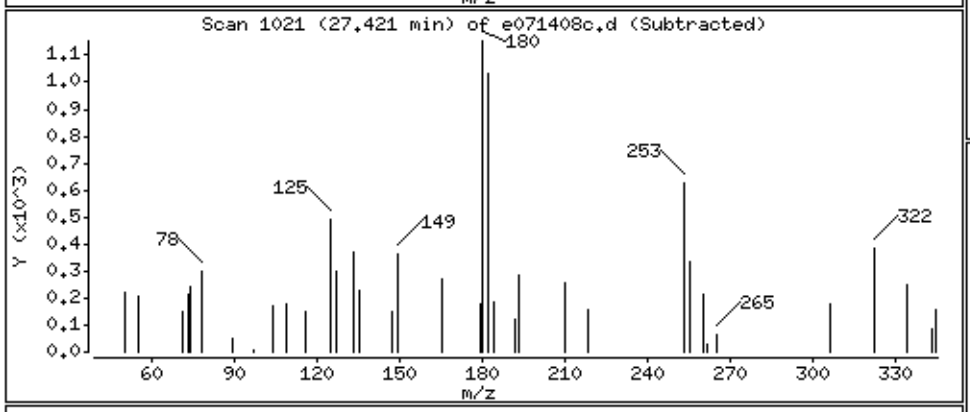
Column phase: RTX-624

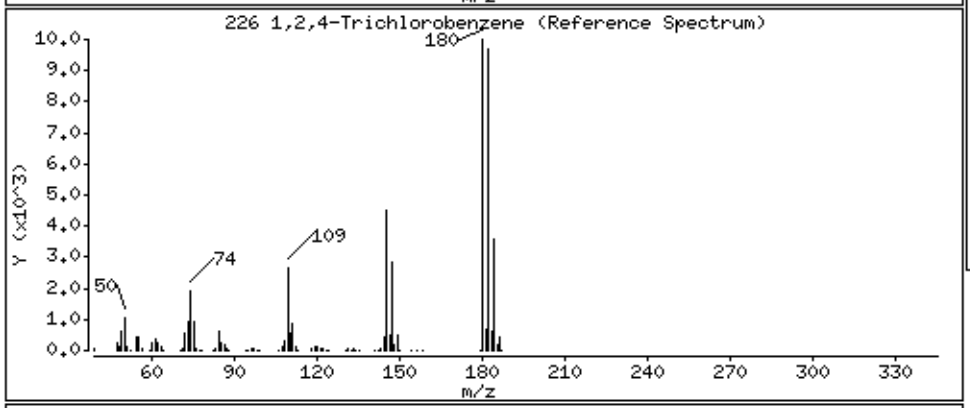
Column diameter: 0.32

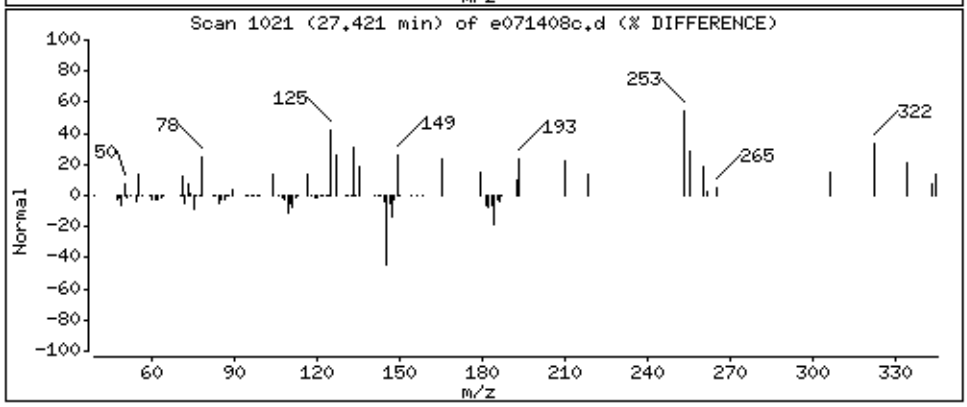
226 1,2,4-Trichlorobenzene

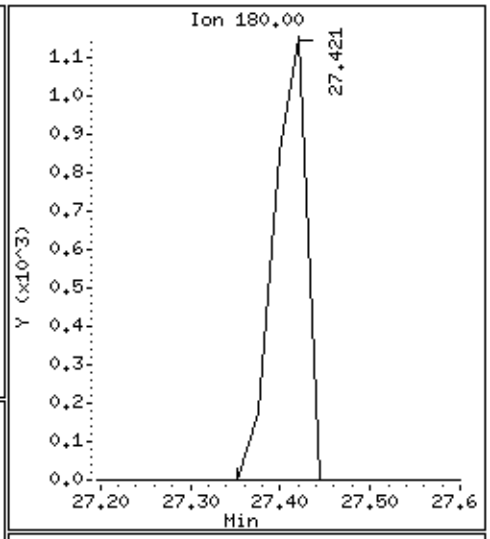
Concentration: 0.06991 PPBV

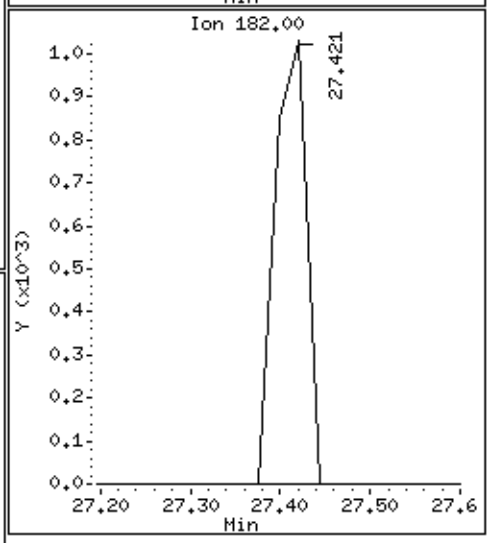












LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1607235A

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	B30IA-1 (070816)	108		97		98				0
02	Lab Blank	111		95		96				0
03	CCV	95		101		98				0
04	LCS	105		96		99				0
05	LCSD	100		98		96				0
06										0
07										0
08										0
09										0
10										0
11										0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

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

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD

SDG No: 1607235A

Lab File ID: e071402.d

Date Analyzed: 07/14/2016

Instrument ID: msde.i

Time Analyzed: 08:35 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	419401		22.18		469034		16.74		131815		15.39	
	UPPER LIMIT	587161		22.51		656648		17.07		184541		15.72	
	LOWER LIMIT	251641		21.85		281420		16.41		79089		15.06	
	CLIENT SAMPLE NO												
01	B30IA-1 (070816)	370312		22.16		395118		16.74		110110		15.39	
02	Lab Blank	397670		22.16		428278		16.74		117205		15.39	
03	CCV	419401		22.18		469034		16.74		131815		15.39	
04	LCS	393867		22.18		447084		16.74		118208		15.39	
05	LCSD	394223		22.18		444566		16.74		116882		15.39	
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

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

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

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: e071404.d & e071403.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 7/14/16 & 7/14/16

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
71-55-6	1,1,1-Trichloroethane	96		97		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	76		80		5.1	
79-00-5	1,1,2-Trichloroethane	89		90		1.1	
75-34-3	1,1-Dichloroethane	92		92		0	
75-35-4	1,1-Dichloroethene	93		96		3.2	
120-82-1	1,2,4-Trichlorobenzene	90		113		23	
95-63-6	1,2,4-Trimethylbenzene	74		77		4.0	
106-93-4	1,2-Dibromoethane (EDB)	100		96		4.1	
95-50-1	1,2-Dichlorobenzene	85		90		5.7	
107-06-2	1,2-Dichloroethane	96		95		1.0	
78-87-5	1,2-Dichloropropane	86		88		2.3	
108-67-8	1,3,5-Trimethylbenzene	80		82		2.5	
106-99-0	1,3-Butadiene	86		86		0	
541-73-1	1,3-Dichlorobenzene	81		81		0	
106-46-7	1,4-Dichlorobenzene	83		84		1.2	
123-91-1	1,4-Dioxane	88		91		3.4	
540-84-1	2,2,4-Trimethylpentane	94		91		3.2	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	89		90		1.1	
591-78-6	2-Hexanone	98		95		3.1	
67-63-0	2-Propanol	89		93		4.4	
107-05-1	3-Chloropropene	113		124		9.3	
622-96-8	4-Ethyltoluene	90		89		1.1	
108-10-1	4-Methyl-2-pentanone	92		91		1.1	
67-64-1	Acetone	82		88		7.0	
100-44-7	alpha-Chlorotoluene	89		88		1.1	
71-43-2	Benzene	88		87		1.1	
75-27-4	Bromodichloromethane	100		102		2.0	
75-25-2	Bromoform	106		107		0.94	
74-83-9	Bromomethane	104		106		1.9	
75-15-0	Carbon Disulfide	87		85		2.3	
56-23-5	Carbon Tetrachloride	99		101		2.0	
108-90-7	Chlorobenzene	99		99		0	
75-00-3	Chloroethane	114		113		0.88	
67-66-3	Chloroform	92		95		3.2	
74-87-3	Chloromethane	89		88		1.1	
156-59-2	cis-1,2-Dichloroethene	90		92		2.2	
10061-01-5	cis-1,3-Dichloropropene	84		85		1.2	
98-82-8	Cumene	91		91		0	
110-82-7	Cyclohexane	97		95		2.1	
124-48-1	Dibromochloromethane	102		103		0.98	
64-17-5	Ethanol	117		116		0.86	
100-41-4	Ethyl Benzene	101		95		6.1	
75-69-4	Freon 11	105		110		4.6	
76-13-1	Freon 113	88		89		1.1	
76-14-2	Freon 114	104		105		0.96	

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: e071404.d & e071403.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 7/14/16 & 7/14/16

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
75-71-8	Freon 12	102		105		2.9	
142-82-5	Heptane	88		89		1.1	
87-68-3	Hexachlorobutadiene	91		113		22	
110-54-3	Hexane	87		88		1.1	
108-38-3	m,p-Xylene	101		98		3.0	
1634-04-4	Methyl tert-butyl ether	91		90		1.1	
75-09-2	Methylene Chloride	87		89		2.3	
91-20-3	Naphthalene	79		102		25	
95-47-6	o-Xylene	100		102		2.0	
103-65-1	Propylbenzene	86		89		3.4	
100-42-5	Styrene	100		100		0	
127-18-4	Tetrachloroethene	105		103		1.9	
109-99-9	Tetrahydrofuran	72		70		2.8	
108-88-3	Toluene	93		92		1.1	
156-60-5	trans-1,2-Dichloroethene	102		98		4.0	
10061-02-6	trans-1,3-Dichloropropene	94		94		0	
79-01-6	Trichloroethene	97		98		1.0	
75-01-4	Vinyl Chloride	93		93		0	

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

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Calibration File Names:
Level 5: /chem/msde.i/17Mar2016.b/e031706.d
Level 6: /chem/msde.i/17Mar2016.b/e031707.d
Level 7: /chem/msde.i/24May2016.b/e052405.d
Level 8: /chem/msde.i/24May2016.b/e052406.d
Level 9: /chem/msde.i/24May2016.b/e052407.d
Level 11: /chem/msde.i/24May2016.b/e052408.d
Level 12: /chem/msde.i/24May2016.b/e052409.d
Level 13: /chem/msde.i/17Mar2016.b/e031711.d
Level 15: /chem/msde.i/17Mar2016.b/e031712.d
Level 16: /chem/msde.i/17Mar2016.b/e031713.d

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
6 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5 / 5.000 Level 12	0.10000 Level 6 / 10.000 Level 13	0.50000 Level 7 / 20.000 Level 15	1.000 Level 8 / 40.000 Level 16	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
7 Freon 134a	+++++	+++++	+++++	+++++	0.99590	0.93100		
	1.02884	+++++	+++++	+++++			0.98525	5.053
8 Propane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
9 Propylene	+++++	+++++	+++++	0.65636	+++++	+++++		
	0.69625	0.67394	0.59210	0.62813			0.64936	6.247
10 1,1-Difluoroethane	+++++	+++++	+++++	0.39191	0.41480	0.40529		
	0.40692	+++++	+++++	+++++			0.40473	2.347
11 Freon 12	+++++	5.12006	4.10953	4.00056	+++++	+++++		
	4.53383	4.16601	3.72304	3.78487			4.20541	11.514
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
13 Chlorodifluoromethane	+++++	+++++	1.23371	1.10297	1.02599	1.06718		
	1.09518	+++++	+++++	+++++			1.10501	7.059
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
15 Freon 114	3.04054	3.74214	2.99528	2.91420	+++++	+++++		
	3.22969	3.03570	2.81081	2.85426			3.07783	9.688
16 Freon 142b	+++++	+++++	2.33378	2.34868	2.04749	2.10517		
	2.23093	+++++	+++++	+++++			2.21321	6.076

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
17 Chloromethane	+++++	0.89598	0.80271	0.83008	+++++	+++++		
	0.82977	0.78391	0.71156	0.73148			0.79793	7.886
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
19 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
20 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
21 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
22 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
23 Butane	+++++	+++++	0.20216	0.19760	+++++	+++++		
	0.22324	0.21314	0.19217	0.21179			0.20668	5.539
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
25 Vinyl Chloride	1.17455	1.32551	1.07263	1.03349	+++++	+++++		
	1.16793	1.13320	1.01360	1.05974			1.12258	9.054
26 1,3-Butadiene	+++++	0.88279	0.65846	0.76541	+++++	+++++		
	0.79294	0.74711	0.70180	0.73672			0.75503	9.432

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
29 Bromomethane	+++++	1.61625	1.12080	1.19140	+++++	+++++		
	1.28406	1.21154	1.05906	1.09156			1.22495	15.420
30 Chloroethane	+++++	+++++	0.49367	0.51242	+++++	+++++		
	0.58805	0.56670	0.51111	0.51020			0.53036	7.102
31 Isopentane	+++++	+++++	0.85650	0.74527	+++++	+++++		
	0.80950	0.76033	0.71285	0.72858			0.76884	7.057
32 Vinyl Bromide	+++++	+++++	0.96076	0.94455	+++++	+++++		
	0.95528	+++++	+++++	+++++			0.95353	0.865
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
34 Pentane	+++++	+++++	1.69548	1.45652	1.39617	1.32596		
	1.26008	+++++	+++++	+++++			1.42684	11.726
35 Freon 11	5.32386	5.21038	4.47573	4.30647	+++++	+++++		
	4.64783	4.30713	3.96331	3.99171			4.52830	11.262
36 1-Pentene	+++++	+++++	0.92877	0.76770	0.81866	0.81261		
	0.74214	+++++	+++++	+++++			0.81398	8.796

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
37 Dichlorofluoromethane	+++++	+++++	2.61477	2.40804	2.40455	2.28575		
	2.48699	+++++	+++++	+++++			2.44002	4.970
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
40 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
41 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
42 Ethanol	+++++	+++++	0.38554	0.36555	+++++	+++++		
	0.36172	0.29161	0.28270	0.28164			0.32813	14.541
43 1,2-Dichloro-1-fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
44 Ethyl Ether	+++++	+++++	0.70230	0.72733	0.65391	0.63915		
	0.58469	+++++	+++++	+++++			0.66148	8.436
45 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
46 Acrolein	+++++	+++++	0.31567	0.29942	+++++	+++++		
	0.25047	+++++	+++++	+++++			0.28852	11.762

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
47 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
48 Freon 123	+++++	+++++	3.12381	2.82674	2.69207	2.67719		
	2.81861	+++++	+++++	+++++			2.82768	6.346
49 Freon 113	3.77652	3.98245	3.17023	3.06291	+++++	+++++		
	3.22635	3.45679	3.19789	3.27477			3.39349	9.562
50 1,1-Dichloroethene	+++++	1.16629	0.95408	0.93919	+++++	+++++		
	0.96344	0.91006	0.82919	0.86193			0.94631	11.491
51 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
52 Acetone	+++++	+++++	0.68940	0.62153	+++++	+++++		
	0.52666	0.52391	0.47398	0.48462			0.55335	15.284
53 Iodomethane	+++++	+++++	4.60765	4.17771	4.02710	4.02394		
	3.68501	+++++	+++++	+++++			4.10428	8.145
54 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
55 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
56 Carbon Disulfide	+++++	+++++	5.08838	4.49862	+++++	+++++		
	4.40737	3.99789	3.66589	3.64653			4.21745	13.210

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
57 2-Propanol	+++++	+++++	1.66071	1.65813	+++++	+++++		
	1.81940	1.70040	1.61933	1.69853			1.69275	4.071
58 3-Chloropropene	+++++	0.59765	0.69152	0.65355	+++++	+++++		
	0.65844	0.63373	0.57676	0.60144			0.63044	6.430
59 Cyclopentene	+++++	+++++	3.15715	2.77885	2.77976	2.71571		
	2.48967	+++++	+++++	+++++			2.78423	8.623
60 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
61 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
62 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
63 Acetonitrile	+++++	+++++	0.87437	0.70413	+++++	+++++		
	0.61519	+++++	+++++	+++++			0.73123	18.010
64 Cyclopentane	+++++	+++++	0.85651	0.67777	0.68509	0.69459		
	0.67804	+++++	+++++	+++++			0.71840	10.789
65 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
66 Methylene Chloride	+++++	1.87437	1.31192	1.27128	+++++	+++++		
	1.32693	1.25948	1.09940	1.13833			1.32596	19.348

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
67 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
68 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
69 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
70 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
71 tert-Butyl alcohol	+++++	+++++	3.17828	3.43808	+++++	+++++		
	2.95256	3.30101	2.74633	2.96407			3.09672	8.246
72 Methyl tert-butyl ether	+++++	4.95062	4.13935	3.98352	+++++	+++++		
	4.54432	4.24444	3.85262	3.96530			4.24002	9.130
73 trans-1,2-Dichloroethene	+++++	1.10234	0.89999	0.93074	+++++	+++++		
	1.04937	0.94937	0.88689	0.90946			0.96116	8.570
74 Acrylonitrile	+++++	+++++	0.94328	0.90324	0.83969	0.78338		
	0.71968	+++++	+++++	+++++			0.83785	10.730
75 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
76 1-Hexene	+++++	+++++	0.86347	0.70113	0.66133	0.72858		
	0.69321	+++++	+++++	+++++			0.72954	10.775

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5 / 5.000 Level 12	0.10000 Level 6 / 10.000 Level 13	0.50000 Level 7 / 20.000 Level 15	1.000 Level 8 / 40.000 Level 16	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
77 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
78 Hexane	+++++	1.93733	1.55177	1.53817	+++++	+++++		
	1.78717	1.66845	1.52334	1.57178			1.65400	9.429
79 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
80 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
81 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
82 1,1-Dichloroethane	+++++	2.69024	2.45244	2.73570	+++++	+++++		
	2.71402	2.49231	2.22594	2.29764			2.51547	8.184
83 Isopropyl ether	+++++	+++++	2.99372	2.83284	+++++	+++++		
	3.33969	3.14518	2.86014	2.92951			3.01685	6.415
84 1-Propanol	+++++	+++++	0.18242	0.21285	0.24978	0.25588		
	0.23464	+++++	+++++	+++++			0.22711	13.207
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
86 Vinyl Acetate	+++++	+++++	0.39671	0.39911	+++++	+++++		
	0.41572	0.40228	0.35889	0.37530			0.39134	5.254

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
88 Ethyl-tert-butyl ether	+++++	+++++	3.51883	3.56297	+++++	+++++		
	4.30713	4.13284	3.74977	3.83274			3.85071	8.141
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
90 2,2-Dichloropropane	+++++	+++++	3.55176	3.36224	3.21760	3.19536		
	2.91851	+++++	+++++	+++++			3.24909	7.178
91 cis-1,2-Dichloroethene	+++++	1.25991	1.02141	1.03678	+++++	+++++		
	1.08460	1.03814	0.93871	0.98020			1.05139	9.795
92 2-Butanone	+++++	+++++	0.64410	0.65010	+++++	+++++		
	0.73733	0.68219	0.62684	0.65867			0.66654	5.875
93 Methyl Acrylate	+++++	+++++	2.28761	2.13389	2.13720	2.17337		
	2.06537	+++++	+++++	+++++			2.15949	3.778
94 Ethyl Acetate	+++++	+++++	0.29688	0.28671	0.25618	0.28402		
	0.27809	+++++	+++++	+++++			0.28038	5.399
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5 / 5.000 Level 12	0.10000 Level 6 / 10.000 Level 13	0.50000 Level 7 / 20.000 Level 15	1.000 Level 8 / 40.000 Level 16	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
99 Tetrahydrofuran	+++++	+++++	1.08081	1.21670	+++++	+++++		
	1.33716	1.25892	1.18591	1.25953			1.22317	7.060
100 Chloroform	+++++	4.78448	3.48851	3.44218	+++++	+++++		
	3.72316	3.43887	3.16350	3.22895			3.60995	15.210
101 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
102 Cyclohexane	+++++	1.97754	1.81719	1.72787	+++++	+++++		
	2.02036	1.94115	1.78685	1.84262			1.87337	5.758
103 1,1,1-Trichloroethane	5.07168	4.75349	3.88746	4.15085	+++++	+++++		
	4.40274	4.00231	3.62668	3.69808			4.19916	12.166
104 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
105 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
106 Carbon Tetrachloride	4.82772	4.07508	3.62459	3.65485	+++++	+++++		
	4.56136	4.33329	3.88074	3.94190			4.11244	10.453
107 1,1-Dichloropropene	+++++	+++++	1.08054	0.88134	0.89724	0.93160		
	0.88002	+++++	+++++	+++++			0.93415	9.039

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
108 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
109 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
110 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
113 2,2,4-Trimethylpentane	+++++	2.82473	2.02878	2.11284	+++++	+++++		
	2.14077	1.98599	1.75904	1.80898			2.09445	16.834
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
115 Isobutanol	+++++	+++++	1.31664	0.98605	0.90345	0.97080		
	0.83123	+++++	+++++	+++++			1.00163	18.618
116 Benzene	+++++	1.77869	1.16573	1.12317	+++++	+++++		
	1.19266	1.07964	1.04163	1.00570			1.19817	22.063
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
119 tert-Amyl methyl ether	+++++	+++++	0.34291	0.26393	+++++	+++++		
	0.33619	0.30905	0.30103	0.29276			0.30765	9.461

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
120 1,2-Dichloroethane	0.55304	0.83119	0.63749	0.58943	+++++	+++++		
	0.66829	0.60152	0.56742	0.54767			0.62451	14.927
121 Heptane	+++++	0.36350	0.26569	0.25009	+++++	+++++		
	0.29317	0.28088	0.26946	0.26529			0.28401	13.222
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
124 n-Butanol	+++++	+++++	0.46765	0.44398	0.44786	0.44685		
	0.44055	+++++	+++++	+++++			0.44938	2.359
125 Trichloroethene	0.55811	0.72579	0.63220	0.61998	+++++	+++++		
	0.64913	0.62225	0.59001	0.57439			0.62148	8.380
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
127 Methylcyclohexane	+++++	+++++	0.66667	0.61556	+++++	+++++		
	0.73059	0.68212	0.66054	0.64704			0.66709	5.751
128 Ethyl acrylate	+++++	+++++	0.08476	0.07847	0.07133	0.06864		
	0.07049	+++++	+++++	+++++			0.07474	9.003
129 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
130 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
131 2-Pentanone	+++++	+++++	0.83872	0.76141	0.76358	0.76608		
	0.74445	+++++	+++++	+++++			0.77485	4.737
132 1,2-Dichloropropane	+++++	0.49479	0.34374	0.37715	+++++	+++++		
	0.40057	0.38071	0.35535	0.34818			0.38578	13.514
133 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
134 Methyl Methacrylate	+++++	+++++	0.40583	0.41307	0.39358	0.40409		
	0.40540	+++++	+++++	+++++			0.40439	1.728
135 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
136 1,4-Dioxane	+++++	0.33485	0.29020	0.28555	+++++	+++++		
	0.29637	0.27812	0.27211	0.26523			0.28892	7.916
137 Dibromomethane	+++++	+++++	0.81469	0.74134	0.74481	0.73171		
	0.70527	+++++	+++++	+++++			0.74756	5.431
138 Bromodichloromethane	0.85036	1.12173	1.02065	1.03009	+++++	+++++		
	1.04984	0.99645	0.95419	0.93127			0.99432	8.293
139 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
140 bis(chloromethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
141 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
142 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
143 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
144 cis-1,3-Dichloropropene	+++++	0.77501	0.74057	0.70277	+++++	+++++		
	0.79805	0.74135	0.71848	0.71044			0.74095	4.712
145 4-Methyl-2-pentanone	+++++	0.68605	0.58879	0.55944	+++++	+++++		
	0.65873	0.62434	0.61146	0.59933			0.61831	6.926
147 Toluene	+++++	1.72268	1.42747	1.33669	+++++	+++++		
	1.49343	1.38186	1.33106	1.29709			1.42718	10.239
148 Octane	+++++	+++++	0.28296	0.25280	0.24534	0.24877		
	0.22852	+++++	+++++	+++++			0.25168	7.859
149 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
150 trans-1,3-Dichloropropene	+++++	0.86752	0.71739	0.73834	+++++	+++++		
	0.82746	0.77859	0.75828	0.73170			0.77418	7.102
151 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
152 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
153 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
154 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
155 1,1,2-Trichloroethane	0.82922	0.71158	0.54764	0.54579	+++++	+++++		
	0.60068	0.55351	0.53276	0.50016			0.60267	18.527
156 Tetrachloroethene	0.84062	1.15457	0.93725	0.89585	+++++	+++++		
	0.99469	0.89262	0.87963	0.83384			0.92863	11.293
157 1,3-Dichloropropane	+++++	+++++	0.97514	0.86766	0.84348	0.80586		
	0.81813	+++++	+++++	+++++			0.86206	7.836
158 2-Hexanone	+++++	+++++	0.34209	0.38128	+++++	+++++		
	0.41450	0.40140	0.39732	0.39046			0.38784	6.449
159 Butyl Acetate	+++++	+++++	0.09579	0.07085	0.08453	0.08534		
	0.08421	+++++	+++++	+++++			0.08414	10.529
160 Dibromochloromethane	1.13509	1.35827	1.21370	1.20779	+++++	+++++		
	1.32964	1.23232	1.18971	1.12096			1.22343	6.861
161 1,2-Dibromoethane (EDB)	0.91461	1.05600	0.90524	0.88768	+++++	+++++		
	0.99492	0.91216	0.88283	0.84531			0.92484	7.338

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
162 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
164 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
165 Chlorobenzene	+++++	1.62401	1.33249	1.27529	+++++	+++++		
	1.42898	1.31371	1.27351	1.22152			1.35279	10.047
166 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
167 Ethyl Benzene	+++++	0.83822	0.63666	0.56139	+++++	+++++		
	0.69087	0.64524	0.63425	0.60527			0.65884	13.412
168 1,1,1,2-Tetrachloroethane	+++++	+++++	1.22059	0.95918	0.97804	0.91730		
	0.91993	+++++	+++++	+++++			0.99901	12.667
169 m,p-Xylene	+++++	0.79226	0.73966	0.71273	+++++	+++++		
	0.84181	0.78428	0.75932	0.72746			0.76536	5.802
170 Nonane	+++++	+++++	0.55249	0.47591	0.49451	0.49445		
	0.48558	+++++	+++++	+++++			0.50059	5.995
171 o-Xylene	+++++	0.64964	0.67013	0.69703	+++++	+++++		
	0.77627	0.72124	0.71636	0.68342			0.70201	5.879
172 Styrene	+++++	1.23221	1.07737	1.10226	+++++	+++++		
	1.30763	1.22708	1.20928	1.15964			1.18792	6.755

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
173 2-Heptanone	+++++	+++++	0.58237	0.49728	0.47279	0.51104		
	0.52408	+++++	+++++	+++++			0.51751	7.909
174 Bromoform	1.12313	1.29015	1.14569	1.13013	+++++	+++++		
	1.33478	1.27750	1.23022	1.16550			1.21214	6.758
175 Cumene	+++++	2.65632	2.23518	2.26236	+++++	+++++		
	2.58051	2.40146	2.36134	2.21060			2.38682	7.268
176 Cyclohexanone	+++++	+++++	0.45860	0.41451	0.44764	0.41318		
	0.42090	+++++	+++++	+++++			0.43097	4.826
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
179 alpha-Pinene	+++++	+++++	2.08725	1.93313	1.97717	1.98009		
	1.99170	+++++	+++++	+++++			1.99387	2.846
180 Bromobenzene	+++++	+++++	1.17580	1.00188	0.98688	0.92611		
	0.93379	+++++	+++++	+++++			1.00489	10.051
181 1,1,2,2-Tetrachloroethane	1.24738	1.29072	1.02927	1.01815	+++++	+++++		
	1.15356	1.08719	1.06739	0.99888			1.11157	9.799
182 Propylbenzene	+++++	2.61332	2.52811	2.39376	+++++	+++++		
	2.67489	2.54068	2.50112	2.34573			2.51395	4.582
183 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
184 trans-1,4-Dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
185 1,2,3-Trichloropropane	+++++	+++++	0.46967	0.40895	0.39751	0.36468		
	0.37683	+++++	+++++	+++++			0.40353	10.114
186 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
187 Decane	+++++	+++++	0.44353	0.39676	0.39410	0.39894		
	0.40695	+++++	+++++	+++++			0.40805	5.000
188 4-Ethyltoluene	2.40545	2.33407	1.95031	1.95348	+++++	+++++		
	2.22952	2.12360	2.09179	1.95776			2.13075	8.358
189 2-Chlorotoluene	+++++	+++++	0.74253	0.65590	0.62484	0.58706		
	0.61373	+++++	+++++	+++++			0.64481	9.296
190 1,3,5-Trimethylbenzene	1.59193	1.84798	1.54624	1.64332	+++++	+++++		
	1.75893	1.68858	1.61769	1.54285			1.65469	6.424
191 4-Chlorotoluene	+++++	+++++	0.62175	0.60979	0.59592	0.56872		
	0.59226	+++++	+++++	+++++			0.59769	3.344
192 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
193 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5 / 5.000 Level 12	0.10000 Level 6 / 10.000 Level 13	0.50000 Level 7 / 20.000 Level 15	1.000 Level 8 / 40.000 Level 16	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
194 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
195 tert-Butylbenzene	+++++	+++++	1.87933	1.66426	1.65208	1.62171		
	1.60705	+++++	+++++	+++++			1.68489	6.593
196 1,2,4-Trimethylbenzene	1.84267	1.58681	1.24330	1.26583	+++++	+++++		
	1.45476	1.39453	1.39981	1.28118			1.43361	13.989
197 Pentachloroethane	+++++	+++++	0.77936	0.70091	0.65926	0.63262		
	0.64222	+++++	+++++	+++++			0.68287	8.777
198 Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
199 D-Limonene	+++++	+++++	0.69441	0.60117	0.63321	0.62578		
	0.62062	+++++	+++++	+++++			0.63504	5.550
200 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
201 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
202 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
203 sec-Butylbenzene	+++++	+++++	3.57695	3.16374	3.08626	3.01567		
	3.05051	+++++	+++++	+++++			3.17863	7.215

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5 / 5.000 Level 12	0.10000 Level 6 / 10.000 Level 13	0.50000 Level 7 / 20.000 Level 15	1.000 Level 8 / 40.000 Level 16	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
204 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
205 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
206 bis(2-Chloroethyl) Ether	+++++	+++++	1.67390	1.53175	1.58397	1.54797		
	1.55759	+++++	+++++	+++++			1.57904	3.566
207 p-Cymene	+++++	+++++	2.03789	1.92953	1.94282	1.89865		
	1.89757	+++++	+++++	+++++			1.94129	2.959
208 1,3-Dichlorobenzene	1.68497	1.62078	1.28850	1.18919	+++++	+++++		
	1.33476	1.27804	1.26242	1.17154			1.35377	14.236
209 1,4-Dichlorobenzene	1.69357	1.25285	1.17392	1.17321	+++++	+++++		
	1.28955	1.22177	1.21895	1.13243			1.26953	14.045
210 1,2,3-Trimethylbenzene	+++++	+++++	0.71000	0.61964	0.59593	0.59307		
	0.58939	+++++	+++++	+++++			0.62161	8.175
211 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
212 alpha-Chlorotoluene	+++++	1.55199	1.46953	1.50801	+++++	+++++		
	1.71700	1.67461	1.67783	1.58295			1.59742	5.903
213 Butylbenzene	+++++	+++++	0.55969	0.46819	0.47703	0.46576		
	0.46411	+++++	+++++	+++++			0.48696	8.412

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
214 1,2-Dichlorobenzene	1.31633	1.25970	1.14520	1.09352	+++++	+++++		
	1.18443	1.14137	1.11159	1.03823			1.16130	7.779
215 Undecane	+++++	+++++	0.31578	0.25944	0.30991	0.29345		
	0.29996	+++++	+++++	+++++			0.29571	7.454
216 4-Ethyl-1,2-dimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
217 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
218 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
219 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
220 1,2,4,5-tetramethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
221 1,2-Dibromo-3-chloropropane	+++++	+++++	0.82195	0.76027	0.77847	0.78435		
	0.80287	+++++	+++++	+++++			0.78958	2.993
222 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
223 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
224 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
225 Dodecane	+++++	+++++	0.11206	0.08728	0.08810	0.07135		
	0.08169	+++++	+++++	+++++			0.08810	16.993
226 1,2,4-Trichlorobenzene	0.71300	0.33652	0.51866	0.51748	+++++	+++++		
	0.51142	0.54926	0.54917	0.51713			0.52658	19.308
227 Hexachlorobutadiene	+++++	0.60454	0.70456	0.75395	+++++	+++++		
	0.74371	0.74884	0.74554	0.71076			0.71599	7.377
228 Naphthalene	+++++	+++++	0.71295	0.80868	+++++	+++++		
	0.77651	0.78779	0.79025	0.73737			0.76893	4.717
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
230 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
231 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
234 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
235 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
236 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
M 237 1,2-Dichloroethene (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
M 238 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
M 239 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
M 240 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
241 Total Volatile Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
242 TPH reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
243 TPH reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5 / 5.000 Level 12	0.10000 Level 6 / 10.000 Level 13	0.50000 Level 7 / 20.000 Level 15	1.000 Level 8 / 40.000 Level 16	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
244 TPH reference to Gasoline	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++
245 TPH reference MineralSpirits	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++
246 TPH reference to Stoddard	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++
247 TVOC reference to Hexane	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++
248 TVOC reference to Heptane	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++
249 TVOC reference to Toluene	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++
250 TVOC reference to Toluene-d8	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++
251 NMOC reference to Hexane	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++
252 NMOC reference to Heptane	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++
253 NMOC reference to Toluene	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
254 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
255 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
256 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
257 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
258 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
259 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
260 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
261 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
262 C5 - C6 Aliphatic ref C5 + C6	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
263 C6-C8 Aliphatic ref Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
264 C8-C10 Aliphatic ref Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
265 C10-C12 Aliphatic ref Dodecan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
266 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
267 C8-C10 Aromatic ref 1,2,3-TMB	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
268 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
269 C10-C12 Aromatic 1,2,4,5-TMB	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
270 C10-C12 Aromatic Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
$ 112 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
$ 117 1,2-Dichloroethane-d4	1.53017	1.48774	1.42716	1.41807	+++++	+++++		
	1.42005	1.38536	1.41883	1.39578			1.43539	3.400
$ 146 Toluene-d8	0.97414	0.96053	0.97380	0.97096	+++++	+++++		
	0.99484	0.99287	0.99302	0.99567			0.98198	1.390

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e16l0317f.m
Cal Date : 24-May-2016 14:41 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
$ 177 4-Bromofluorobenzene	0.67332	0.68733	0.68241	0.67820	+++++	+++++		
	0.69032	0.69273	0.70440	0.67988			0.68607	1.432

Calibration History

Method : /chem/msde.i/24May2016.b/e16l0317f.m
Start Cal Date: 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 5 , Cal Amount: 0.05000		
17-MAR-2016 14:00	Level5	/chem/msde.i/17Mar2016.b/e031706.d

Injection Date	Sublist	Calibration File
Cal Level: 6 , Cal Amount: 0.10000		
17-MAR-2016 15:07	Level6	/chem/msde.i/17Mar2016.b/e031707.d

Injection Date	Sublist	Calibration File
Cal Level: 7 , Cal Amount: 0.50000		
24-MAY-2016 09:29	FreonICAL	/chem/msde.i/24May2016.b/e052405.d
19-MAY-2016 14:02	AcetonitrileCrv	/chem/msde.i/19May2016.b/e051907.d
09-MAY-2016 11:01	ComboICAL-VB	/chem/msde.i/09May2016.b/e050907.d
30-MAR-2016 14:41	AcroleinICAL	/chem/msde.i/30Mar2016.b/e033007.d
25-MAR-2016 12:18	Combo-AT1ICAL	/chem/msde.i/25Mar2016.b/e032505.d
22-MAR-2016 12:05	AT1	/chem/msde.i/22Mar2016.b/e032205.d
17-MAR-2016 15:49	HILOcrvFULL	/chem/msde.i/17Mar2016.b/e031708.d

Injection Date	Sublist	Calibration File
Cal Level: 8 , Cal Amount: 1.00000		
24-MAY-2016 10:14	FreonICAL	/chem/msde.i/24May2016.b/e052406.d
19-MAY-2016 14:44	AcetonitrileCrv	/chem/msde.i/19May2016.b/e051908.d
09-MAY-2016 12:03	ComboICAL-VB	/chem/msde.i/09May2016.b/e050908.d
30-MAR-2016 15:43	AcroleinICAL	/chem/msde.i/30Mar2016.b/e033008.d
25-MAR-2016 13:02	Combo-AT1ICAL	/chem/msde.i/25Mar2016.b/e032506.d
22-MAR-2016 13:20	AT1	/chem/msde.i/22Mar2016.b/e032206.d
17-MAR-2016 16:31	HILOcrvFULL	/chem/msde.i/17Mar2016.b/e031709.d

Injection Date	Sublist	Calibration File
Cal Level: 9 , Cal Amount: 2.00000		
24-MAY-2016 11:00	FreonICAL	/chem/msde.i/24May2016.b/e052407.d
09-MAY-2016 12:56	ComboICAL-VB	/chem/msde.i/09May2016.b/e050909.d
22-MAR-2016 14:04	AT1	/chem/msde.i/22Mar2016.b/e032207.d

| Cal Level: 11, Cal Amount: 4.00000 |

24-MAY-2016 11:47	FreonICAL	/chem/msde.i/24May2016.b/e052408.d
09-MAY-2016 14:40	ComboICAL-VB	/chem/msde.i/09May2016.b/e050912.d
22-MAR-2016 14:50	AT1	/chem/msde.i/22Mar2016.b/e032208.d

| Cal Level: 12, Cal Amount: 5.00000 |

24-MAY-2016 13:20	FreonICAL	/chem/msde.i/24May2016.b/e052409.d
19-MAY-2016 15:27	AcetonitrileCrv	/chem/msde.i/19May2016.b/e051909.d
09-MAY-2016 15:22	ComboICAL-VB	/chem/msde.i/09May2016.b/e050913.d
30-MAR-2016 16:25	AcroleinICAL	/chem/msde.i/30Mar2016.b/e033009.d
25-MAR-2016 13:44	Combo-AT1ICAL	/chem/msde.i/25Mar2016.b/e032507.d
22-MAR-2016 15:32	AT1	/chem/msde.i/22Mar2016.b/e032209.d
17-MAR-2016 17:24	HILOcrvFULL	/chem/msde.i/17Mar2016.b/e031710.d

| Cal Level: 13, Cal Amount: 10.00000 |

17-MAR-2016 18:10	HILOcrvFULL	/chem/msde.i/17Mar2016.b/e031711.d

| Cal Level: 15, Cal Amount: 20.00000 |

17-MAR-2016 19:01	HILOcrvFULL	/chem/msde.i/17Mar2016.b/e031712.d

| Cal Level: 16, Cal Amount: 40.00000 |

17-MAR-2016 19:49	HILOcrvFULL	/chem/msde.i/17Mar2016.b/e031713.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 12

| Ccal Level: 12, Ccal Amount: 5.000 |

24-MAY-2016 07:15	AT09	/chem/msde.i/24May2016.b/e052402.d

| Ccal Level: 8 , Ccal Amount: 1.000 |

24-MAY-2016 10:14	AT1CCV	/chem/msde.i/24May2016.b/e052406a.d

Curve Name: E16$_L$0317F

Initial Calibration Narrative

An initial calibration curve was analyzed on 03/17/16 on MSD-E.
The instrument was set up to do Full Scan and Selective Ion Monitoring (SIM) simultaneously.
Tune File: E031701, E032201, E032501, E033001, E050901, E051901, E052401.
ICAL: Zero (0) out.
ICV: Zero (0) out. File E031716.
In-house control limits: Zero (0) out.
DOD Control limits: Zero (0) out.
BTEX RL Spike: Zero (0) out 50-150. File E031707x.
Naphthalene was calibrated from 0.05ppbv-4.0ppbv. See note below regarding Naphthalene.
The following compounds are good for special RL of 0.05ppbv:

Freon 114	Bromodichloromethane	1,3,5-Trimethylbenzene
Vinyl Chloride	1,1,2-Trichloroethane	1,2,4-Trimethylbenzene
Freon 11	Tetrachloroethene	1,3-Dichlorobenzene
Freon 113	Dibromochloromethane	1,4-Dichlorobenzene
1,1,1-Trichloroethane	1,2-Dibromomethane (EDB)	1,2-Dichlorobenzene
Carbon Tetrachloride	Bromoform	1,2,4-Trichlorobenzene
1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	
Trichloroethene	4-Ethyltoluene	

*The quantitation ion peak (128 amu) is sufficiently resolved for accurate quantification of Naphthalene at the special reporting limit of 0.05ppbv. However, the secondary mass ion peak (127 amu) for Naphthalene is not completely baseline-resolved. Identification of Naphthalene based on the presence and abundance ratio of confirmation ion is reliable at the lowest concentrations even when insufficient baseline resolution of the secondary mass ion peak (127 amu). The spectrum of Naphthalene in this ICAL point will be used as the reference to determine the ion ratio target in the samples for this ICAL.

~~**A five (5) point initial calibration for the AT-1 special was analyzed on 3/22/16 at levels 0.5ppbv, 1.0ppbv, 2.0ppbv, 4.0ppbv, and 5.0ppbv and included in the "A" curve.** Freon 134 was calibrated from 2.0ppbv to 5.0ppbv due to poor peak quality at the lower levels. Freon 152a was calibrated from 1.0ppbv to 5.0ppbv due to poor peak quality at the 0.5ppbv level.~~ (Freons re-curved on 5/24/16, see below).

~~**A three (3) point initial calibration for the Combination special (minus the AT-1 specials) was analyzed on 3/25/16 at levels 0.5ppbv, 1.0ppbv, and 5.0ppbv.** Zero (0) out, all points included.~~ (Combination specials recurved on 5/9/16, see below).

A three (3) point initial calibration for Acrolein was analyzed on 3/30/16 at levels 0.5ppbv, 1.0ppbv, and 5.0ppbv.

The Combination special was recalibrated on 5/9/16 at levels 0.5ppbv, 1.0ppbv, 2.0ppbv, 4.0ppbv, and 5.0ppbv. Includes alpha-Pinene and D-Limonene. The Vinyl Bromide ICAL from 3/25/16 and the Freon ICAL from 3/22/16 were retained. Acetonitrile and trans-1,4-Dichloro-2-Butene were removed from the ICAL due to interference from coeluting compounds. **AT-1 ICV:** Zero (0) out. File E050916.

A three (3) point initial calibration for Acetonitrile was analyzed on 5/19/16 at levels 0.5ppbv, 1.0ppbv, and 5.0ppbv.

A five (5) point initial calibration for the special Freons was analyzed on 5/24/16 at levels 0.5ppbv, 1.0ppbv, 2.0ppbv, 4.0ppbv, and 5.0ppbv. Freon 134 was calibrated from 2.0ppbv to 5.0ppbv due to poor peak quality at the lower levels. Freon 152a was calibrated from 1.0ppbv to 5.0ppbv due to poor peak quality at the 0.5ppbv level.

MDL was run 10/19/15 – 10/23/15.

Important Note: The MDL for Hexane and Cyclohexane is greater than ½ the RL.

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 24-MAY-2016 13:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/24May2016.b/e1610317f.m
Cal Date : 24-May-2016 14:26 efinn
Curve Type : Average

Calibration File Names:
Level 5: /chem/msde.i/17Mar2016.b/e031706.d
Level 6: /chem/msde.i/17Mar2016.b/e031707.d
Level 7: /chem/msde.i/24May2016.b/e052405.d
Level 8: /chem/msde.i/24May2016.b/e052406.d
Level 9: /chem/msde.i/24May2016.b/e052407.d
Level 11: /chem/msde.i/24May2016.b/e052408.d
Level 12: /chem/msde.i/24May2016.b/e052409.d
Level 13: /chem/msde.i/17Mar2016.b/e031711.d
Level 15: /chem/msde.i/17Mar2016.b/e031712.d
Level 16: /chem/msde.i/17Mar2016.b/e031713.d

EF 6/24/16

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

Compound	0.05000 Level 5 / 5.000 Level 12	0.10000 Level 6 / 10.000 Level 13	0.50000 Level 7 / 20.000 Level 15	1.000 Level 8 / 40.000 Level 16	2.000 Level 9	4.000 Level 11	RRF	% RSD
7 Freon 134a	+++++	+++++	+++++	+++++	0.99590	0.93100		
	1.02884	+++++	+++++	+++++			0.98525	5.053
10 1,1-Difluoroethane	+++++	+++++	+++++	0.39191	0.41480	0.40529		
	0.40692	+++++	+++++	+++++			0.40473	2.347
13 Chlorodifluoromethane	+++++	+++++	1.23371	1.10297	1.02599	1.06718		
	1.09518	+++++	+++++	+++++			1.10501	7.059
16 Freon 142b	+++++	+++++	2.33378	2.34868	2.04749	2.10517		
	2.23093	+++++	+++++	+++++			2.21321	6.076
37 Dichlorofluoromethane	+++++	+++++	2.61477	2.40804	2.40455	2.28575		
	2.48699	+++++	+++++	+++++			2.44002	4.970
48 Freon 123	+++++	+++++	3.12381	2.82674	2.69207	2.67719		
	2.81861	+++++	+++++	+++++			2.82768	6.346

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 19-MAY-2016 15:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/19May2016.b/e1610317e.m
Cal Date : 19-May-2016 16:14 efinn
Curve Type : Average

Calibration File Names:
Level 5: /chem/msde.i/17Mar2016.b/e031706.d
Level 6: /chem/msde.i/17Mar2016.b/e031707.d
Level 7: /chem/msde.i/19May2016.b/e051907.d
Level 8: /chem/msde.i/19May2016.b/e051908.d
Level 9: /chem/msde.i/09May2016.b/e050909.d
Level 11: /chem/msde.i/09May2016.b/e050912.d
Level 12: /chem/msde.i/19May2016.b/e051909.d
Level 13: /chem/msde.i/17Mar2016.b/e031711.d
Level 15: /chem/msde.i/17Mar2016.b/e031712.d
Level 16: /chem/msde.i/17Mar2016.b/e031713.d

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

5/19/16
5/20/16

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
63 Acetonitrile	+++++	+++++	0.87437	0.70413	+++++	+++++		
	0.61519	+++++	+++++	+++++			0.73123	18.010

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 09-MAY-2016 15:22
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/09May2016.b/e1610317d.m
Cal Date : 10-May-2016 10:48 efinn
Curve Type : Average

Calibration File Names:
Level 5: /chem/msde.i/17Mar2016.b/e031706.d
Level 6: /chem/msde.i/17Mar2016.b/e031707.d
Level 7: /chem/msde.i/09May2016.b/e050907.d
Level 8: /chem/msde.i/09May2016.b/e050908.d
Level 9: /chem/msde.i/09May2016.b/e050909.d
Level 11: /chem/msde.i/09May2016.b/e050912.d
Level 12: /chem/msde.i/09May2016.b/e050913.d
Level 13: /chem/msde.i/17Mar2016.b/e031711.d
Level 15: /chem/msde.i/17Mar2016.b/e031712.d
Level 16: /chem/msde.i/17Mar2016.b/e031713.d

5/10/16

5/10/16

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

Compound	0.05000 Level 5 / 5.000 Level 12	0.10000 Level 6 / 10.000 Level 13	0.50000 Level 7 / 20.000 Level 15	1.000 Level 8 / 40.000 Level 16	2.000 Level 9	4.000 Level 11	___ RRF	% RSD
36 1-Pentene	+++++	+++++	0.92877	0.76770	0.81866	0.81261		
	0.74214	+++++	+++++	+++++			0.81398	8.796
34 Pentane	+++++	+++++	1.69548	1.45652	1.39617	1.32596		
	1.26008	+++++	+++++	+++++			1.42684	11.726
44 Ethyl Ether	+++++	+++++	0.70230	0.72733	0.65391	0.63915		
	0.58469	+++++	+++++	+++++			0.66148	8.436
53 Iodomethane	+++++	+++++	4.60765	4.17771	4.02710	4.02394		
	3.68501	+++++	+++++	+++++			4.10428	8.145
59 Cyclopentene	+++++	+++++	3.15715	2.77885	2.77976	2.71571		
	2.48967	+++++	+++++	+++++			2.78423	8.623
63 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 30-MAR-2016 16:25
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/30Mar2016.b/e16l0317c.m
Cal Date : 30-Mar-2016 17:13 efinn
Curve Type : Average

Calibration File Names:
Level 5: /chem/msde.i/17Mar2016.b/e031706.d
Level 6: /chem/msde.i/17Mar2016.b/e031707.d
Level 7: /chem/msde.i/30Mar2016.b/e033007.d
Level 8: /chem/msde.i/30Mar2016.b/e033008.d
Level 9: /chem/msde.i/22Mar2016.b/e032207.d
Level 11: /chem/msde.i/22Mar2016.b/e032208.d
Level 12: /chem/msde.i/30Mar2016.b/e033009.d
Level 13: /chem/msde.i/17Mar2016.b/e031711.d
Level 15: /chem/msde.i/17Mar2016.b/e031712.d
Level 16: /chem/msde.i/17Mar2016.b/e031713.d

3/30/16
3/30/16

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
46 Acrolein	+++++	+++++	0.31567	0.29942	+++++	+++++		
	0.25047	+++++	+++++	+++++			0.28852	11.762

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 25-MAR-2016 13:44
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/25Mar2016.b/e1610317b.m
Cal Date : 25-Mar-2016 15:49 efinn
Curve Type : Average

Calibration File Names:
Level 5: /chem/msde.i/17Mar2016.b/e031706.d
Level 6: /chem/msde.i/17Mar2016.b/e031707.d
Level 7: /chem/msde.i/25Mar2016.b/e032505.d
Level 8: /chem/msde.i/25Mar2016.b/e032506.d
Level 9: /chem/msde.i/22Mar2016.b/e032207.d
Level 11: /chem/msde.i/22Mar2016.b/e032208.d
Level 12: /chem/msde.i/25Mar2016.b/e032507.d
Level 13: /chem/msde.i/17Mar2016.b/e031711.d
Level 15: /chem/msde.i/17Mar2016.b/e031712.d
Level 16: /chem/msde.i/17Mar2016.b/e031713.d

SS 3/25/16
SS 3/26/16

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	2.000 Level 9	4.000 Level 11	RRF	% RSD
	5.000 Level 12	10.000 Level 13	20.000 Level 15	40.000 Level 16				
32 Vinyl Bromide	+++++	+++++	0.96076	0.94455	+++++	+++++		
	0.95528	+++++	+++++	+++++			0.95353	0.865
36 1-Pentene	+++++	+++++	0.73685	0.75065	+++++	+++++		
	0.69800	+++++	+++++	+++++			0.72850	3.748
34 Pentane	+++++	+++++	1.20757	1.37543	+++++	+++++		
	1.31490	+++++	+++++	+++++			1.29930	6.543
44 Ethyl Ether	+++++	+++++	0.55213	0.48697	+++++	+++++		
	0.43861	+++++	+++++	+++++			0.49257	11.565
53 Iodomethane	+++++	+++++	2.85200	3.33388	+++++	+++++		
	3.02822	+++++	+++++	+++++			3.07136	7.938
63 Acetonitrile	+++++	+++++	0.52787	0.64569	+++++	+++++		
	0.64914	+++++	+++++	+++++			0.60757	11.363

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 22-MAR-2016 15:32
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/22Mar2016.b/e1610317a.m
Cal Date : 24-Mar-2016 11:05 efinn
Curve Type : Average

Calibration File Names:
Level 5: /chem/msde.i/17Mar2016.b/e031706.d
Level 6: /chem/msde.i/17Mar2016.b/e031707.d
Level 7: /chem/msde.i/22Mar2016.b/e032205.d
Level 8: /chem/msde.i/22Mar2016.b/e032206.d
Level 9: /chem/msde.i/22Mar2016.b/e032207.d
Level 11: /chem/msde.i/22Mar2016.b/e032208.d
Level 12: /chem/msde.i/22Mar2016.b/e032209.d
Level 13: /chem/msde.i/17Mar2016.b/e031711.d
Level 15: /chem/msde.i/17Mar2016.b/e031712.d
Level 16: /chem/msde.i/17Mar2016.b/e031713.d

EF 3/24/16

Compound	0.05000 Level 5 / 5.000 Level 12	0.10000 Level 6 / 10.000 Level 13	0.50000 Level 7 / 20.000 Level 15	1.000 Level 8 / 40.000 Level 16	2.000 Level 9	4.000 Level 11	RRF	% RSD
7 Freon 134a	+++++	+++++	+++++	+++++	0.41473	0.42129		
	0.38615	+++++	+++++	+++++			0.40739	4.586
10 1,1-Difluoroethane	+++++	+++++	+++++	0.20524	0.15752	0.16041		
	0.16479	+++++	+++++	+++++			0.17199	13.005
13 Chlorodifluoromethane	+++++	+++++	0.48150	0.44538	0.47328	0.40228		
	0.41265	+++++	+++++	+++++			0.44302	7.968
16 Freon 142b	+++++	+++++	0.95463	0.90227	0.91463	0.87295		
	0.84882	+++++	+++++	+++++			0.89866	4.501
37 Dichlorofluoromethane	+++++	+++++	1.07501	0.88651	0.90482	0.93031		
	0.89584	+++++	+++++	+++++			0.93850	8.315
48 Freon 123	+++++	+++++	1.53572	1.50104	1.39390	1.43541		
	1.38044	+++++	+++++	+++++			1.44930	4.648

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-MAR-2016 14:00
End Cal Date : 17-MAR-2016 19:49
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/17Mar2016.b/e1610317a.m
Cal Date : 23-Mar-2016 15:56 efinn
Curve Type : Average

Calibration File Names:
Level 5: /chem/msde.i/17Mar2016.b/e031706.d
Level 6: /chem/msde.i/17Mar2016.b/e031707.d
Level 7: /chem/msde.i/17Mar2016.b/e031708.d
Level 8: /chem/msde.i/17Mar2016.b/e031709.d
Level 12: /chem/msde.i/17Mar2016.b/e031710.d
Level 13: /chem/msde.i/17Mar2016.b/e031711.d
Level 15: /chem/msde.i/17Mar2016.b/e031712.d
Level 16: /chem/msde.i/17Mar2016.b/e031713.d

3/24/16

3/24/16

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

Compound	0.05000 Level 5 / 20.000 Level 15	0.10000 Level 6 / 40.000 Level 16	0.50000 Level 7	1.000 Level 8	5.000 Level 12	10.000 Level 13	___ RRF	% RSD
9 Propylene	+++++	+++++	+++++	0.65636	0.69625	0.67394		
	0.59210	0.62813					0.64936	6.247
11 Freon 12	+++++	5.12006	4.10953	4.00056	4.53383	4.16601		
	3.72304	3.78487					4.20541	11.514
15 Freon 114	3.04054	3.74214	2.99528	2.91420	3.22969	3.03570		
	2.81081	2.85426					3.07783	9.688
17 Chloromethane	+++++	0.89598	0.80271	0.83008	0.82977	0.78391		
	0.71156	0.73148					0.79793	7.886
23 Butane	+++++	+++++	0.20216	0.19760	0.22324	0.21314		
	0.19217	0.21179					0.20668	5.539
25 Vinyl Chloride	1.17455	1.32551	1.07263	1.03349	1.16793	1.13320		
	1.01360	1.05974					1.12258	9.054
26 1,3-Butadiene	+++++	0.88279	0.65846	0.76541	0.79294	0.74711		
	0.70180	0.73672					0.75503	9.432

Eurofins Air Toxics, Inc. **MSD-E** **Logbook #2755**

BFB Verification of 176/174 m/z Ratio: (627456/649766)x100= 96.65	
Tekmar Purge Flow:	
Vacuum:	3/17/16

IS/S Std. #: 2787-17		Exp. Date: 6/17/16
BCM	LL: 1641946	Sol: 170470
1,4-DFB	626935	700553
CB-d5	567678	1028352

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

File ID:	0031710
Compound:	Toluene-d8
Initials:	

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (623703) x (5.000) = 5.066
(~~626935~~ 626935) (0.978198)

SOP# (Circle one): 6 / 83 / 88 / 91 / 109

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

Reported Result: 5.066

Method Name: E1614A0317A / E1650317A

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	Verified Vol loaded	DF	Loaded By/Initials	Date Analyzed	Time Analyzed	Reviewed By/Initials	Comments/Standard Expiration Date
1	✓	0031701	BFB Tune criteria	2759-1484	50psig	2.0mL		1.00		3/17/16	1047		
2	✓	02	ICAL Level 1	2789-13	0.005ppbv	15mL		1.00			1111		Exp 4/16/16
3	✓	03	2		0.025ppbv	35mL		1.00			1155		
4	✓	04	3		0.01ppbv	50mL		1.00			1236		
5	✓	05	4		0.02ppbv	100mL		1.00			1318		
6	✓	06	5		0.05ppbv	250mL		1.00			1400		
7	✓	07	6	2789-14	0.1ppbv	25mL		1.00			1507		Exp 4/16/16
8	✓	08	7		0.5ppbv	125mL		1.00			1519	EA	
9	✓	09	8		1.0ppbv	250mL		1.00			1631	EA	
10	✓	10	12	2759-223	5.0ppbv	25mL	EA	1.00	EA		1724	EA	Exp 4/6/16
11	✓	11	13		10ppbv	50mL	EA	1.00	EA		1810	EA	
12	✓	12	15		20ppbv	100mL	EA	1.00	EA		1901	EA	
13	✓	13	16		40ppbv	200mL	EA	1.00	EA		1949	EA	
14	X	14	System Blank	35248	Humid	250mL		1.00	EA		2034	EA	

Reviewed

3/23/16
Date

Eurofins Air Toxics, Inc.

MSD-E

Logbook #2755

0087 of 0502

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	Verified Vol. Loaded	DF	Loaded By/Initials	Date Analyzed	Time Analyzed	Reviewed By/Initials	Comments/Standard Expiration Date
		113/17/16											
15	X	E03171165	system blank	3524B	Humid	250ml	EA	1.00	EA	3/17/16	2118	EA	
16	✓	1 1716	IRV (50ppbv)	2789-16	5.0ppbv	25ml		1.00	EA	3/17/16	2208	EA	6/11/16
17		17	System Blank	flow line	Dry	250ml	EA	1.00	EA	3/22/16	0843	EA	
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													

EA 3/22/16

Reviewed

3/22/16

Date

Eurofins Air Toxics, Inc.

MSD-E

Logbook #2755

0088 of 0502

BFB Verification of 176/174 m/z Ratio: (1087824/1092096) x 100 = 96.78	
Tekmar Purge Flow:	
Vacuum:	EF 3/22/16

IS/S Std. #:	2789-17	Exp. Date:	6/17/16
BCM	Lot: 1904121		Lot: 1956613
1,4-DFB	736283		826772
CB-d5	6586023		7306611

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

File ID:	E032201
Compound:	Toluene-d8
Initials:	EF

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (778723) x (5.000) = 5.039
(736283) (0.58198)

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

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

Method Name: E16L-0317A / E16S0317A

Reported Result: 5.039

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	Verified Vol. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	/	E032201	BFB TUNE CHECK	2789-1904	50ng	2.0µL	EF 1.00 EF 3/22/16	1.00	EF	3/22/16	0924	EF	
2	/	02	CCV (50ppbv)	2769-226	5.0ppbv	25mL	EF 1.00 EF 3/22/16	1.00	EF		0947	EF	Exp. 4/6/16 ∅ 0.4
3	/	03	LCS (50ppbv)	2789-8	5.0ppbv	25mL	EF	1.00	EF		1032	EF	Exp. 6/11/16 ∅ 5.4
4	/	04	LAB BLANK	3476	Humidified	250mL	EF	1.00	EF		1121	EF	
5	/	05	ICAL LEVEL 7	2769-228	0.5ppbv	25mL	EF	1.00	EF		1205	EF	Exp. 5/5/15 Ar. 1
6	/	06	8		1.0ppbv	50mL	EF	1.00	EF		1320	EF	
7	/	07	9		2.0ppbv	100mL	EF	1.00	EF		1404	EF	
8	/	08	11		4.0ppbv	200mL	EF	1.00	EF		1480	EF	
9	/	09	12		5.0ppbv	250mL	EF	1.00	EF		1632	EF	
10	/	10	CCV (50ppbv)	2789-4	0.5ppbv	25mL	EF	1.00	EF				
11													
12													
13													
14													

EF 3/24/16

Reviewed

3/24/16

Date

Eurofins Air Toxics, Inc. **MSD-E** **Logbook #2755**

BFB Verification of 176/174 m/z Ratio: (705088/728064) x 100 = 96.8%	
Tekmar Purge Flow:	
Vacuum:	2 EF 3/25/16

IS/S Std. #:	2789-17	Exp. Date: 6/17/16
BCM	4: 1966631	6.0ml 2001621
1,4-DFB	760212	838688
CB-d5	680800	748894

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

File ID:	E032501
Compound:	Toluene-d8
Initials:	EF

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (733691) x (5.000) = 4.914
(760212) (0.98198)

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one) TO-14A/TO-15/TO-17 Reported Result: 4.914

Method Name: E16L0317A/ E16S0317A

	Use	File	Lab ID# EF 3/25/16	Can#/ Standard ID#	Pressure	Amt. Loaded	Verified Vol. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	E032501	BFB Tune check	2789-1484	50psi	2.0ml	EF	1.00	EF	3/25/16	0902	EF	
2	✓	02	CCV (50ppbv)	2789-225	5.0ppbv	25ml	EF	1.00	EF	3/25/16	0925	EF	Exp. 4/6/16 ✓ out
3	✓	03	LCS (50ppbv)	2789-8	5.0ppbv	25ml	EF	1.00	EF		1029	EF	Exp. 6/11/16 u: 1 out Sma: 6 out
4	✓	04	LCSD (50ppbv)	2789-8	5.0ppbv	25ml	EF	1.00	EF		1114	EF	Exp. 6/11/16
5	✓	05	ICAL Level 7	2789-4	0.5ppbv	25ml	EF	1.00	EF		1218	EF	Exp 5/16/16 COMBO
6	✓	06	8		1.0ppbv	50ml	EF	1.00	EF		1305	EF	CCV
7	✓	07	12		5.0ppbv	250ml	EF	1.00	EF		1344	EF	
8	✓	08	LAB BLANK	34764	Humidi	250ml	EF	1.00	EF		1448	EF	
9		09	1603238-01A	36570	1.Ce"Hg 14.7psi	250ml	EF	2.12	EF				
10													
11													
12													
13													
14													EF 3/25/16

Reviewed 3/25/16 Date

Eurofins Air Toxics, Inc. **MSD-E** **Logbook #2755**

BFB Verification of 176/174 m/z Ratio:	(890112/916928) x 100 = 97.08
Tekmar Purge Flow:	
Vacuum:	3/30/16

IS/S Std. #:	2789-17	Exp. Date:	6/17/16
BCM	lot: 190719	Sum:	1928830
1,4-DFB	726285		2647730
CB-d5	688864		717749

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

File ID:	E033002
Compound:	Toluene-d8
Initials:	

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (712176) x (5.000) = 5.000
(726285) (0.98198)

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one): TO-14A/TO-15/TO-17 Reported Result: 5.000

Method Name: E16L03178/ E16S03174

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	Verified Vol. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	/	E033001	BFB Tune check	2789-1484	50mg	2.0mL		1.00		3/30/16	1046		
2	/	02	CCV (50ppbv)	2745-215	5.0ppbv	25mL		1.00			1107		Exp. 4/6/16 ∅ out
3	/	03	LCS (50ppbv)	2789-8	5.0ppbv	25mL		1.00			1150		Exp. 6/11/16 ∅ out
4	/	04	LCSD (50ppbv)	2789-8	5.0ppbv	25mL		1.00			1233		Exp. 6/11/16
5	N/A	05	CCV zp (5.0ppbv)	2739-236	1.0ppbv	50mL		1.00			1315		Exp. 5/5/16 CAN CLOSED.
6	/	06	CCV zp (5.0ppbv)	2739-238	1.0ppbv	50mL		1.00			1359		Exp. 5/5/16
7	/	07	ICAL level 7	2789-46	0.5ppbv	25mL		1.00			1441		Exp. 4/28/16 Accepted
8	/	08	8		1.0ppbv	50mL		1.00			1543		
9	/	09	12		5.0ppbv	250mL		1.00			1628		
10		10	LAB Blank	34764	Humid	250mL		1.00					3/30/16
11													
12													
13													
14													

Reviewed 3/30/16 Date

Eurofins Air Toxics, Inc. **MSD-E** **Logbook #2755**

BFB Verification of 176/174 m/z Ratio: (677184/693056) x100 = 97.71%	
Tekmar Purge Flow:	
Vacuum:	

IS/S Std. #:	2789-17	Exp. Date:	6/17/16
BCM LL:	159373	Sim:	1600010
1,4-DFB	624905		678475
CB-d5	549719		668473

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

File ID:	
Compound:	
Initials:	

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (_____) x (_____) = _____ 5/9/16 AT

~~5/19~~ AT 5/9/16

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

Method Name: E16L03178/E16S03174

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	Verified Vol. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	E050901	BFB Tune Check	2789-1484	50ng	2.0µl	AT	1.00	AT	5/9/16	0645	AT	
2	✓	02	System Blank	HouseLine	D.I	250mL	AT		AT		0708	AT	
3	/	03	CCV (50 ppbv)	2789-51	5.0ppbv	25mL	AT		AT		0751	AT	Exp 7/1/16 ϕ ϕ
4	/	04	LCS (25 ppbv)	2789-8A	5.0ppbv	50mL	AT	1.00	AT		0838	AT	Exp. 6/11/16 ϕ ϕ
5	/	05	LCSD (25 ppbv)	2789-8A	5.0ppbv	50mL	AT	1.00	AT		0922	AT	Exp. 6/11/16
6	~~BFB~~	06	CCV sp (5.0 ppbv)	2789-126	1.0 ppbv	50mL	AT	1.00	AT		1006	AT	Exp. 6/3/16 Acrolein
7	/	07	ICAL Level 7	2789-105	0.5ppbv	25mL	AT	1.00	AT		1101	AT	Exp. 8/3/16 combo
8	/	08	8		1.0ppbv	50mL	AT	1.00	AT		1203	AT	
9	/	09	9		2.0ppbv	100mL	AT	1.00	AT		1256	AT	AT 5/19/16
10	~~N/A~~	10	11		4.0ppbv	200mL	AT	1.00	AT		N/A	N/A	NOT RAN: TEKMAR ERROR
11	/	11	System Blank	35248	Humid	250mL	AT	1.00	AT		1357	AT	
12	/	12	ICAL Level 11	2789-105	4.0ppbv	200mL	AT	1.00	AT		1446	AT	Exp. 8/3/16 Combo
13	/	13	12	1	5.0ppbv	250mL	AT	1.00	AT		1522	AT	
14	/	14	System Blank	35248	Humid	250mL	AT	1.00	AT		1605	AT	

Reviewed _____ Date 5/9/16

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	Verified Vol. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
15	X	E050915	ICV sp (5.0ppbv)	2789-241	1.0 ppbv	50mL	[illegible]	1.00	[illegible]	5/9/16	1719	[illegible]	exp 5/9/16 AT-1
16	✓	↓ -16	ICV sp (5.0ppbv)	2789-128	1.0 ppbv	50mL	TAR	1.00	TAR	5-9-16	2123	TAR/[illegible]	exp 8-9-16 AT1
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													TAR 5-9-16

TA [illegible]
Reviewed

5-9-16
Date

0092 of 0502

Eurofins Air Toxics, Inc. **MSD-E** **Logbook #2755**

BFB Verification of 176/174 m/z Ratio: (633856/658824)x100= 96.95	
Tekmar Purge Flow:	
Vacuum:	5/19/16

IS/S Std. #:	2789 5/18/16 2736-150	Exp. Date:	8/19/16
BCM	151740	SIM:	153558
1,4-DFB	581412		636149
CB-d5	528099		561480

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

File ID:	E051902
Compound:	Toluene-d8
Initials:	✓

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (548609) x (5.000) = 4.804
(581412) (0.7819)

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one): TO-14A/TO-15/TO-17 Reported Result: 4.804

Method Name: E16V0317E / E16S0317E

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	Verified Vol. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	/	E051901	BFB tune check	2789-1484	50ng	2.0mL	✓	1.00	✓	5/19/16	0732	✓	
2	/	02	CCV (50ppbv)	2789-51	5.0ppbv	25mL	✓	1.00	✓		0753	✓	Exp. 7/1/16 SIM: 8 out SCAN: 1 out
3	/	03	LCS (25ppbv)	2789-8A	5.0ppbv	50mL	✓	1.00	✓		1036	✓	Exp. 6/11/16 SIM: 4 & 8 out SCAN: 1 out
4	/	04	LCSD (25ppbv)	2789-8A	5.0ppbv	50mL	✓	1.00	✓		1118	✓	Exp. 6/11/16
5	/	05	CCV Sp (5.0ppbv)	2789-126	1.0ppbv	50mL	✓	1.00	✓		1201	✓	Exp. 6/8/16 Acetone
6	/	06	CCV Sp (5.0ppbv)	2789-105	1.0ppbv	50mL	✓	1.00	✓		1247	✓	Exp. 8/8/16 COMBO
7	/	07	ICAL LEVEL 7	2789-151	0.5ppbv	25mL	✓	1.00	✓		1402	✓	Exp. 8/19/16 Acetaldehyde
8	/	08	8		1.0ppbv	50mL	✓	1.00	✓		1444	✓	CCV
9	/	09	12		5.0ppbv	250mL	✓	1.00	✓		1527	✓	
10	/	10	LAB BLANK	35240	Humid	250mL	✓	1.00	✓		1613	✓	
11	✓	11	1605193-01A	34741	4.1"Hg-4.9psi	50mL	EA	7.70	EA		1724	EA	E" TCE
12	✓	12	-02A	33671	5.7"Hg-5psi	50mL	EA	8.30	EA		1813	EA	E" TCE
13	✓	13	1605372A-01A	04588	6.3"Hg-4.6psi	250mL	EA	1.66	EA		1906	EA	
14	✓	14	-02A	D0157	4.5"Hg-5psi	250mL	EA	1.58	EA		1953	EA	

Reviewed 5/19/16 Date

Eurofins Air Toxics, Inc. **MSD-E** **Logbook #2755**

BFB Verification of 176/174 m/z Ratio: (667584/688960) X100= 96.91%	
Tekmar Purge Flow:	
Vacuum:	

IS/S Std. #: 2789-150		Exp. Date: 8/19/16
BCM LL: 1553666		SIM: 153139
1,4-DFB	569598	629212
CB-d5	606381	558757

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

File ID:	
Compound:	
Initials:	

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (_____) x (_____) = _____

( ) ( ) 5/24/16 ACT

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

Method Name: E16L0317E / E16S0317A

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	Verified Vol. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	E052401	BFB Tune Check	2299-1484	50ng	2.0ml	ACT	1.00	ACT	5/24/16	0655	ACT	
2	✓	02	CCV (50ppbv)	2789-51	5.0ppbv	25mL	ACT	1	ACT		0715	~~ES~~	Exp 7/1/16 u: 2 out 5min 40 out
3	✓	03	LCS (~~50ppbv~~ 25ppbv)	2789-80	5.0ppbv	50mL	~~ES~~	1.00	~~ES~~		0802	~~ES~~	Exp. 6/11/16 u: 2 out 5min
4	✓	04	LCSD (25ppbv)	2789-78A	5.0ppbv	50mL	~~ES~~	1.00	~~ES~~		0848	~~ES~~	Exp. 6/11/16
5	✓	05	ICAL LEVEL 7	2789-129	0.5ppbv	25mL	~~ES~~	1.00	~~ES~~		0929	~~ES~~	Exp. 8/4/16 AT.1
6	✓	06	8		1.0ppbv	50mL	~~ES~~	1.00	~~ES~~		1014	~~ES~~	CCV
7	✓	07	9		2.0ppbv	100mL	~~ES~~	1.00	~~ES~~		1100	~~ES~~	
8	✓	08	11		4.0ppbv	200mL	~~ES~~	1.00	~~ES~~		1147	~~ES~~	
9	✓	09	12		5.0ppbv	250mL	~~ES~~	1.00	~~ES~~		1320	~~ES~~	
10		~~10~~	~~LAB BLANK~~	~~352148~~	~~Humid~~	~~250mL~~	~~ES~~	~~1.00~~	~~ES~~				
11													
12													
13													
14												~~ES~~ 5/24/16	

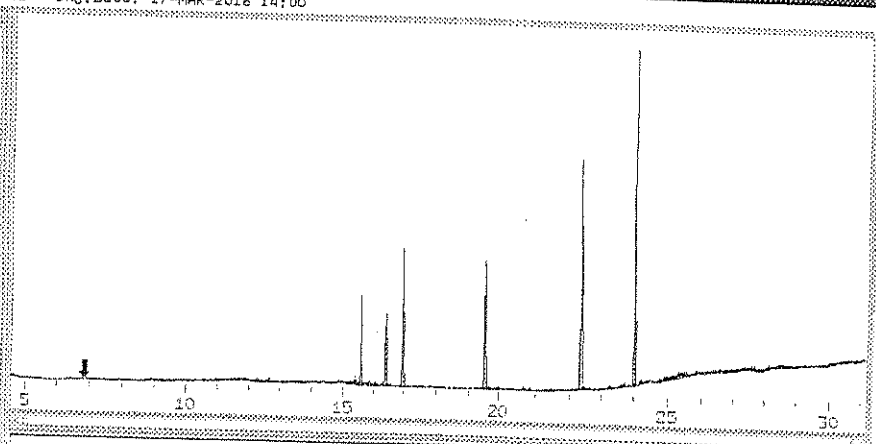
Reviewed

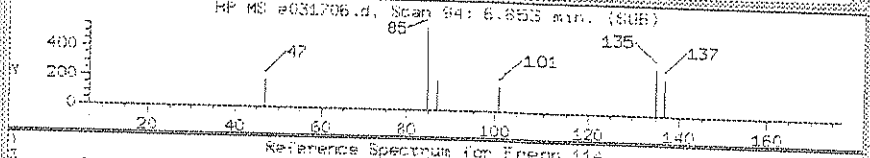
5/24/16
Date

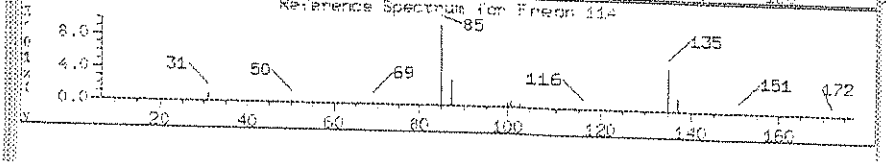
Sample: ICAL Type: SAMPLE Inj.Date: 17-MAR-2016 14:00

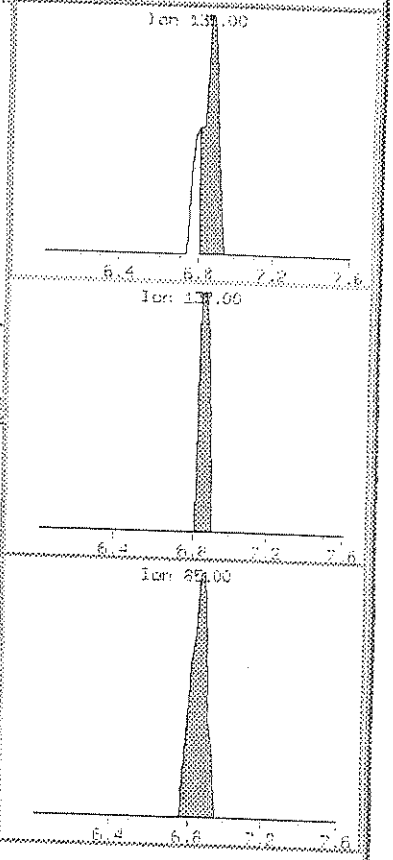
	11	Freon 12
*	14	Freon 114
+	25	Vinyl Chloride
+	35	Freon 11
+	49	Freon 113
*+	98	Bromochloromet
+	103	1,1,1-Trichlor
-	106	Carbon Tetrach
$+	117	1,2-Dichloroet
+	120	1,2-Dichloroet
*+	123	1,4-Difluorobe
+	125	Trichloroethen
+	138	Bromodichlorom
$+	146	Toluene-d8
-	155	1,1,2-Trichlor
+	156	Tetrachloroeth
+	160	Dibromochlorom
+	161	1,2-Dibromoeth
*+	163	Chlorobenzene-
-	174	Bromoform
$+	177	4-Bromofluorob
+	181	1,1,2,2-Tetrac
+	190	1,3,5-Trimethy
+	196	1,2,4-Trimethy
+	208	1,3-Dichlorobe

x031706.d



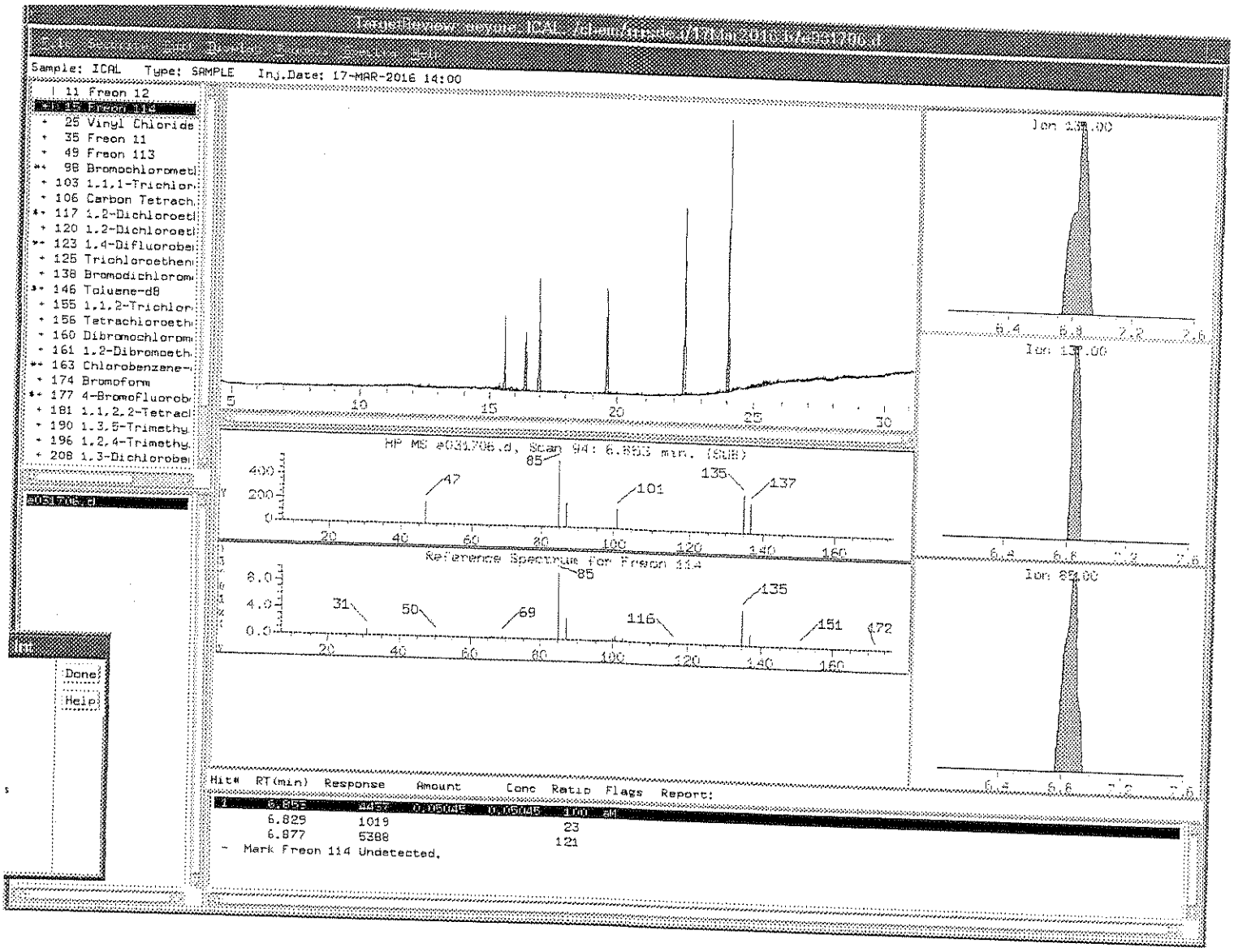






Hit#	RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
1	6.853	2686	0.04191	0.04191	100	a	
	6.829	1019			28		
	6.877	5388			146		

- Mark Freon 114 Undetected.



03/23/16

After

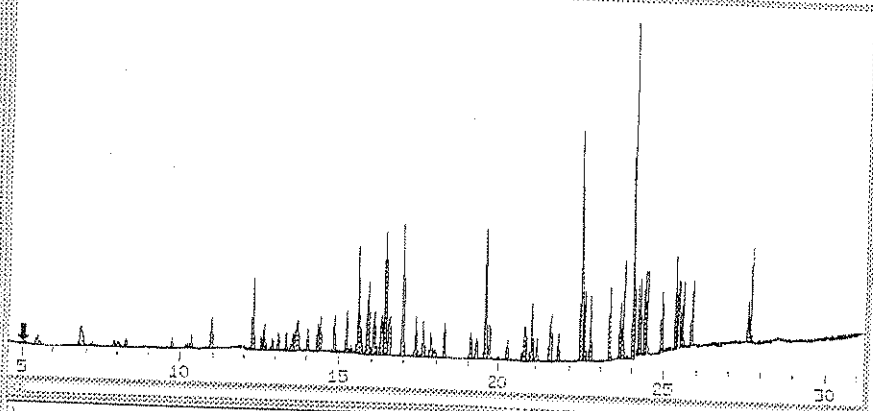
Correct Baseline	3/23/16
Split Peak	X
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

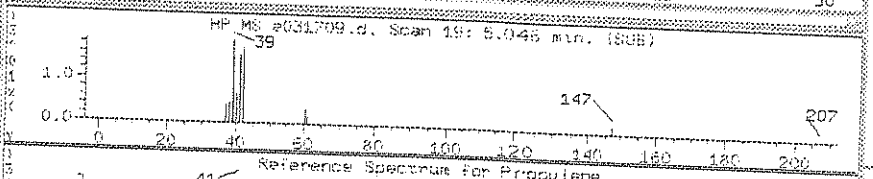
Trackbview secure ICAL /Users/Agilent/17Mar2016/031709.d

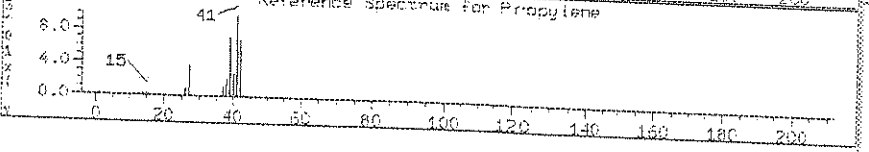
Sample: ICAL Type: SAMPLE Inj.Date: 17-MAR-2016 16:31

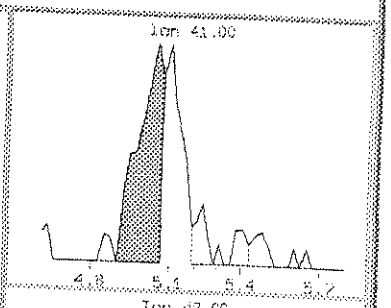
- 9 Propylene
- 11 Freon 12
- 15 Freon 114
- 17 Chloromethane
- 23 Butane
- 25 Vinyl Chloride
- 26 1,3-Butadiene
- 29 Bromomethane
- 30 Chloroethane
- 31 Isopentane
- 35 Freon 11
- 42 Ethanol
- 49 Freon 113
- 50 1,1-Dichloroeth
- 52 Acetone
- 56 Carbon Disulfi
- 57 2-Propanol
- 58 3-Chloropropen
- 66 Methylene Chlo
- 71 tert-Butyl alc
- 72 Methyl tert-bu
- 73 trans-1,2-Dich
- 78 Hexane
- 83 Isopropyl ethe
- 82 1,1-Dichloroet

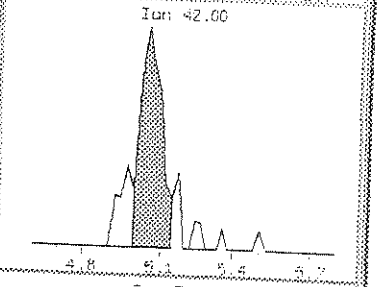
031709.d

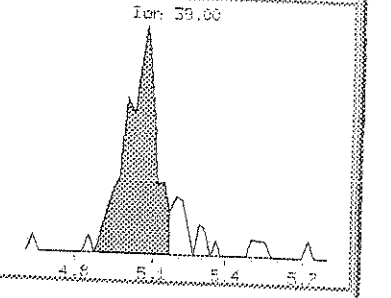






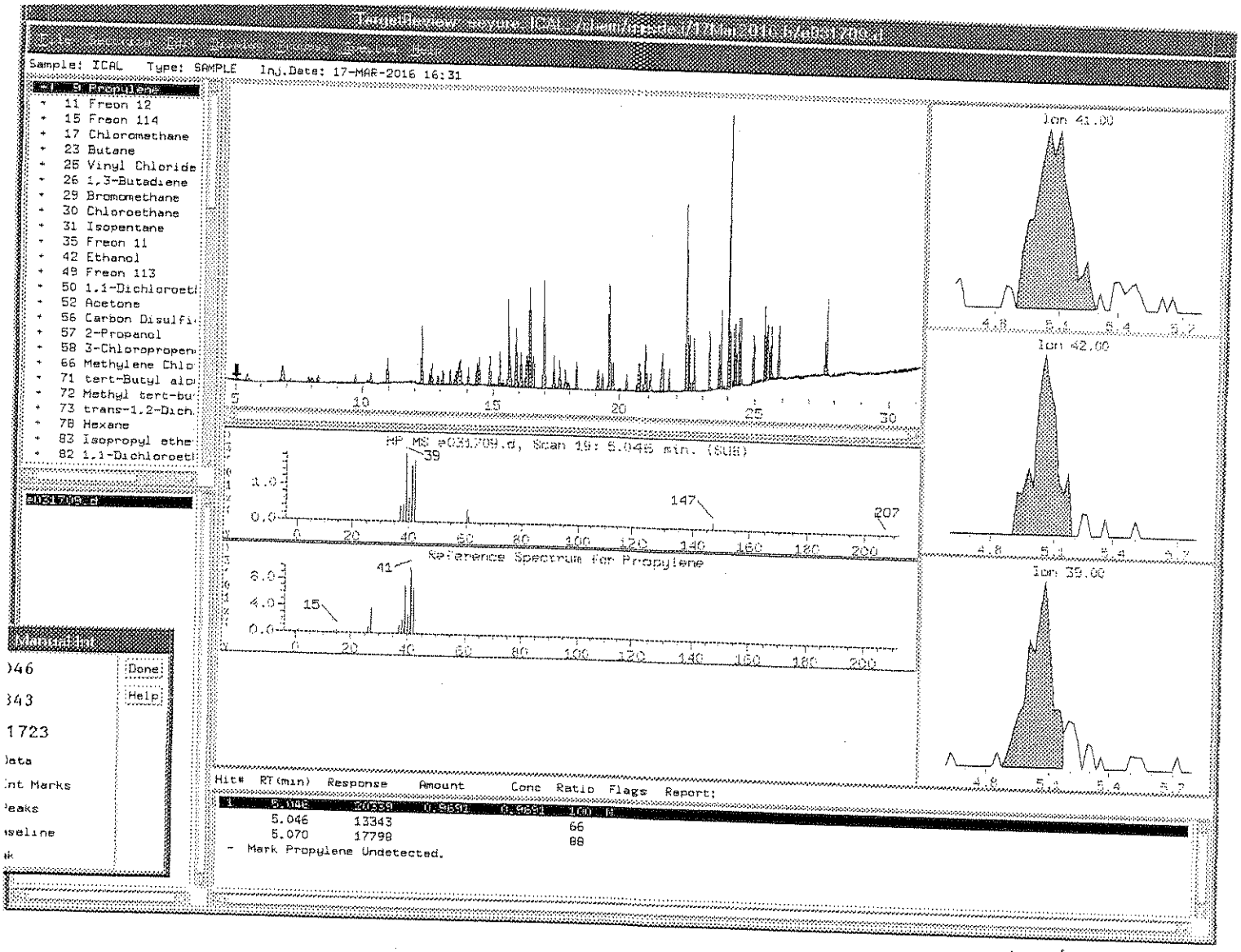






Hit#	RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
1	4.853	582	0.02777	0.02777	100	a	
	4.973	2717			466		
	4.863	250			43		
2	5.046	11848	0.5550	0.5550	100		
	5.046	10434			90		
	5.070	17798			153		

BSSont



EB 3/23/16

After

EB 3/23/16

Correct Baseline	
Split Peak	
Merge Peak	✓
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

Sample: ICAL Type: SAMPLE Inj.Date: 22-MAR-2016 13:20

+!	7	Freon 134a
*	10	1,1-Difluoroet
+	13	Chlorodifluoro
+	16	Freon 142b
+	37	Dichlorofluoro
+	48	Freon 123
+	59	Cyclopentene
+	84	1-Propanol
+	90	2,2-Dichloropr
*+	98	Bromochlorometh
+	107	1,1-Dichloropr
+	115	Isobutanol
*+	123	1,4-Difluorobe
+	124	n-Butanol
+	157	1,3-Dichloropr
+	159	Butyl Acetate
*+	163	Chlorobenzene-
+	168	1,1,1,2-Tetrach
+	173	2-Heptanone
+	176	Cyclohexanone
+	180	Bromobenzene
+	185	1,2,3-Trichlor
+	189	2-Chlorotoluen
+	191	4-Chlorotoluen
+	195	tert-Butylbenz

Ion 65.00

Ion 51.00

HP MS e030206.d, Scan 39: 5.287 min. (SUB)

Reference Spectrum for 1,1-Difluoroethane

Manual Int

.877

1601

1114

Data

Int Marks

Peaks

Baseline

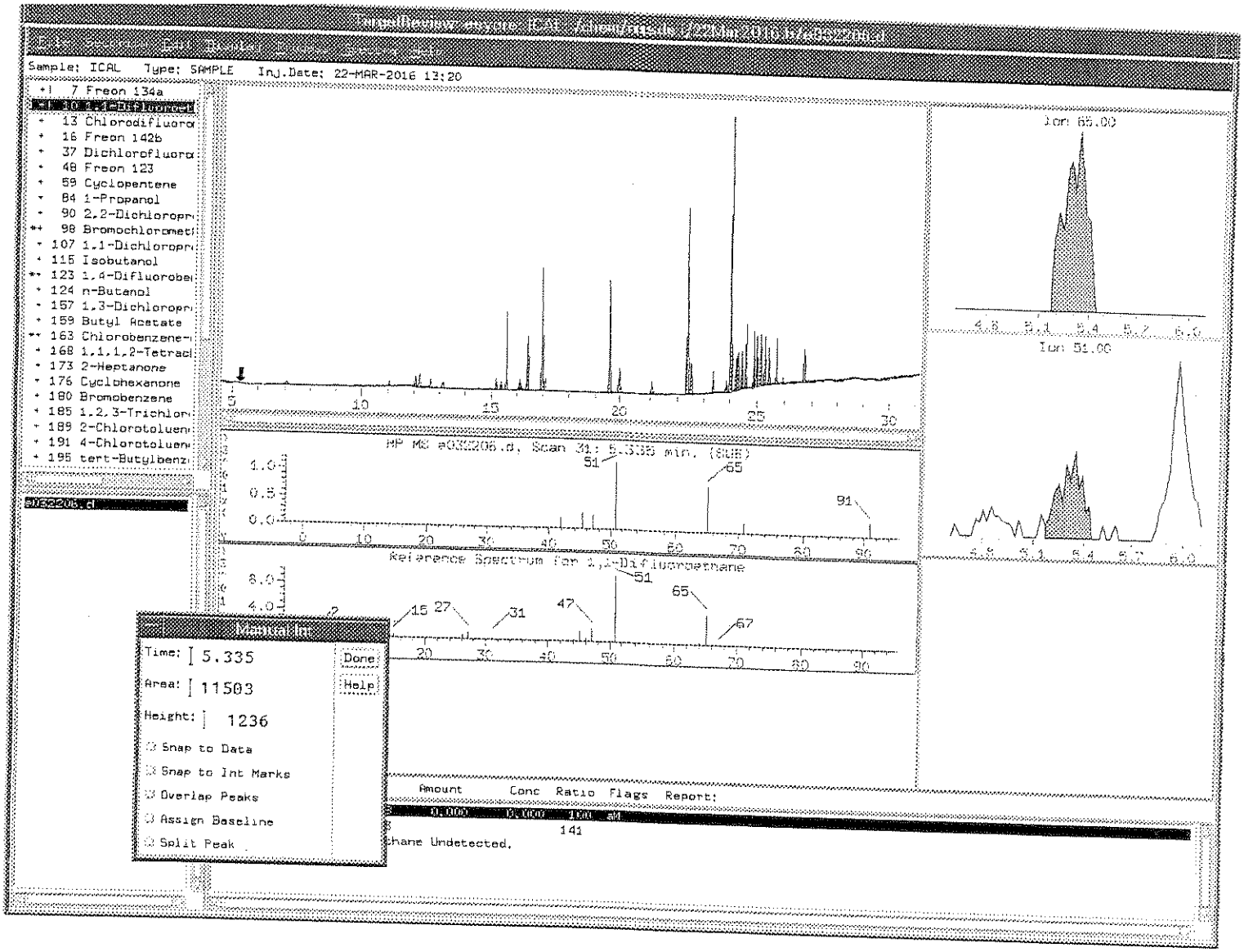
Peak

Done

Help

Hit#	RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
1	5.287	2195	0.000	0.000	100	a	
	5.335	8736			398		
2	5.335	4499	0.000	0.000	100	a	
	5.335	8736			194		

- Mark 1,1-Difluoroethane Undetected.



3/23/16

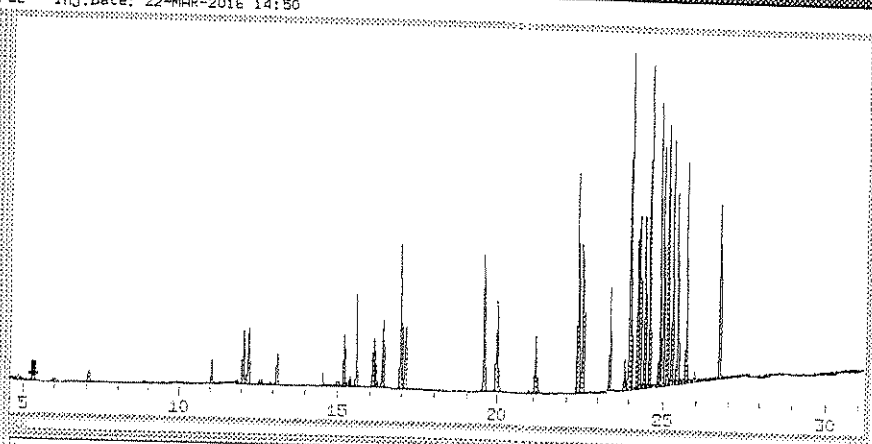
After

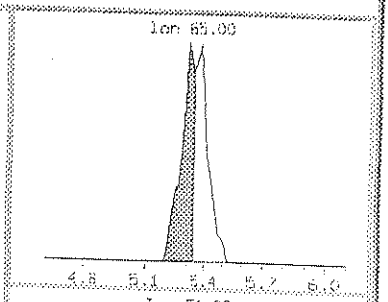
3/23/16

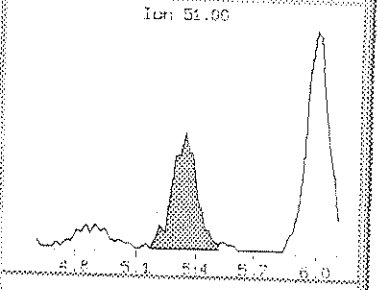
Correct Baseline	
Split Peak	X
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

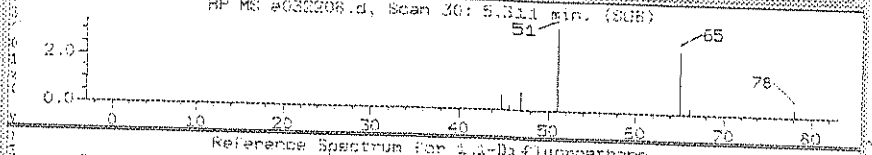
Sample: ICAL Type: SAMPLE Inj.Date: 22-MAR-2016 14:50

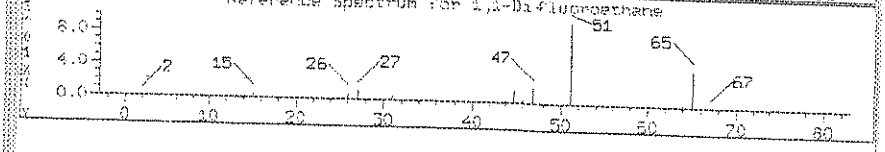
- 7 Freon 134a
- 10 1,1-Difluoroet
- 13 Chlorodifluoro
- 16 Freon 142b
- 37 Dichlorofluoro
- 48 Freon 123
- 59 Cyclopentene
- 84 1-Propanol
- 90 2,2-Dichloropr
- 98 Bromochlorometh
- 107 1,1-Dichloropr
- 115 Isobutanol
- 123 1,4-Difluorobe
- 124 n-Butanol
- 157 1,3-Dichloropr
- 159 Butyl Acetate
- 163 Chlorobenzene-
- 168 1,1,1,2-Tetrac
- 173 2-Heptanone
- 176 Cyclohexanone
- 180 Bromobenzene
- 185 1,2,3-Trichlor
- 189 2-Chlorotolue
- 191 4-Chlorotolue
- 195 tert-Butylbenz







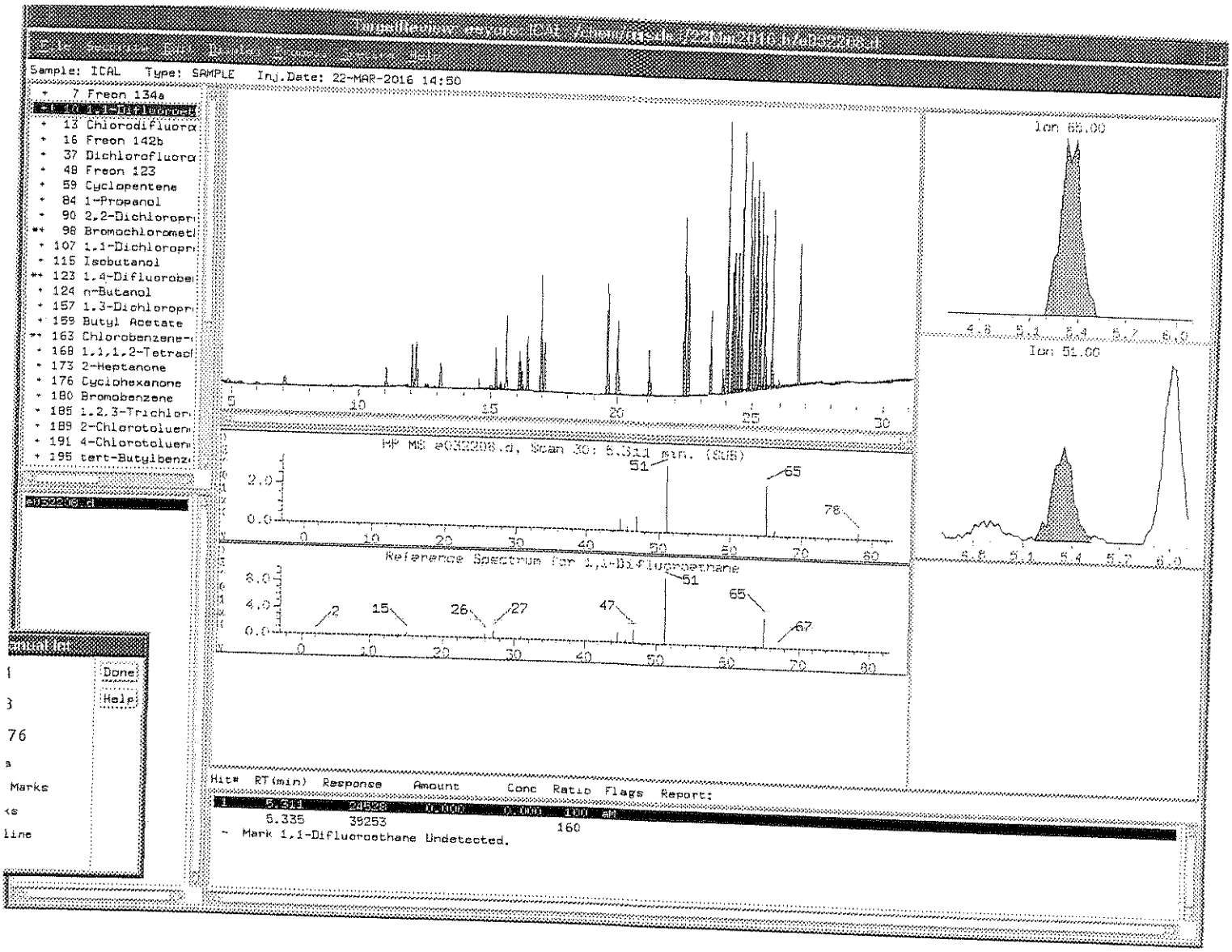




Hit#	RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
1	5.311	12185	0.000	0.000	100	a	
	5.335	39253			322		
2	5.383	15550	0.000	0.000	100	a	
	5.335	39253			252		

- Mark 1,1-Difluoroethane Undetected.

Bsow



BJ 3/23/16

After

BJ 3/23/16

Correct Baseline	
Split Peak	X
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

Sample: ICAL Type: SAMPLE Inj.Date: 22-MAR-2016 15:32

- 7 Freon 134a
- 10 1,2-Dichloroethane
- 13 Chlorodifluoro
- 16 Freon 142b
- 37 Dichlorofluoro
- 48 Freon 123
- 59 Cyclopentene
- 84 1-Propanol
- 90 2,2-Dichloropr
- 98 Bromochlorometh
- 107 1,1-Dichloropr
- 115 Isobutanol
- 123 1,4-Difluorobe
- 124 n-Butanol
- 157 1,3-Dichloropr
- 159 Butyl Acetate
- 163 Chlorobenzene-
- 168 1,1,1,2-Tetrac
- 173 2-Heptanone
- 176 Cyclohexanone
- 180 Bromobenzene
- 185 1,2,3-Trichlor
- 189 2-Chlorotoluen
- 191 4-Chlorotoluen
- 195 tert-Butylbenz

Ion 65.00

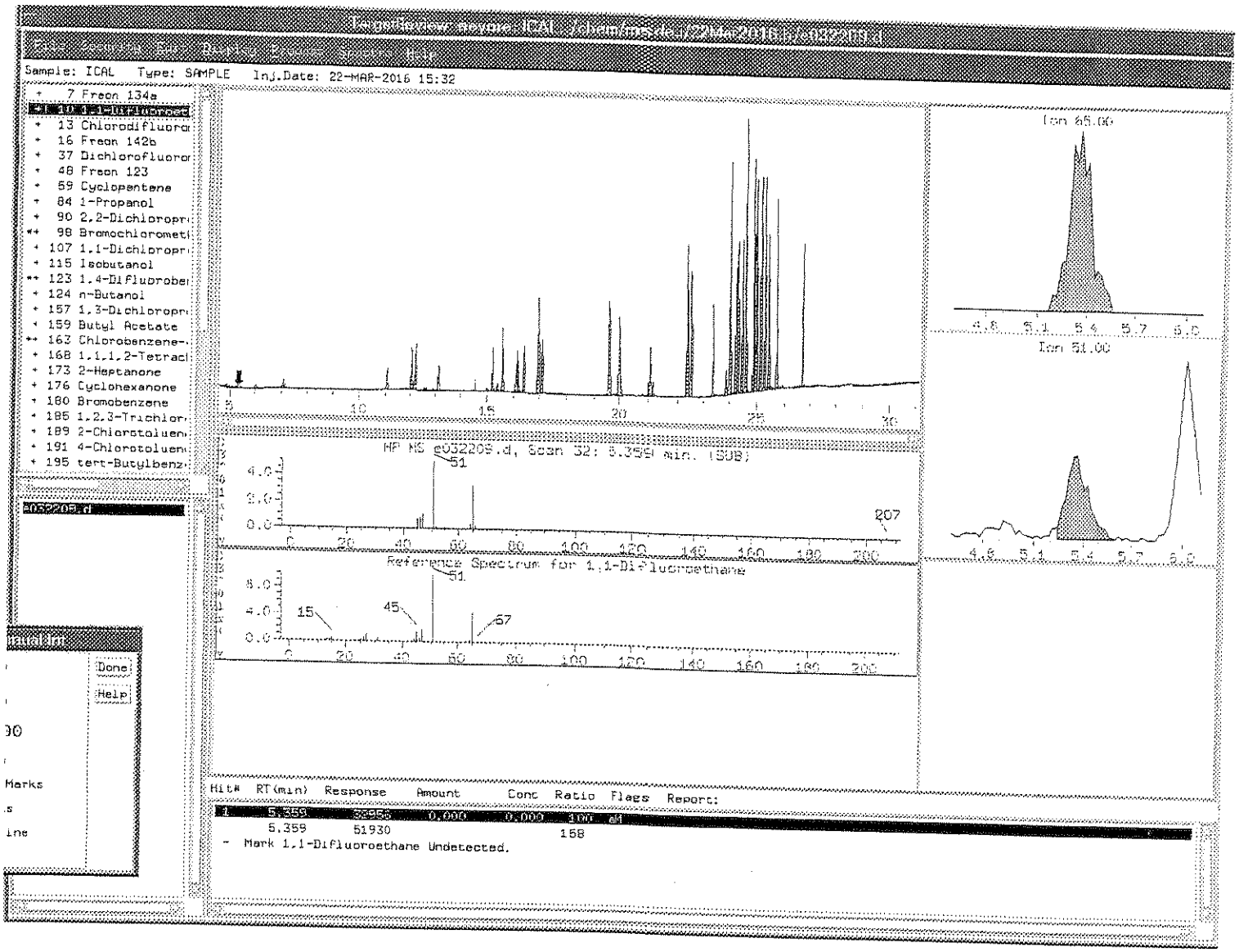
Ion 51.00

HP MS e030209.d, Scan 30: 5.3519 min. (SUB)

Reference Spectrum for 1,1-Difluoroethane

Hit#	RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
1	5.359	24026	0.000	0.000	100	a	
	5.359	51930			213		
2	5.479	4003	0.000	0.000	100	a	
	5.359	51930			1297		

- Mark 1,1-Difluoroethane Undetected.



3/23/16

After

3/23/16

Correct Baseline	
Split Peak	X
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

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
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

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

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

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/17Mar2016.b/e031716.d
Lab Smp Id: ICV
Inj Date : 17-MAR-2016 22:08
Operator : ea Inst ID: msde.i
Smp Info : 25mL#2789-6
Misc Info : 5.0ppbv(50ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/17Mar2016.b/e16l0317a.m
Meth Date : 23-Mar-2016 08:53 efinn Quant Type: ISTD
Cal Date : 17-MAR-2016 19:49 Cal File: e031713.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
9 Propylene						CAS #: 115-07-1		
4.997	5.070	(0.321)	41	116224	5.29046	5.290	80.00- 120.00	100.00
5.045	5.046	(0.324)	42	79005			38.73- 98.73	67.98
4.997	5.070	(0.321)	39	94807			55.81- 115.81	81.57
11 Freon 12						CAS #: 75-71-8		
5.455	5.479	(0.350)	85	759207	5.33619	5.336	80.00- 120.00	100.00
5.479	5.479	(0.352)	87	248784			2.00- 62.00	32.77
15 Freon 114						CAS #: 76-14-2		
6.829	6.829	(0.438)	135	585293	5.62094	5.621	80.00- 120.00	100.00
6.829	6.829	(0.438)	137	197788			1.31- 61.31	33.79
6.829	6.829	(0.438)	85	662219			93.88- 153.88	113.14
17 Chloromethane						CAS #: 74-87-3		
7.167	7.167	(0.460)	50	145495	5.38972	5.390	80.00- 120.00	100.00
7.167	7.167	(0.460)	52	47121			5.50- 65.50	32.39

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
23 Butane					CAS #: 106-97-8		
7.871	7.872 (0.505)	58	38895	5.56256	5.562	80.00- 120.00	100.00
7.871	7.872 (0.505)	43	240748			588.57- 648.57	618.96
25 Vinyl Chloride					CAS #: 75-01-4		
8.010	8.010 (0.514)	62	208743	5.49634	5.496	80.00- 120.00	100.00
8.010	8.010 (0.514)	64	72818			3.14- 63.14	34.88
26 1,3-Butadiene					CAS #: 106-99-0		
8.236	8.236 (0.529)	54	131461	5.14651	5.146	80.00- 120.00	100.00
8.236	8.236 (0.529)	39	127875			65.21- 125.21	97.27
29 Bromomethane					CAS #: 74-83-9		
9.711	9.711 (0.623)	94	224650	5.42085	5.421	80.00- 120.00	100.00
9.711	9.711 (0.623)	96	203966			64.16- 124.16	90.79
30 Chloroethane					CAS #: 75-00-3		
10.195	10.176 (0.654)	64	106146	5.91586	5.916	80.00- 120.00	100.00
10.195	10.176 (0.654)	49	25731			0.00- 54.91	24.24
10.195	10.176 (0.654)	66	35451			3.62- 63.62	33.40
31 Isopentane					CAS #: 78-78-4		
10.328	10.309 (0.663)	57	142773	5.48900	5.489	80.00- 120.00	100.00
10.328	10.309 (0.663)	43	162082			82.69- 142.69	113.52
10.328	10.309 (0.663)	42	140375			68.65- 128.65	98.32
35 Freon 11					CAS #: 75-69-4		
10.938	10.938 (0.702)	101	797145	5.20333	5.203	80.00- 120.00	100.00
10.938	10.938 (0.702)	103	529394			37.17- 97.17	66.41
42 Ethanol					CAS #: 64-17-5		
11.852	11.852 (0.761)	45	68124	6.13677	6.137	80.00- 120.00	100.00
11.852	11.852 (0.761)	46	26949			6.61- 66.61	39.56
11.852	11.852 (0.761)	43	17088			0.00- 54.66	25.08
49 Freon 113					CAS #: 76-13-1		
12.271	12.252 (0.788)	151	635878	5.53869	5.539	80.00- 120.00	100.00
12.271	12.252 (0.788)	153	398933			33.64- 93.64	62.74
12.271	12.252 (0.788)	101	695761			80.40- 140.40	109.42
50 1,1-Dichloroethene					CAS #: 75-35-4		
12.290	12.271 (0.789)	98	169271	5.28724	5.287	80.00- 120.00	100.00
12.290	12.271 (0.789)	61	392434			204.89- 264.89	231.84
12.290	12.271 (0.789)	96	263375			127.69- 187.69	155.59
52 Acetone					CAS #: 67-64-1		
12.556	12.537 (0.806)	58	96533	5.15650	5.156	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
52 Acetone (continued)							
12.556	12.537 (0.806)	43	314097			321.47- 381.47	325.38
56 Carbon Disulfide					CAS #: 75-15-0		
12.652	12.633 (0.812)	76	645621	4.52489	4.525	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
12.899	12.899 (0.828)	45	327167	5.71291	5.713	80.00- 120.00	100.00
12.899	12.899 (0.828)	43	75716			0.00- 54.09	23.14
12.899	12.899 (0.828)	59	15496			0.00- 34.43	4.74
58 3-Chloropropene					CAS #: 107-05-1		
13.071	13.071 (0.839)	76	112259	5.26331	5.263	80.00- 120.00	100.00
13.071	13.071 (0.839)	41	205097			163.76- 223.76	182.70
66 Methylene Chloride					CAS #: 75-09-2		
13.356	13.337 (0.857)	84	227846	5.07917	5.079	80.00- 120.00	100.00
13.337	13.337 (0.856)	49	213781			63.99- 123.99	93.83
13.356	13.337 (0.857)	51	69089			0.29- 60.29	30.32
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
13.674	13.674 (0.878)	73	748001	5.21451	5.214	80.00- 120.00	100.00
13.674	13.674 (0.878)	57	136765			0.00- 48.26	18.28
13.674	13.674 (0.878)	41	120274			0.00- 45.58	16.08
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.729	13.729 (0.881)	98	149744	4.60503	4.605	80.00- 120.00	100.00
13.729	13.729 (0.881)	61	295050			155.28- 215.28	197.04
13.729	13.729 (0.881)	96	236733			126.18- 186.18	158.09
78 Hexane					CAS #: 110-54-3		
14.003	14.003 (0.899)	57	309068	5.52330	5.523	80.00- 120.00	100.00
14.003	14.003 (0.899)	43	160636			21.48- 81.48	51.97
14.003	14.003 (0.899)	86	62388			0.00- 51.51	20.19
82 1,1-Dichloroethane					CAS #: 75-34-3		
14.415	14.415 (0.925)	63	450825	5.29748	5.297	80.00- 120.00	100.00
14.415	14.415 (0.925)	65	146640			1.78- 61.78	32.53
86 Vinyl Acetate					CAS #: 108-05-4		
14.442	14.442 (0.927)	86	69016	5.21291	5.213	80.00- 120.00	100.00
14.442	14.442 (0.927)	42	49925			44.70- 104.70	72.34
14.442	14.442 (0.927)	43	506928			757.33- 817.33	734.51
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.240	15.240 (0.978)	98	209962	5.90277	5.903	80.00- 120.00	100.00

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

   91 cis-1,2-Dichloroethene (continued)
 15.240  15.240 (0.978)    61    362417                   145.90- 205.90   172.61
 15.240  15.240 (0.978)    96    321228                   125.53- 185.53   152.99
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
 15.240  15.221 (0.978)    72    125390 5.56058    5.560  80.00- 120.00   100.00
 15.221  15.221 (0.977)    43    356701                   262.26- 322.26   284.47
 15.221  15.221 (0.977)    57     34057                     0.00-  55.71    27.16
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                              CAS #: 109-99-9
 15.580  15.580 (1.000)    42    230798 5.57731    5.577  80.00- 120.00   100.00
 15.580  15.580 (1.000)    71    135962                    26.85-  86.85    58.91
 15.580  15.580 (1.000)    72    152869                    32.22-  92.22    66.24
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.580  15.580 (1.000)   130    169157 5.00000            80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    137393                    52.25- 112.25    81.22
 15.580  15.641 (1.000)    49    211163                    89.81- 149.81   124.83
-------------------------------------------------------------------------------
  100 Chloroform                                  CAS #: 67-66-3
 15.641  15.641 (1.004)    83    633461 5.18679    5.187  80.00- 120.00   100.00
 15.641  15.641 (1.004)    85    412634                    33.97-  93.97    65.14
-------------------------------------------------------------------------------
  102 Cyclohexane                                 CAS #: 110-82-7
 15.888  15.888 (1.020)    84    350235 5.52607    5.526  80.00- 120.00   100.00
 15.888  15.888 (1.020)    56    315557                    58.69- 118.69    90.10
 15.888  15.888 (1.020)    41    168916                    18.98-  78.98    48.23
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                       CAS #: 71-55-6
 15.888  15.888 (1.020)    97    727659 5.12206    5.122  80.00- 120.00   100.00
 15.888  15.888 (1.020)    99    461247                    34.21-  94.21    63.39
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                        CAS #: 56-23-5
 16.073  16.073 (1.032)   119    764828 5.49723    5.497  80.00- 120.00   100.00
 16.073  16.073 (1.032)   117    800337                    74.09- 134.09   104.64
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                      CAS #: 540-84-1
 16.313  16.313 (1.047)    56    359076 5.06753    5.068  80.00- 120.00   100.00
 16.313  16.313 (1.047)    57   1210470                   306.64- 366.64   337.11
 16.313  16.313 (1.047)    41    328703                    64.14- 124.14    91.54
-------------------------------------------------------------------------------
  116 Benzene                                     CAS #: 71-43-2
 16.409  16.409 (0.969)    78    782572 5.00241    5.002  80.00- 120.00   100.00
 16.409  16.409 (0.969)    77    181577                     0.00-  53.97    23.20
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                       CAS #: 17060-07-0
 16.409  16.409 (1.053)    65    230674 4.75015    4.750  80.00- 120.00   100.00
```

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

$ 117 1,2-Dichloroethane-d4 (continued)
 16.409  16.409 (1.053)    67    125519                    21.16-  81.16    54.41
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                           CAS #: 107-06-2
 16.505  16.505 (0.974)    62    415127 5.09119    5.091  80.00- 120.00   100.00
 16.505  16.505 (0.974)    64    144877                     1.03-  61.03    34.90
-------------------------------------------------------------------------------
  121 Heptane                                      CAS #: 142-82-5
 16.554  16.554 (0.977)    57    196896 5.30980    5.310  80.00- 120.00   100.00
 16.554  16.554 (0.977)   100    114578                    28.67-  88.67    58.19
 16.554  16.554 (0.977)    43    306694                   128.92- 188.92   155.76
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                          CAS #: 540-36-3
 16.939  16.939 (1.000)   114    652823 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88     94311                    0.00-  45.20    14.45
-------------------------------------------------------------------------------
  125 Trichloroethene                              CAS #: 79-01-6
 17.373  17.349 (1.026)   130    432411 5.32897    5.329  80.00- 120.00   100.00
 17.373  17.349 (1.026)    95    391577                    63.99- 123.99    90.56
 17.373  17.349 (1.026)    97    251255                    29.21-  89.21    58.11
-------------------------------------------------------------------------------
  127 Methylcyclohexane                            CAS #: 108-87-2
 17.590  17.590 (1.038)    83    482807 5.54328    5.543  80.00- 120.00   100.00
 17.590  17.590 (1.038)    55    302321                    31.29-  91.29    62.62
 17.590  17.590 (1.038)    56     95335                    0.00-  48.78    19.75
-------------------------------------------------------------------------------
  132 1,2-Dichloropropane                          CAS #: 78-87-5
 17.806  17.806 (1.051)    63    259404 5.15001    5.150  80.00- 120.00   100.00
 17.806  17.806 (1.051)    62    168436                    34.19-  94.19    64.93
 17.806  17.806 (1.051)    41    148736                    27.38-  87.38    57.34
-------------------------------------------------------------------------------
  136 1,4-Dioxane                                  CAS #: 123-91-1
 17.927  17.927 (1.058)    88    192076 5.09179    5.092  80.00- 120.00   100.00
 17.927  17.927 (1.058)    58    106548                    25.03-  85.03    55.47
 17.927  17.927 (1.058)    57     35925                    0.00-  50.67    18.70
-------------------------------------------------------------------------------
  138 Bromodichloromethane                         CAS #: 75-27-4
 18.240  18.240 (1.077)    83    697441 5.37224    5.372  80.00- 120.00   100.00
 18.240  18.240 (1.077)    85    450344                    35.15-  95.15    64.57
-------------------------------------------------------------------------------
  144 cis-1,3-Dichloropropene                      CAS #: 10061-01-5
 19.086  19.063 (1.127)    75    476570 4.92618    4.926  80.00- 120.00   100.00
 19.086  19.086 (1.127)    77    154496                    0.45-  60.45    32.42
 19.086  19.063 (1.127)    39    198807                    13.69-  73.69    41.72
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                         CAS #: 108-10-1
 19.265  19.265 (1.137)    43    427897 5.30043    5.300  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
145 4-Methyl-2-pentanone (continued)							
19.265	19.265 (1.137)	58	195202			15.64- 75.64	45.62
19.265	19.265 (1.137)	85	112616			0.00- 56.71	26.32
$ 146 Toluene-d8					CAS #: 2037-26-5		
19.556	19.556 (1.155)	98	635224	4.95449	4.954	80.00- 120.00	100.00
19.579	19.556 (1.156)	70	67109			0.00- 40.11	10.56
19.556	19.556 (1.155)	100	421637			37.58- 97.58	66.38
147 Toluene					CAS #: 108-88-3		
19.713	19.713 (1.164)	91	963209	5.16911	5.169	80.00- 120.00	100.00
19.713	19.713 (1.164)	92	569302			28.92- 88.92	59.10
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.276	20.276 (0.907)	75	496809	5.46662	5.467	80.00- 120.00	100.00
20.276	20.276 (0.907)	77	152415			0.55- 60.55	30.68
20.276	20.276 (0.907)	39	177791			8.25- 68.25	35.79
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.688	20.688 (0.925)	97	350340	4.95206	4.952	80.00- 120.00	100.00
20.688	20.688 (0.925)	99	222924			32.91- 92.91	63.63
20.688	20.688 (0.925)	83	282375			47.93- 107.93	80.60
156 Tetrachloroethene					CAS #: 127-18-4		
20.853	20.853 (0.932)	166	573157	5.25778	5.258	80.00- 120.00	100.00
20.853	20.853 (0.932)	129	414882			42.31- 102.31	72.39
20.853	20.853 (0.932)	131	418933			40.11- 100.11	73.09
158 2-Hexanone					CAS #: 591-78-6		
21.018	21.018 (0.940)	58	254565	5.59135	5.591	80.00- 120.00	100.00
21.018	21.018 (0.940)	43	419572			140.44- 200.44	164.82
21.018	21.018 (0.940)	100	68514			0.00- 59.62	26.91
160 Dibromochloromethane					CAS #: 124-48-1		
21.430	21.430 (0.958)	129	775632	5.40067	5.401	80.00- 120.00	100.00
21.430	21.430 (0.958)	127	598968			46.82- 106.82	77.22
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
21.677	21.677 (0.969)	107	590995	5.44364	5.444	80.00- 120.00	100.00
21.677	21.677 (0.969)	109	544972			65.45- 125.45	92.21
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.365	22.366 (1.000)	117	586945	5.00000		80.00- 120.00	100.00
22.365	22.366 (1.000)	82	294565			20.64- 80.64	50.19
165 Chlorobenzene					CAS #: 108-90-7		
22.407	22.407 (1.002)	112	823817	5.18769	5.188	80.00- 120.00	100.00

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

  165 Chlorobenzene (continued)
 22.407  22.407 (1.002)   114    269357                     2.42-  62.42    32.70
 22.407  22.407 (1.002)    77    435716                    23.54-  83.54    52.89
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
 22.490  22.490 (1.006)   106    392171 5.07068    5.071  80.00- 120.00   100.00
 22.490  22.490 (1.006)    91   1260593                  282.51- 342.51   321.44
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
 22.656  22.656 (1.013)   106    497840 5.54111    5.541  80.00- 120.00   100.00
 22.656  22.656 (1.013)    91    974635                  166.46- 226.46   195.77
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
 23.257  23.257 (1.040)   106    459807 5.57960    5.580  80.00- 120.00   100.00
 23.257  23.257 (1.040)    91    994546                  184.01- 244.01   216.30
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
 23.298  23.298 (1.042)   104    774064 5.55087    5.551  80.00- 120.00   100.00
 23.278  23.278 (1.041)    78    384577                   20.27-  80.27    49.68
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
 23.639  23.639 (1.057)   173   1024346 7.19892    7.199  80.00- 120.00   100.00
 23.639  23.639 (1.057)   171    518922                   20.88-  80.88    50.66
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
 23.728  23.728 (1.061)   105   1517599 5.41638    5.416  80.00- 120.00   100.00
 23.728  23.728 (1.061)   120    419494                    0.00-  57.47    27.64
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                         CAS #: 460-00-4
 24.020  24.020 (1.074)   174    396891 4.92804    4.928  80.00- 120.00   100.00
 24.020  24.020 (1.074)    95    420081                   77.42- 137.42   105.84
 24.020  24.020 (1.074)   176    386544                   65.38- 125.38    97.39
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
 24.199  24.199 (1.082)    83    698007 5.34930    5.349  80.00- 120.00   100.00
 24.199  24.199 (1.082)    85    454731                   35.73-  95.73    65.15
-------------------------------------------------------------------------------
  182 Propylbenzene                                CAS #: 103-65-1
 24.267  24.267 (1.085)    91   1597044 5.41170    5.412  80.00- 120.00   100.00
 24.267  24.267 (1.085)   120    394439                    0.00-  55.24    24.70
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                               CAS #: 622-96-8
 24.401  24.401 (1.091)   105   1305575 5.21966    5.220  80.00- 120.00   100.00
 24.401  24.401 (1.091)   120    397334                    1.08-  61.08    30.43
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 24.468  24.469 (1.094)   105   1028663 5.29577    5.296  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
190 1,3,5-Trimethylbenzene (continued)							
24.468	24.469 (1.094)	120	512304			18.44- 78.44	49.80
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.917	24.917 (1.114)	105	838509	4.98251	4.982	80.00- 120.00	100.00
24.917	24.917 (1.114)	120	380400			16.20- 76.20	45.37
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.321	25.321 (1.132)	146	802773	5.05149	5.051	80.00- 120.00	100.00
25.321	25.321 (1.132)	148	506635			35.51- 95.51	63.11
25.321	25.321 (1.132)	111	303740			9.35- 69.35	37.84
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.433	25.433 (1.137)	146	747382	5.01502	5.015	80.00- 120.00	100.00
25.433	25.433 (1.137)	148	468727			32.61- 92.61	62.72
25.433	25.433 (1.137)	111	268700			6.90- 66.90	35.95
212 alpha-Chlorotoluene					CAS #: 100-44-7		
25.567	25.567 (1.143)	91	1038709	5.53922	5.539	80.00- 120.00	100.00
25.567	25.567 (1.143)	126	240904			0.00- 51.82	23.19
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.859	25.859 (1.156)	146	674763	4.94972	4.950	80.00- 120.00	100.00
25.859	25.859 (1.156)	148	425275			33.69- 93.69	63.03
25.859	25.859 (1.156)	111	269555			8.96- 68.96	39.95
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.607	27.607 (1.234)	180	291657	4.71826	4.718	80.00- 120.00	100.00
27.607	27.607 (1.234)	182	281766			66.05- 126.05	96.61
227 Hexachlorobutadiene					CAS #: 87-68-3		
27.697	27.697 (1.238)	225	415709	4.94605	4.946	80.00- 120.00	100.00
27.697	27.697 (1.238)	223	252383			33.78- 93.78	60.71
228 Naphthalene					CAS #: 91-20-3		
27.921	27.921 (1.248)	128	29963	0.33196	0.3320	80.00- 120.00	100.00(a)
27.921	27.921 (1.248)	127	6168			0.00- 46.39	20.59

QC Flag Legend

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

Report Date: 23-Mar-2016 08:55

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e031716.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msde.i/17Mar2016.b/e16l0317a.m
Misc Info: 5.0ppbv(50ppbv)

Calibration Date: 17-MAR-2016
Calibration Time: 17:24

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	164946	98968	230924	169157	2.55
123 1,4-Difluorobenze	626935	376161	877709	652823	4.13
163 Chlorobenzene-d5	567678	340607	794749	586945	3.39

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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: 23-Mar-2016 08:55

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 17Mar2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: ICV
Level: LOW
Operator: ea
Data Type: MS DATA
SampleType: LCS
SpikeList File: AT09Bromo.spk
Quant Type: ISTD
Sublist File: AT09.sub
Method File: /chem/msde.i/17Mar2016.b/e16l0317a.m
Misc Info: 5.0ppbv(50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	5.000	5.290	105.81	60-140
11 Freon 12	5.000	5.336	106.72	70-130
15 Freon 114	5.000	5.621	112.42	70-130
17 Chloromethane	5.000	5.390	107.79	70-130
23 Butane	5.000	5.562	111.25	60-140
25 Vinyl Chloride	5.000	5.496	109.93	70-130
26 1,3-Butadiene	5.000	5.146	102.93	70-130
29 Bromomethane	5.000	5.421	108.42	70-130
30 Chloroethane	5.000	5.916	118.32	70-130
31 Isopentane	5.000	5.489	109.78	60-140
35 Freon 11	5.000	5.203	104.07	70-130
42 Ethanol	5.000	6.137	122.74	70-130
49 Freon 113	5.000	5.539	110.77	70-130
50 1,1-Dichloroethene	5.000	5.287	105.74	70-130
52 Acetone	5.000	5.156	103.13	70-130
56 Carbon Disulfide	5.000	4.525	90.50	70-130
57 2-Propanol	5.000	5.713	114.26	70-130
58 3-Chloropropene	5.000	5.263	105.27	70-130
66 Methylene Chloride	5.000	5.079	101.58	70-130
72 Methyl tert-butyl	5.000	5.214	104.29	70-130
73 trans-1,2-Dichloro	4.250	4.605	108.35	70-130
78 Hexane	5.000	5.523	110.47	70-130
82 1,1-Dichloroethane	5.000	5.297	105.95	70-130
86 Vinyl Acetate	5.000	5.213	104.26	60-140
91 cis-1,2-Dichloroet	5.650	5.903	104.47	70-130
92 2-Butanone	5.000	5.560	111.21	70-130
99 Tetrahydrofuran	5.000	5.577	111.55	70-130
100 Chloroform	5.000	5.187	103.74	70-130
103 1,1,1-Trichloroeth	5.000	5.122	102.44	70-130
106 Carbon Tetrachlori	5.000	5.497	109.94	70-130
102 Cyclohexane	5.000	5.526	110.52	70-130
113 2,2,4-Trimethylpen	5.000	5.068	101.35	70-130
116 Benzene	5.000	5.002	100.05	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	5.000	5.091	101.82	70-130
121 Heptane	5.000	5.310	106.20	70-130
125 Trichloroethene	5.000	5.329	106.58	70-130
127 Methylcyclohexane	5.000	5.543	110.87	60-140
132 1,2-Dichloropropan	5.000	5.150	103.00	70-130
136 1,4-Dioxane	5.000	5.092	101.84	70-130
138 Bromodichlorometha	5.000	5.372	107.44	70-130
144 cis-1,3-Dichloropr	5.000	4.926	98.52	70-130
145 4-Methyl-2-pentano	5.000	5.300	106.01	70-130
147 Toluene	5.000	5.169	103.38	70-130
150 trans-1,3-Dichloro	5.000	5.467	109.33	70-130
155 1,1,2-Trichloroeth	5.000	4.952	99.04	70-130
156 Tetrachloroethene	5.000	5.258	105.16	70-130
158 2-Hexanone	5.000	5.591	111.83	70-130
160 Dibromochlorometha	5.000	5.401	108.01	70-130
161 1,2-Dibromoethane	5.000	5.444	108.87	70-130
165 Chlorobenzene	5.000	5.188	103.75	70-130
167 Ethyl Benzene	5.000	5.071	101.41	70-130
169 m,p-Xylene	5.000	5.541	110.82	70-130
171 o-Xylene	5.000	5.580	111.59	70-130
172 Styrene	5.000	5.551	111.02	70-130
174 Bromoform	6.500	7.199	110.75	70-130
175 Cumene	5.000	5.416	108.33	70-130
181 1,1,2,2-Tetrachlor	5.000	5.349	106.99	70-130
182 Propylbenzene	5.000	5.412	108.23	70-130
188 4-Ethyltoluene	5.000	5.220	104.39	70-130
190 1,3,5-Trimethylben	5.000	5.296	105.92	70-130
196 1,2,4-Trimethylben	5.000	4.982	99.65	70-130
208 1,3-Dichlorobenzen	5.000	5.051	101.03	70-130
209 1,4-Dichlorobenzen	5.000	5.015	100.30	70-130
212 alpha-Chlorotoluen	5.000	5.539	110.78	70-130
214 1,2-Dichlorobenzen	5.000	4.950	98.99	70-130
226 1,2,4-Trichloroben	5.000	4.718	94.37	70-130
227 Hexachlorobutadien	5.000	4.946	98.92	70-130
228 Naphthalene	0.5000	0.3320	66.39	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	5.000	4.750	95.00	70-130
$ 146 Toluene-d8	5.000	4.954	99.09	70-130
$ 177 4-Bromofluorobenze	5.000	4.928	98.56	70-130

Data File: /chem/msde.i/17Mar2016.b/e031716.d

Date : 17-MAR-2016 22:08

Client ID:

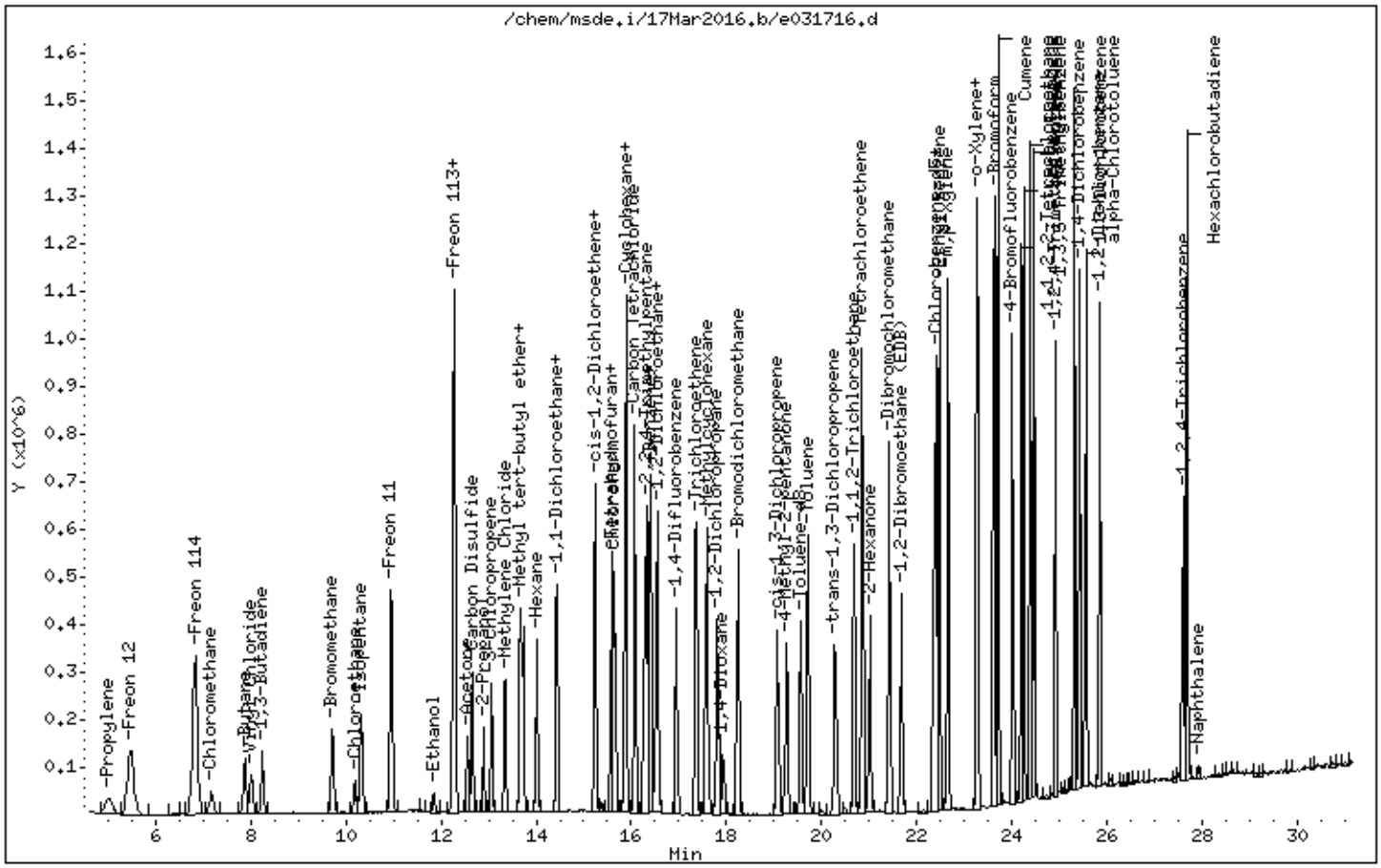
Instrument: msde.i

Sample Info: 25mL#2789-6

Operator: ea

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/09May2016.b/e050916.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 09-MAY-2016 21:23
Operator : tar Inst ID: msde.i
Smp Info : 50mL #2789-128
Misc Info : 1.0ppbv (5.0ppbv) AT-1
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/09May2016.b/e16l0317d.m
Meth Date : 10-May-2016 10:48 efinn Quant Type: ISTD
Cal Date : 09-MAY-2016 12:03 Cal File: e050908.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1CCV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE		RATIO
13 Chlorodifluoromethane					CAS #: 75-45-6			
6.353	5.962 (0.413)	51	705	0.05878	0.05878	0.00-	0.00	100.00(a)
0.000	5.962 (0.000)	67	0			0.00-	0.00	0.00
0.000	5.962 (0.000)	85	0			0.00-	0.00	0.00
59 Cyclopentene					CAS #: 142-29-0			
12.899	12.900 (0.838)	67	72416	0.96078	0.9608	0.00-	0.00	100.00(a)
12.899	12.900 (0.838)	68	31038			0.00-	0.00	42.86
12.919	12.900 (0.839)	53	12612			0.00-	0.00	17.42
84 1-Propanol					CAS #: 71-23-8			
14.384	14.357 (0.935)	59	5945	0.96695	0.9669	0.00-	0.00	100.00(a)
14.384	14.357 (0.935)	42	3792			0.00-	0.00	63.78
14.384	14.385 (0.935)	41	3117			0.00-	0.00	52.43
90 2,2-Dichloropropane					CAS #: 594-20-7			
15.008	15.009 (0.975)	77	77495	0.88106	0.8811	0.00-	0.00	100.00(a)
15.008	15.009 (0.975)	79	24128			0.00-	0.00	31.13
15.008	15.009 (0.975)	97	14605			0.00-	0.00	18.85

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

*  98 Bromochloromethane                           CAS #: 74-97-5
 15.391  15.391 (1.000)   130    135355 5.00000           80.00- 120.00   100.00
 15.391  15.391 (1.000)   128    102471                   52.25- 112.25    75.71
 15.391  15.391 (1.000)    49     94823                   89.81- 149.81    70.06
-------------------------------------------------------------------------------
  107 1,1-Dichloropropene                         CAS #: 563-58-6
 15.884  15.885 (1.032)   110     22653 0.89579   0.8958   0.00-   0.00   100.00(a)
 15.884  15.885 (1.032)    75     54120                    0.00-   0.00   238.91
-------------------------------------------------------------------------------
  115 Isobutanol                                  CAS #: 78-83-1
 15.977  15.977 (1.038)    43     20433 0.75356   0.7536   0.00-   0.00   100.00(a)
 15.977  15.977 (1.038)    41     15071                    0.00-   0.00    73.76
 15.977  15.977 (1.038)    55      2198                    0.00-   0.00    10.76
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                       CAS #: 17060-07-0
 16.183  16.183 (1.051)    65    176118 4.53240    4.532  80.00- 120.00   100.00
 16.207  16.183 (1.053)    67     83304                   21.16-  81.16    47.30
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                         CAS #: 540-36-3
 16.737  16.737 (1.000)   114    491123 5.00000           80.00- 120.00   100.00
 16.737  16.737 (1.000)    88     68885                    0.00-  45.20    14.03
-------------------------------------------------------------------------------
  124 n-Butanol                                   CAS #: 71-36-3
 16.906  16.882 (1.010)    56     30544 0.69198   0.6920   0.00-   0.00   100.00(a)
 16.906  16.906 (1.010)    41     22915                    0.00-   0.00    75.02
 16.906  16.882 (1.010)    43     17173                    0.00-   0.00    56.22
-------------------------------------------------------------------------------
$ 146 Toluene-d8                                  CAS #: 2037-26-5
 19.275  19.276 (1.152)    98    461753 4.78726    4.787  80.00- 120.00   100.00
 19.275  19.276 (1.152)    70     48959                    0.00-  40.11    10.60
 19.275  19.276 (1.152)   100    302057                   37.58-  97.58    65.42
-------------------------------------------------------------------------------
  157 1,3-Dichloropropane                         CAS #: 142-28-9
 20.822  20.795 (0.939)    76     62106 0.81703   0.8170   0.00-   0.00   100.00(a)
 20.822  20.795 (0.939)    41     31641                    0.00-   0.00    50.95
 20.795  20.795 (0.938)    78     21112                    0.00-   0.00    33.99
-------------------------------------------------------------------------------
  159 Butyl Acetate                               CAS #: 123-86-4
 20.905  20.905 (0.943)    56     10195 1.37408    1.374   0.00-   0.00   100.00(a)
 20.905  20.905 (0.943)    73      5959                    0.00-   0.00    58.45
 20.905  20.905 (0.943)    43     20173                    0.00-   0.00   197.87
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                            CAS #: 3114-55-4
 22.177  22.177 (1.000)   117    440891 5.00000           80.00- 120.00   100.00
 22.177  22.177 (1.000)    82    214966                   20.64-  80.64    48.76
-------------------------------------------------------------------------------
```

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

  168 1,1,1,2-Tetrachloroethane                    CAS #: 630-20-6
 22.343  22.343 (1.007)   131     71901 0.81622   0.8162   0.00-   0.00   100.00(a)
 22.343  22.343 (1.007)   117     43579                    0.00-   0.00    60.61
 22.343  22.343 (1.007)    95     26486                    0.00-   0.00    36.84
-------------------------------------------------------------------------------
  173 2-Heptanone                                  CAS #: 110-43-0
 23.214  23.214 (1.047)    58     34861 0.76394   0.7639   0.00-   0.00   100.00(a)
 23.214  23.214 (1.047)    43     49421                    0.00-   0.00   141.77
-------------------------------------------------------------------------------
  176 Cyclohexanone                                CAS #: 108-94-1
 23.811  23.811 (1.074)    55     25263 0.66478   0.6648   0.00-   0.00   100.00(a)
 23.811  23.811 (1.074)    98     21856                    0.00-   0.00    86.51
 23.811  23.811 (1.074)    42     18092                    0.00-   0.00    71.61
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                         CAS #: 460-00-4
 23.856  23.856 (1.076)   174    308018 5.09149    5.091  80.00- 120.00   100.00
 23.856  23.856 (1.076)    95    306680                   77.42- 137.42    99.57
 23.856  23.856 (1.076)   176    297131                   65.38- 125.38    96.47
-------------------------------------------------------------------------------
  180 Bromobenzene                                 CAS #: 108-86-1
 24.080  24.080 (1.086)   156     72331 0.81629   0.8163   0.00-   0.00   100.00(a)
 24.080  24.080 (1.086)   158     72296                    0.00-   0.00    99.95
 24.080  24.080 (1.086)    77     84008                    0.00-   0.00   116.14
-------------------------------------------------------------------------------
  185 1,2,3-Trichloropropane                       CAS #: 96-18-4
 24.125  24.125 (1.088)   110     30299 0.85152   0.8515   0.00-   0.00   100.00(a)
 24.125  24.125 (1.088)    75     70264                    0.00-   0.00   231.90
 24.125  24.125 (1.088)    61     14975                    0.00-   0.00    49.42
-------------------------------------------------------------------------------
  189 2-Chlorotoluene                              CAS #: 95-49-8
 24.282  24.282 (1.095)   126     48045 0.84500   0.8450   0.00-   0.00   100.00(a)
 24.282  24.282 (1.095)    91    120041                    0.00-   0.00   249.85
 24.282  24.282 (1.095)    65     11051                    0.00-   0.00    23.00
-------------------------------------------------------------------------------
  191 4-Chlorotoluene                              CAS #: 106-43-4
 24.416  24.417 (1.101)   126     43606 0.82739   0.8274   0.00-   0.00   100.00(a)
 24.416  24.417 (1.101)    91    116181                    0.00-   0.00   266.43
 24.416  24.417 (1.101)    63     14358                    0.00-   0.00    32.93
-------------------------------------------------------------------------------
  195 tert-Butylbenzene                            CAS #: 98-06-6
 24.708  24.708 (1.114)   119    121525 0.81796   0.8180   0.00-   0.00   100.00(a)
 24.708  24.708 (1.114)   134     30795                    0.00-   0.00    25.34
 24.708  24.686 (1.114)    91     74251                    0.00-   0.00    61.10
-------------------------------------------------------------------------------
  197 Pentachloroethane                            CAS #: 76-01-7
 24.798  24.798 (1.118)   167     49293 0.81862   0.8186   0.00-   0.00   100.00(a)
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
197 Pentachloroethane (continued)							
24.798	24.798 (1.118)	117	42145			0.00- 0.00	85.50
24.798	24.798 (1.118)	169	24625			0.00- 0.00	49.96
203 sec-Butylbenzene					CAS #: 135-98-8		
24.955	24.955 (1.125)	105	232187	0.82839	0.8284	0.00- 0.00	100.00(a)
24.955	24.955 (1.125)	134	39342			0.00- 0.00	16.94
24.955	24.955 (1.125)	91	37877			0.00- 0.00	16.31
207 p-Cymene					CAS #: 99-87-6		
25.089	25.089 (1.131)	119	133780	0.78152	0.7815	0.00- 0.00	100.00(a)
25.089	25.089 (1.131)	134	37689			0.00- 0.00	28.17
25.089	25.089 (1.131)	91	31764			0.00- 0.00	23.74
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.268	25.269 (1.139)	120	41361	0.75460	0.7546	0.00- 0.00	100.00(a)
25.268	25.269 (1.139)	105	97325			0.00- 0.00	235.31
25.268	25.246 (1.139)	77	11671			0.00- 0.00	28.22
213 Butylbenzene					CAS #: 104-51-8		
25.537	25.538 (1.152)	134	33258	0.77454	0.7745	0.00- 0.00	100.00(a)
25.537	25.538 (1.152)	91	112055			0.00- 0.00	336.93
25.537	25.538 (1.152)	92	59165			0.00- 0.00	177.90
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
26.546	26.546 (1.197)	157	58102	0.83451	0.8345	0.00- 0.00	100.00(a)
26.546	26.546 (1.197)	75	39555			0.00- 0.00	68.08
26.546	26.546 (1.197)	155	45092			0.00- 0.00	77.61

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: e050916.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: tar
Method File: /chem/msde.i/09May2016.b/e16l0317d.m
Misc Info: 1.0ppbv (5.0ppbv) AT-1

Calibration Date: 09-MAY-2016
Calibration Time: 07:51
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	159373	95624	223122	135355	-15.07
123 1,4-Difluorobenze	624905	374943	874867	491123	-21.41
163 Chlorobenzene-d5	549919	329951	769887	440891	-19.83

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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: 10-May-2016 10:48

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 09May2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: tar
Data Type: MS DATA
SampleType: LCS
SpikeList File: AT1.spk
Quant Type: ISTD
Sublist File: AT1CCV.sub
Method File: /chem/msde.i/09May2016.b/e16l0317d.m
Misc Info: 1.0ppbv (5.0ppbv) AT-1

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
59 Cyclopentene	1.000	0.9608	96.08	60-140
84 1-Propanol	1.000	0.9669	96.69	60-140
90 2,2-Dichloropropan	1.000	0.8811	88.11	60-140
107 1,1-Dichloropropen	1.000	0.8958	89.58	60-140
115 Isobutanol	1.000	0.7536	75.36	60-140
124 n-Butanol	1.000	0.6920	69.20	60-140
157 1,3-Dichloropropan	1.000	0.8170	81.70	60-140
159 Butyl Acetate	1.000	1.374	137.41	60-140
168 1,1,1,2-Tetrachlor	1.000	0.8162	81.62	60-140
173 2-Heptanone	1.000	0.7639	76.39	60-140
176 Cyclohexanone	1.000	0.6648	66.48	60-140
180 Bromobenzene	1.000	0.8163	81.63	60-140
185 1,2,3-Trichloropro	1.000	0.8515	85.15	60-140
189 2-Chlorotoluene	1.000	0.8450	84.50	60-140
191 4-Chlorotoluene	1.000	0.8274	82.74	60-140
195 tert-Butylbenzene	1.000	0.8180	81.80	60-140
197 Pentachloroethane	1.000	0.8186	81.86	60-140
203 sec-Butylbenzene	1.000	0.8284	82.84	60-140
207 p-Cymene	1.000	0.7815	78.15	60-140
210 1,2,3-Trimethylben	1.000	0.7546	75.46	60-140
213 Butylbenzene	1.000	0.7745	77.45	60-140
221 1,2-Dibromo-3-chlo	1.000	0.8345	83.45	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	5.000	4.532	90.65	70-130
$ 146 Toluene-d8	5.000	4.787	95.75	70-130
$ 177 4-Bromofluorobenze	5.000	5.091	101.83	70-130

Data File: /chem/msde.i/09May2016.b/e050916.d

Date : 09-MAY-2016 21:23

Client ID: ICV

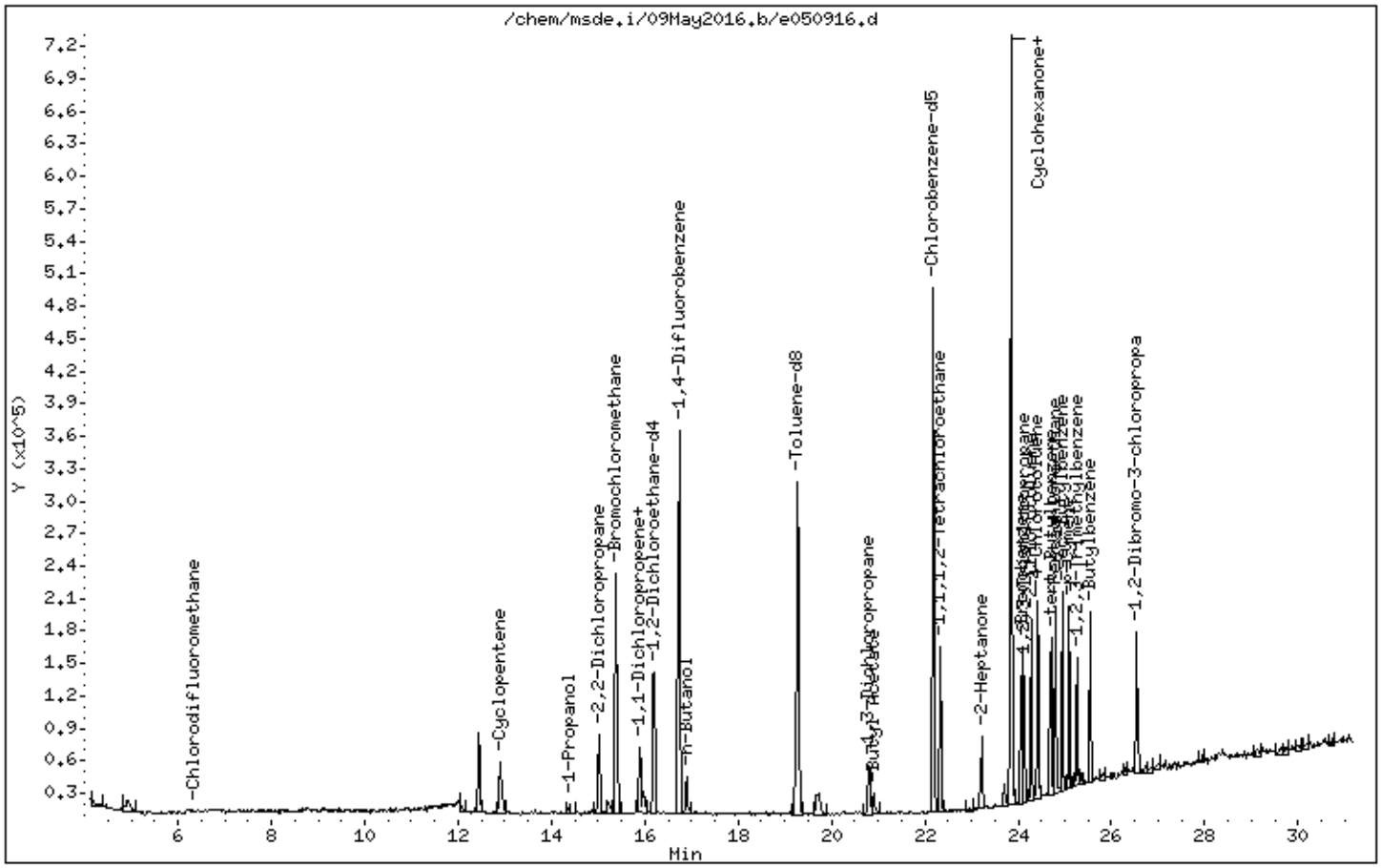
Instrument: msde.i

Sample Info: 50mL #2789-128

Operator: tar

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/17Mar2016.b/e031706.d
Lab Smp Id: ICAL Client Smp ID: Level 5
Inj Date : 17-MAR-2016 14:00
Operator : ef Inst ID: msde.i
Smp Info : 250mL# 2789-13
Misc Info : 0.05ppbv (0.05ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/17Mar2016.b/e16l0317a.m
Meth Date : 23-Mar-2016 08:52 efinn Quant Type: ISTD
Cal Date : 17-MAR-2016 14:00 Cal File: e031706.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Level5.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
15 Freon 114					CAS #: 76-14-2		
6.853	6.853 (0.440)	135	4437	0.05000	0.04939	80.00- 120.00	100.00(aM)
6.829	6.829 (0.438)	137	1019			1.31- 61.31	22.97
6.877	6.877 (0.441)	85	5388			93.88- 153.88	121.43
25 Vinyl Chloride					CAS #: 75-01-4		
8.010	8.010 (0.514)	62	1714	0.05000	0.05231	80.00- 120.00	100.00(Ta)
0.000	1.000 (0.000)	64	0			3.14- 63.14	0.00
35 Freon 11					CAS #: 75-69-4		
10.976	10.976 (0.704)	101	7769	0.05000	0.05878	80.00- 120.00	100.00(a)
10.957	10.957 (0.703)	103	5523			37.17- 97.17	71.09
49 Freon 113					CAS #: 76-13-1		
12.271	12.271 (0.788)	151	5511	0.05000	0.05564	80.00- 120.00	100.00(a)
12.271	12.271 (0.788)	153	3064			33.64- 93.64	55.60
12.271	12.271 (0.788)	101	4978			80.40- 140.40	90.33

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

*  98 Bromochloromethane                          CAS #: 74-97-5
 15.580  15.580 (1.000)   130    145928 5.00000           80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    120155                   52.25- 112.25    82.34
 15.580  15.580 (1.000)    49    112169                   89.81- 149.81    76.87
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                         CAS #: 71-55-6
 15.888  15.888 (1.020)    97      7401 0.05000  0.06039  80.00- 120.00   100.00(a)
 15.888  15.888 (1.020)    99      3732                   34.21-  94.21    50.43
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                          CAS #: 56-23-5
 16.073  16.073 (1.032)   119      7045 0.05000  0.05870  80.00- 120.00   100.00(a)
 16.073  16.073 (1.032)   117      6622                   74.09- 134.09    94.00
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                         CAS #: 17060-07-0
 16.409  16.409 (1.053)    65    223295 5.00000    5.330  80.00- 120.00   100.00
 16.409  16.409 (1.053)    67    113990                   21.16-  81.16    51.05
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                            CAS #: 107-06-2
 16.529  16.529 (0.976)    62      3164 0.05000  0.04428  80.00- 120.00   100.00(a)
 16.505  16.505 (0.974)    64      1177                    1.03-  61.03    37.20
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                           CAS #: 540-36-3
 16.939  16.939 (1.000)   114    572111 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88     84310                    0.00-  45.20    14.74
-------------------------------------------------------------------------------
  125 Trichloroethene                               CAS #: 79-01-6
 17.373  17.373 (1.026)   130      3193 0.05000  0.04490  80.00- 120.00   100.00(a)
 17.373  17.373 (1.026)    95      3283                   63.99- 123.99   102.82
 17.349  17.349 (1.024)    97      2417                   29.21-  89.21    75.70
-------------------------------------------------------------------------------
  138 Bromodichloromethane                          CAS #: 75-27-4
 18.240  18.240 (1.077)    83      4865 0.05000  0.04276  80.00- 120.00   100.00(a)
 18.264  18.264 (1.078)    85      3652                   35.15-  95.15    75.07
-------------------------------------------------------------------------------
$ 146 Toluene-d8                                    CAS #: 2037-26-5
 19.556  19.556 (1.155)    98    557316 5.00000    4.960  80.00- 120.00   100.00
 19.556  19.556 (1.155)    70     60940                    0.00-  40.11    10.93
 19.556  19.556 (1.155)   100    367356                   37.58-  97.58    65.92
-------------------------------------------------------------------------------
  155 1,1,2-Trichloroethane                         CAS #: 79-00-5
 20.688  20.688 (0.925)    97      4438 0.05000  0.06880  80.00- 120.00   100.00(a)
 20.688  20.688 (0.925)    99      2109                   32.91-  92.91    47.52
 20.688  20.688 (0.925)    83      2785                   47.93- 107.93    62.75
-------------------------------------------------------------------------------
  156 Tetrachloroethene                             CAS #: 127-18-4
 20.881  20.881 (0.934)   166      4499 0.05000  0.04526  80.00- 120.00   100.00(a)
```

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

  156 Tetrachloroethene (continued)
 20.853  20.853 (0.932)   129      3982                    42.31- 102.31    88.51
 20.853  20.853 (0.932)   131      3669                    40.11- 100.11    81.55
-------------------------------------------------------------------------------
  160 Dibromochloromethane                          CAS #: 124-48-1
 21.430  21.430 (0.958)   129      6075 0.05000  0.04639  80.00- 120.00   100.00(a)
 21.430  21.430 (0.958)   127      4659                    46.82- 106.82    76.69
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                       CAS #: 106-93-4
 21.677  21.677 (0.969)   107      4895 0.05000  0.04945  80.00- 120.00   100.00(a)
 21.677  21.677 (0.969)   109      4954                    65.45- 125.45   101.21
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                              CAS #: 3114-55-4
 22.365  22.365 (1.000)   117    535201 5.00000           80.00- 120.00   100.00
 22.365  22.365 (1.000)    82    272131                    20.64-  80.64    50.85
-------------------------------------------------------------------------------
  174 Bromoform                                     CAS #: 75-25-2
 23.639  23.639 (1.057)   173      6011 0.05000  0.04633  80.00- 120.00   100.00(a)
 23.639  23.639 (1.057)   171      3802                    20.88-  80.88    63.25
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 24.020  24.020 (1.074)   174    360362 5.00000    4.907  80.00- 120.00   100.00
 24.020  24.020 (1.074)    95    388817                    77.42- 137.42   107.90
 24.020  24.020 (1.074)   176    350335                    65.38- 125.38    97.22
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 24.199  24.199 (1.082)    83      6676 0.05000  0.05611  80.00- 120.00   100.00(a)
 24.199  24.199 (1.082)    85      4717                    35.73-  95.73    70.66
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 24.401  24.401 (1.091)   105     12874 0.05000  0.05645  80.00- 120.00   100.00(a)
 24.401  24.401 (1.091)   120      2729                     1.08-  61.08    21.20
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.469  24.469 (1.094)   105      8520 0.05000  0.04810  80.00- 120.00   100.00(a)
 24.469  24.469 (1.094)   120      3524                    18.44-  78.44    41.36
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.917  24.917 (1.114)   105      9862 0.05000  0.06427  80.00- 120.00   100.00(a)
 24.939  24.939 (1.115)   120      3472                    16.20-  76.20    35.21
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 25.321  25.321 (1.132)   146      9018 0.05000  0.06223  80.00- 120.00   100.00(a)
 25.321  25.321 (1.132)   148      6515                    35.51-  95.51    72.24
 25.321  25.321 (1.132)   111      2878                     9.35-  69.35    31.91
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.433	25.433 (1.137)	146	9064	0.05000	0.06670	80.00- 120.00	100.00(a)
25.433	25.433 (1.137)	148	5129			32.61- 92.61	56.59
25.433	25.433 (1.137)	111	3592			6.90- 66.90	39.63
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.859	25.859 (1.156)	146	7045	0.05000	0.05667	80.00- 120.00	100.00(a)
25.859	25.859 (1.156)	148	5549			33.69- 93.69	78.77
25.859	25.859 (1.156)	111	2782			8.96- 68.96	39.49
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.607	27.607 (1.234)	180	3816	0.05000	0.06770	80.00- 120.00	100.00(a)
27.607	27.607 (1.234)	182	3642			66.05- 126.05	95.44

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e031706.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/17Mar2016.b/e16l0317a.m
Misc Info: 0.05ppbv (0.05ppbv)

Calibration Date: 17-MAR-2016
Calibration Time: 17:24
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	164946	98968	230924	145928	-11.53
123 1,4-Difluorobenze	626935	376161	877709	572111	-8.74
163 Chlorobenzene-d5	567678	340607	794749	535201	-5.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/17Mar2016.b/e031706.d

Date : 17-MAR-2016 14:00

Client ID: Level 5

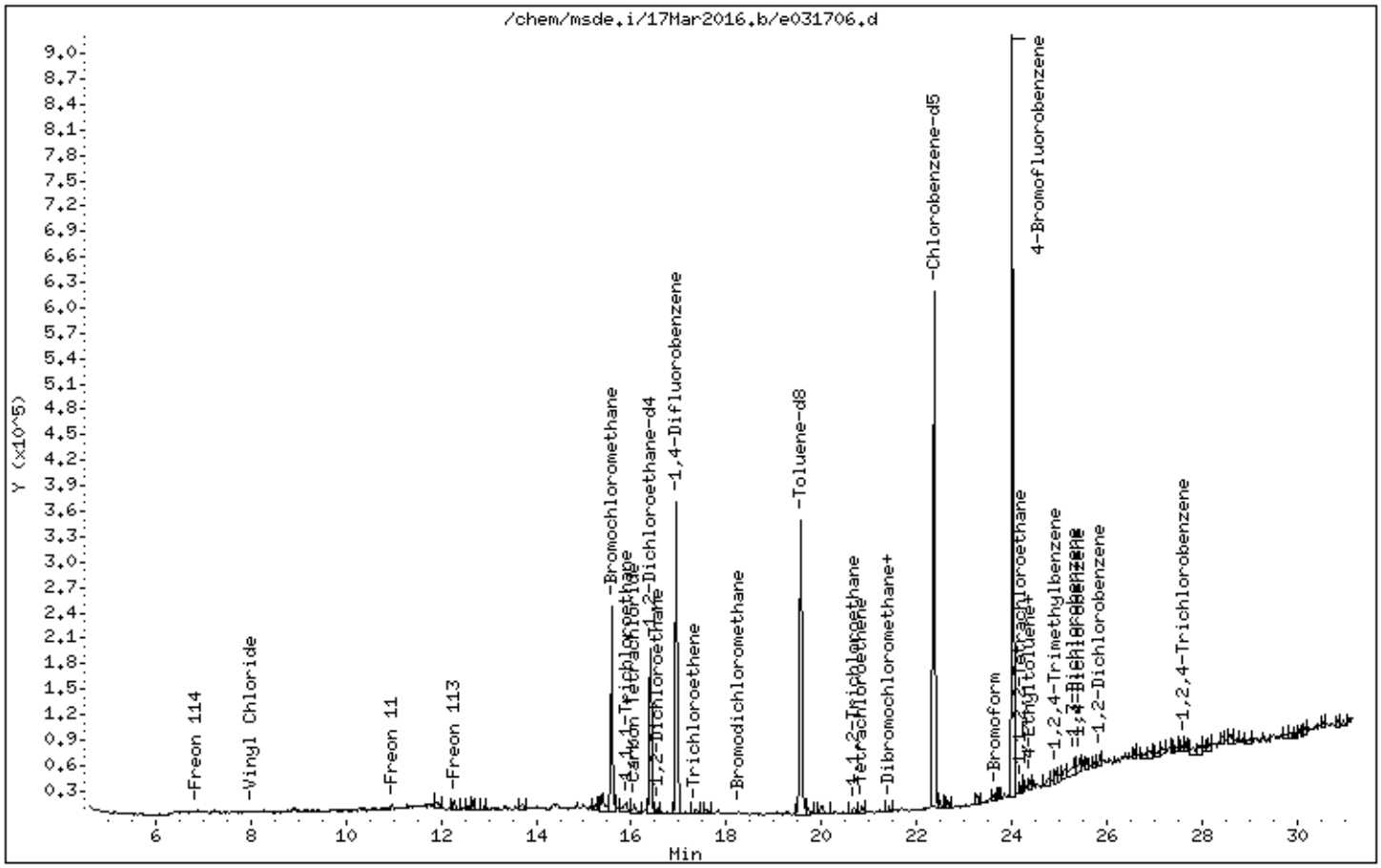
Instrument: msde.i

Sample Info: 250mL# 2789-13

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/17Mar2016.b/e031707.d
Lab Smp Id: ICAL Client Smp ID: Level 6
Inj Date : 17-MAR-2016 15:07
Operator : ef Inst ID: msde.i
Smp Info : 25mL# 2789-14
Misc Info : 0.1ppbv (1.0ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/17Mar2016.b/e16l0317a.m
Meth Date : 23-Mar-2016 08:52 efinn Quant Type: ISTD
Cal Date : 17-MAR-2016 15:07 Cal File: e031707.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Level6.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
11 Freon 12					CAS #: 75-71-8		
5.503	5.503 (0.353)	85	15532	0.10000	0.1217	80.00- 120.00	100.00(a)
5.479	5.479 (0.352)	87	2362			2.00- 62.00	15.21
15 Freon 114					CAS #: 76-14-2		
6.829	6.829 (0.438)	135	11352	0.10000	0.1216	80.00- 120.00	100.00(a)
6.805	6.805 (0.437)	137	2959			1.31- 61.31	26.07
6.805	6.805 (0.437)	85	12892			93.88- 153.88	113.57
17 Chloromethane					CAS #: 74-87-3		
7.167	7.167 (0.460)	50	2718	0.10000	0.1123	80.00- 120.00	100.00(a)
7.215	7.215 (0.463)	52	1236			5.50- 65.50	45.47
25 Vinyl Chloride					CAS #: 75-01-4		
8.010	8.010 (0.514)	62	4021	0.10000	0.1181	80.00- 120.00	100.00(a)
7.993	7.993 (0.513)	64	1986			3.14- 63.14	49.39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
26 1,3-Butadiene					CAS #: 106-99-0		
8.271	8.271 (0.531)	54	2678	0.10000	0.1169	80.00- 120.00	100.00(a)
8.253	8.253 (0.530)	39	2419			65.21- 125.21	90.33
29 Bromomethane					CAS #: 74-83-9		
9.729	9.729 (0.624)	94	4903	0.10000	0.1319	80.00- 120.00	100.00(a)
9.729	9.729 (0.624)	96	5609			64.16- 124.16	114.40
35 Freon 11					CAS #: 75-69-4		
10.938	10.938 (0.702)	101	15806	0.10000	0.1151	80.00- 120.00	100.00(a)
10.957	10.957 (0.703)	103	10474			37.17- 97.17	66.27
49 Freon 113					CAS #: 76-13-1		
12.271	12.271 (0.788)	151	12081	0.10000	0.1174	80.00- 120.00	100.00(a)
12.271	12.271 (0.788)	153	7680			33.64- 93.64	63.57
12.271	12.271 (0.788)	101	12864			80.40- 140.40	106.48
50 1,1-Dichloroethene					CAS #: 75-35-4		
12.290	12.290 (0.789)	98	3538	0.10000	0.1232	80.00- 120.00	100.00(a)
12.290	12.290 (0.789)	61	8394			204.89- 264.89	237.25
12.290	12.290 (0.789)	96	7675			127.69- 187.69	216.93
58 3-Chloropropene					CAS #: 107-05-1		
13.071	13.071 (0.839)	76	1813	0.10000	0.09480	80.00- 120.00	100.00(a)
13.071	13.071 (0.839)	41	3663			163.76- 223.76	202.04
66 Methylene Chloride					CAS #: 75-09-2		
13.337	13.337 (0.856)	84	5686	0.10000	0.1414	80.00- 120.00	100.00(a)
13.337	13.337 (0.856)	49	4600			63.99- 123.99	80.90
13.337	13.337 (0.856)	51	1797			0.29- 60.29	31.60
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
13.674	13.674 (0.878)	73	15018	0.10000	0.1168	80.00- 120.00	100.00(a)
13.674	13.674 (0.878)	57	2111			0.00- 48.26	14.06
13.674	13.674 (0.878)	41	2851			0.00- 45.58	18.98
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.729	13.729 (0.881)	98	3344	0.10000	0.1147	80.00- 120.00	100.00(a)
13.729	13.729 (0.881)	61	6065			155.28- 215.28	181.37
13.729	13.729 (0.881)	96	5831			126.18- 186.18	174.37
78 Hexane					CAS #: 110-54-3		
14.031	14.031 (0.901)	57	5877	0.10000	0.1171	80.00- 120.00	100.00(a)
14.003	14.003 (0.899)	43	3467			21.48- 81.48	58.99
14.031	14.031 (0.901)	86	1377			0.00- 51.51	23.43

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

   82 1,1-Dichloroethane                            CAS #: 75-34-3
 14.415  14.415 (0.925)    63      8161 0.10000   0.1069  80.00- 120.00   100.00(a)
 14.415  14.415 (0.925)    65      3398                    1.78-  61.78    41.64
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.240  15.240 (0.978)    98      3822 0.10000   0.1198  80.00- 120.00   100.00(a)
 15.240  15.240 (0.978)    61      7885                  145.90- 205.90   206.31
 15.240  15.240 (0.978)    96      6419                  125.53- 185.53   167.95
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.580  15.580 (1.000)   130    151678 5.00000           80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    124531                   52.25- 112.25    82.10
 15.580  15.580 (1.000)    49    118326                   89.81- 149.81    78.01
-------------------------------------------------------------------------------
  100 Chloroform                                   CAS #: 67-66-3
 15.641  15.641 (1.004)    83     14514 0.10000   0.1325  80.00- 120.00   100.00(a)
 15.641  15.641 (1.004)    85      8573                   33.97-  93.97    59.07
-------------------------------------------------------------------------------
  102 Cyclohexane                                  CAS #: 110-82-7
 15.888  15.888 (1.020)    84      5999 0.10000   0.1056  80.00- 120.00   100.00
 15.888  15.888 (1.020)    56      5736                   58.69- 118.69    95.62
 15.888  15.888 (1.020)    41      4124                   18.98-  78.98    68.74
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                        CAS #: 71-55-6
 15.888  15.888 (1.020)    97     14420 0.10000   0.1132  80.00- 120.00   100.00(a)
 15.888  15.888 (1.020)    99      9245                   34.21-  94.21    64.11
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                         CAS #: 56-23-5
 16.073  16.073 (1.032)   119     12362 0.10000  0.09909  80.00- 120.00   100.00(a)
 16.073  16.073 (1.032)   117     14459                   74.09- 134.09   116.96
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                       CAS #: 540-84-1
 16.313  16.313 (1.047)    56      8569 0.10000   0.1349  80.00- 120.00   100.00(a)
 16.313  16.313 (1.047)    57     22019                  306.64- 366.64   256.96
 16.313  16.313 (1.047)    41      7926                   64.14- 124.14    92.50
-------------------------------------------------------------------------------
  116 Benzene                                      CAS #: 71-43-2
 16.409  16.409 (0.969)    78     20674 0.10000   0.1484  80.00- 120.00   100.00(a)
 16.409  16.409 (0.969)    77      5049                    0.00-  53.97    24.42
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                        CAS #: 17060-07-0
 16.409  16.409 (1.053)    65    225657 5.00000    5.182  80.00- 120.00   100.00
 16.409  16.409 (1.053)    67    111012                   21.16-  81.16    49.20
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                           CAS #: 107-06-2
 16.505  16.505 (0.974)    62      9661 0.10000   0.1331  80.00- 120.00   100.00
```

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

  120 1,2-Dichloroethane (continued)
 16.505  16.505 (0.974)    64      2336                     1.03-  61.03    24.18
-------------------------------------------------------------------------------
  121 Heptane                                        CAS #: 142-82-5
 16.554  16.554 (0.977)    57      4225 0.10000   0.1280  80.00- 120.00   100.00(a)
 16.554  16.554 (0.977)   100      1996                   28.67-  88.67    47.24
 16.554  16.554 (0.977)    43      6368                  128.92- 188.92   150.72
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                            CAS #: 540-36-3
 16.939  16.939 (1.000)   114    581157 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88     87386                    0.00-  45.20    15.04
-------------------------------------------------------------------------------
  125 Trichloroethene                                CAS #: 79-01-6
 17.373  17.373 (1.026)   130      8436 0.10000   0.1168  80.00- 120.00   100.00(a)
 17.373  17.373 (1.026)    95      7276                   63.99- 123.99    86.25
 17.349  17.349 (1.024)    97      5800                   29.21-  89.21    68.75
-------------------------------------------------------------------------------
  132 1,2-Dichloropropane                            CAS #: 78-87-5
 17.806  17.806 (1.051)    63      5751 0.10000   0.1282  80.00- 120.00   100.00(a)
 17.806  17.806 (1.051)    62      3381                   34.19-  94.19    58.79
 17.806  17.806 (1.051)    41      5102                   27.38-  87.38    88.72
-------------------------------------------------------------------------------
  136 1,4-Dioxane                                    CAS #: 123-91-1
 17.951  17.951 (1.060)    88      3892 0.10000   0.1159  80.00- 120.00   100.00(a)
 17.927  17.927 (1.058)    58      2661                   25.03-  85.03    68.37
 17.951  17.951 (1.060)    57       617                    0.00-  50.67    15.85
-------------------------------------------------------------------------------
  138 Bromodichloromethane                           CAS #: 75-27-4
 18.240  18.240 (1.077)    83     13038 0.10000   0.1128  80.00- 120.00   100.00(a)
 18.240  18.240 (1.077)    85      8550                   35.15-  95.15    65.58
-------------------------------------------------------------------------------
  144 cis-1,3-Dichloropropene                        CAS #: 10061-01-5
 19.086  19.086 (1.127)    75      9008 0.10000   0.1046  80.00- 120.00   100.00(a)
 19.108  19.108 (1.128)    77      3755                    0.45-  60.45    41.69
 19.086  19.086 (1.127)    39      4222                   13.69-  73.69    46.87
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                           CAS #: 108-10-1
 19.265  19.265 (1.137)    43      7974 0.10000   0.1110  80.00- 120.00   100.00(a)
 19.265  19.265 (1.137)    58      3008                   15.64-  75.64    37.72
 19.265  19.265 (1.137)    85      2195                    0.00-  56.71    27.53
-------------------------------------------------------------------------------
$ 146 Toluene-d8                                     CAS #: 2037-26-5
 19.556  19.556 (1.155)    98    558217 5.00000    4.891  80.00- 120.00   100.00
 19.556  19.556 (1.155)    70     59804                    0.00-  40.11    10.71
 19.556  19.556 (1.155)   100    372369                   37.58-  97.58    66.71
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
147 Toluene						CAS #: 108-88-3	
19.713	19.713 (1.164)	91	20023	0.10000	0.1207	80.00- 120.00	100.00(a)
19.713	19.713 (1.164)	92	12037			28.92- 88.92	60.12
150 trans-1,3-Dichloropropene						CAS #: 10061-02-6	
20.304	20.304 (0.908)	75	9118	0.10000	0.1120	80.00- 120.00	100.00(a)
20.276	20.276 (0.907)	77	5077			0.55- 60.55	55.68
20.276	20.276 (0.907)	39	5238			8.25- 68.25	57.45
155 1,1,2-Trichloroethane						CAS #: 79-00-5	
20.688	20.688 (0.925)	97	7479	0.10000	0.1181	80.00- 120.00	100.00(a)
20.688	20.688 (0.925)	99	4557			32.91- 92.91	60.93
20.688	20.688 (0.925)	83	5862			47.93- 107.93	78.38
156 Tetrachloroethene						CAS #: 127-18-4	
20.853	20.853 (0.932)	166	12135	0.10000	0.1243	80.00- 120.00	100.00(a)
20.853	20.853 (0.932)	129	8765			42.31- 102.31	72.23
20.853	20.853 (0.932)	131	8190			40.11- 100.11	67.49
160 Dibromochloromethane						CAS #: 124-48-1	
21.430	21.430 (0.958)	129	14276	0.10000	0.1110	80.00- 120.00	100.00(a)
21.430	21.430 (0.958)	127	12542			46.82- 106.82	87.85
161 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
21.677	21.677 (0.969)	107	11099	0.10000	0.1142	80.00- 120.00	100.00(a)
21.677	21.677 (0.969)	109	10655			65.45- 125.45	96.00
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
22.366	22.366 (1.000)	117	525520	5.00000		80.00- 120.00	100.00
22.366	22.366 (1.000)	82	266443			20.64- 80.64	50.70
165 Chlorobenzene						CAS #: 108-90-7	
22.407	22.407 (1.002)	112	17069	0.10000	0.1200	80.00- 120.00	100.00(a)
22.407	22.407 (1.002)	114	5403			2.42- 62.42	31.65
22.407	22.407 (1.002)	77	13966			23.54- 83.54	81.82
167 Ethyl Benzene						CAS #: 100-41-4	
22.490	22.490 (1.006)	106	8810	0.10000	0.1272	80.00- 120.00	100.00(a)
22.490	22.490 (1.006)	91	24513			282.51- 342.51	278.24
169 m,p-Xylene						CAS #: 108-38-3	
22.656	22.656 (1.013)	106	8327	0.10000	0.1035	80.00- 120.00	100.00(a)
22.656	22.656 (1.013)	91	19172			166.46- 226.46	230.24
171 o-Xylene						CAS #: 95-47-6	
23.257	23.257 (1.040)	106	6828	0.10000	0.09254	80.00- 120.00	100.00(a)

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

  171 o-Xylene (continued)
 23.257  23.257 (1.040)    91     19359                   184.01- 244.01   283.52
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
 23.298  23.298 (1.042)   104     12951 0.10000   0.1037  80.00- 120.00   100.00(a)
 23.298  23.298 (1.042)    78      6242                    20.27-  80.27    48.20
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
 23.639  23.639 (1.057)   173     13560 0.10000   0.1064  80.00- 120.00   100.00(a)
 23.639  23.639 (1.057)   171      7383                    20.88-  80.88    54.45
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
 23.728  23.728 (1.061)   105     27919 0.10000   0.1113  80.00- 120.00   100.00(a)
 23.728  23.728 (1.061)   120      7113                     0.00-  57.47    25.48
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                         CAS #: 460-00-4
 24.020  24.020 (1.074)   174    361205 5.00000    5.009  80.00- 120.00   100.00
 24.020  24.020 (1.074)    95    379821                    77.42- 137.42   105.15
 24.020  24.020 (1.074)   176    343883                    65.38- 125.38    95.20
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
 24.199  24.199 (1.082)    83     13566 0.10000   0.1161  80.00- 120.00   100.00(a)
 24.199  24.199 (1.082)    85     10331                    35.73-  95.73    76.15
-------------------------------------------------------------------------------
  182 Propylbenzene                                CAS #: 103-65-1
 24.267  24.267 (1.085)    91     27467 0.10000   0.1040  80.00- 120.00   100.00(a)
 24.267  24.267 (1.085)   120      6686                     0.00-  55.24    24.34
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                               CAS #: 622-96-8
 24.401  24.401 (1.091)   105     24532 0.10000   0.1095  80.00- 120.00   100.00(a)
 24.401  24.401 (1.091)   120      6993                     1.08-  61.08    28.51
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 24.469  24.469 (1.094)   105     19423 0.10000   0.1117  80.00- 120.00   100.00(a)
 24.469  24.469 (1.094)   120      8148                    18.44-  78.44    41.95
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                       CAS #: 95-63-6
 24.917  24.917 (1.114)   105     16678 0.10000   0.1107  80.00- 120.00   100.00(a)
 24.939  24.939 (1.115)   120      6394                    16.20-  76.20    38.34
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                          CAS #: 541-73-1
 25.321  25.321 (1.132)   146     17035 0.10000   0.1197  80.00- 120.00   100.00(a)
 25.321  25.321 (1.132)   148     11334                    35.51-  95.51    66.53
 25.321  25.321 (1.132)   111      5841                     9.35-  69.35    34.29
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                          CAS #: 106-46-7
 25.433  25.433 (1.137)   146     13168 0.10000  0.09869  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
209 1,4-Dichlorobenzene (continued)							
25.433	25.433 (1.137)	148	9584			32.61- 92.61	72.78
25.410	25.410 (1.136)	111	5420			6.90- 66.90	41.16
212 alpha-Chlorotoluene					CAS #: 100-44-7		
25.567	25.567 (1.143)	91	16312	0.10000	0.09716	80.00- 120.00	100.00(a)
25.567	25.567 (1.143)	126	4975			0.00- 51.82	30.50
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.859	25.859 (1.156)	146	13240	0.10000	0.1085	80.00- 120.00	100.00(a)
25.859	25.859 (1.156)	148	9306			33.69- 93.69	70.29
25.859	25.859 (1.156)	111	6349			8.96- 68.96	47.95
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.607	27.607 (1.234)	180	3537	0.10000	0.06391	80.00- 120.00	100.00(a)
27.607	27.607 (1.234)	182	4603			66.05- 126.05	130.14
227 Hexachlorobutadiene					CAS #: 87-68-3		
27.697	27.697 (1.238)	225	6354	0.10000	0.08444	80.00- 120.00	100.00(a)
27.697	27.697 (1.238)	223	5078			33.78- 93.78	79.92

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: e031707.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/17Mar2016.b/e16l0317a.m
Misc Info: 0.1ppbv (1.0ppbv)

Calibration Date: 17-MAR-2016
Calibration Time: 17:24
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	164946	98968	230924	151678	-8.04
123 1,4-Difluorobenze	626935	376161	877709	581157	-7.30
163 Chlorobenzene-d5	567678	340607	794749	525520	-7.43

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/17Mar2016.b/e031707.d

Date : 17-MAR-2016 15:07

Client ID: Level 6

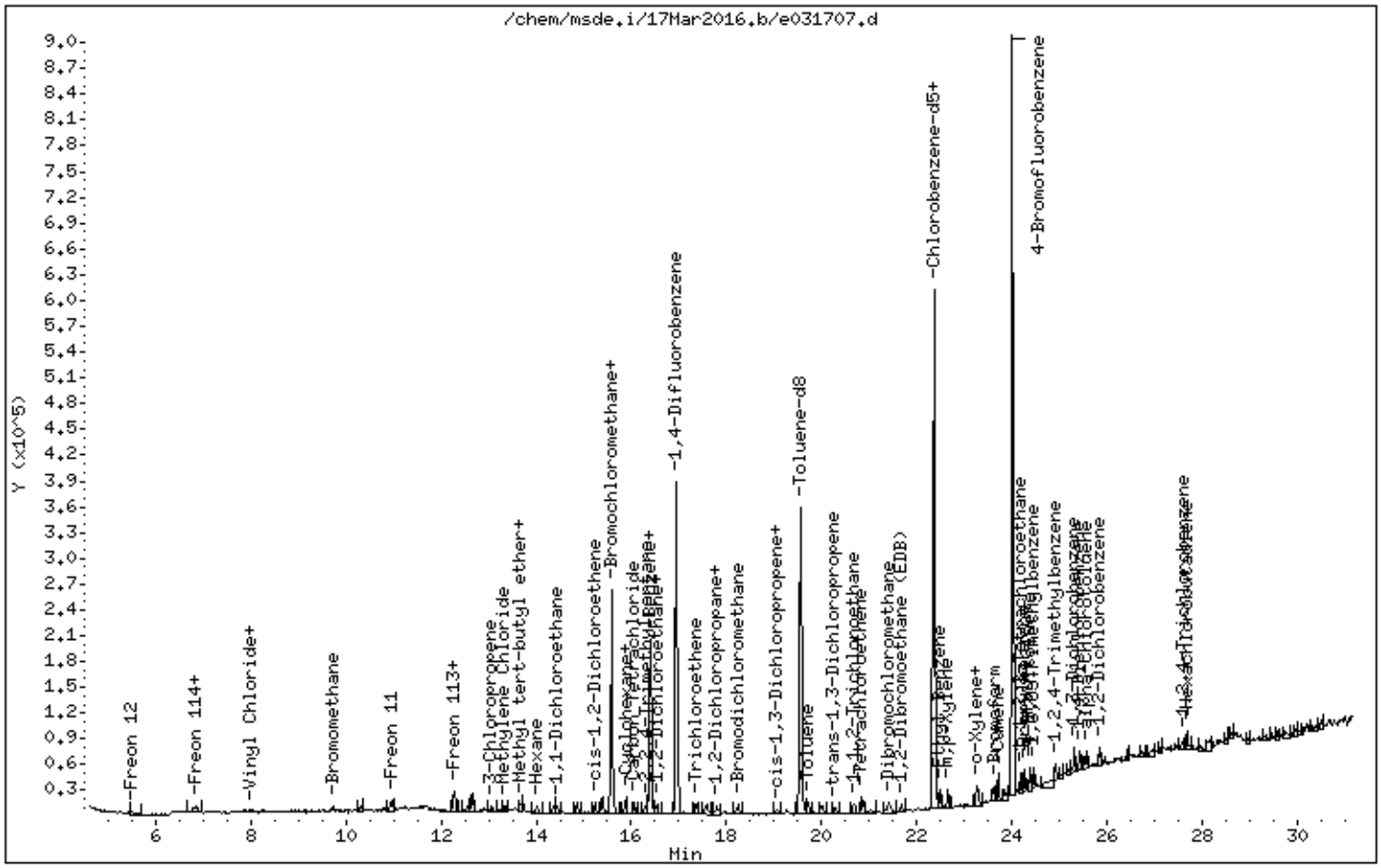
Instrument: msde.i

Sample Info: 25mL# 2789-14

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/24May2016.b/e052405.d
Lab Smp Id: ICAL Level 7
Inj Date : 24-MAY-2016 09:29
Operator : ef Inst ID: msde.i
Smp Info : 25mL# 2789-129
Misc Info : 0.5ppbv (5.0ppbv) AT-1
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/24May2016.b/e16l0317f.m
Meth Date : 24-May-2016 14:10 atoyama Quant Type: ISTD
Cal Date : 24-MAY-2016 09:29 Cal File: e052405.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FreonICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE		RATIO
13 Chlorodifluoromethane					CAS #: 75-45-6			
5.703	5.703 (0.370)	51	16100	0.50000	0.5582	0.00-	0.00	100.00(Ta)
5.751	5.751 (0.374)	67	4108			0.00-	0.00	25.52
0.000	1.000 (0.000)	85	0			0.00-	0.00	0.00
16 Freon 142b					CAS #: 75-68-3			
6.835	6.835 (0.444)	65	30456	0.50000	0.5272	0.00-	0.00	100.00(a)
6.835	6.835 (0.444)	45	6833			0.00-	0.00	22.44
6.835	6.835 (0.444)	81	1185			0.00-	0.00	3.89
37 Dichlorofluoromethane					CAS #: 75-43-4			
10.881	10.881 (0.707)	67	34123	0.50000	0.5358	0.00-	0.00	100.00(a)
10.881	10.881 (0.707)	69	13010			0.00-	0.00	38.13
10.862	10.862 (0.706)	47	2809			0.00-	0.00	8.23
48 Freon 123					CAS #: 306-83-2			
12.043	12.043 (0.782)	83	40766	0.50000	0.5524	0.00-	0.00	100.00(a)
12.043	12.043 (0.782)	133	11472			0.00-	0.00	28.14
12.043	12.043 (0.782)	85	26199			0.00-	0.00	64.27

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane							CAS #: 74-97-5	
15.391	15.391	(1.000)	130	130501	5.00000		80.00- 120.00	100.00
15.391	15.391	(1.000)	128	99691			52.25- 112.25	76.39
15.391	15.391	(1.000)	49	95016			89.81- 149.81	72.81
* 123 1,4-Difluorobenzene							CAS #: 540-36-3	
16.737	16.737	(1.000)	114	466296	5.00000		80.00- 120.00	100.00
16.737	16.737	(1.000)	88	69410			0.00- 45.20	14.89
* 163 Chlorobenzene-d5							CAS #: 3114-55-4	
22.177	22.177	(1.000)	117	427824	5.00000		80.00- 120.00	100.00
22.177	22.177	(1.000)	82	204097			20.64- 80.64	47.71

QC Flag Legend

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

Report Date: 24-May-2016 14:10

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e052405.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/24May2016.b/e16l0317f.m
Misc Info: 0.5ppbv (5.0ppbv) AT-1

Calibration Date: 24-MAY-2016
Calibration Time: 07:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	155366	93220	217512	130501	-16.00
123 1,4-Difluorobenze	569598	341759	797437	466296	-18.14
163 Chlorobenzene-d5	506881	304129	709633	427824	-15.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/24May2016.b/e052405.d

Date : 24-MAY-2016 09:29

Client ID:

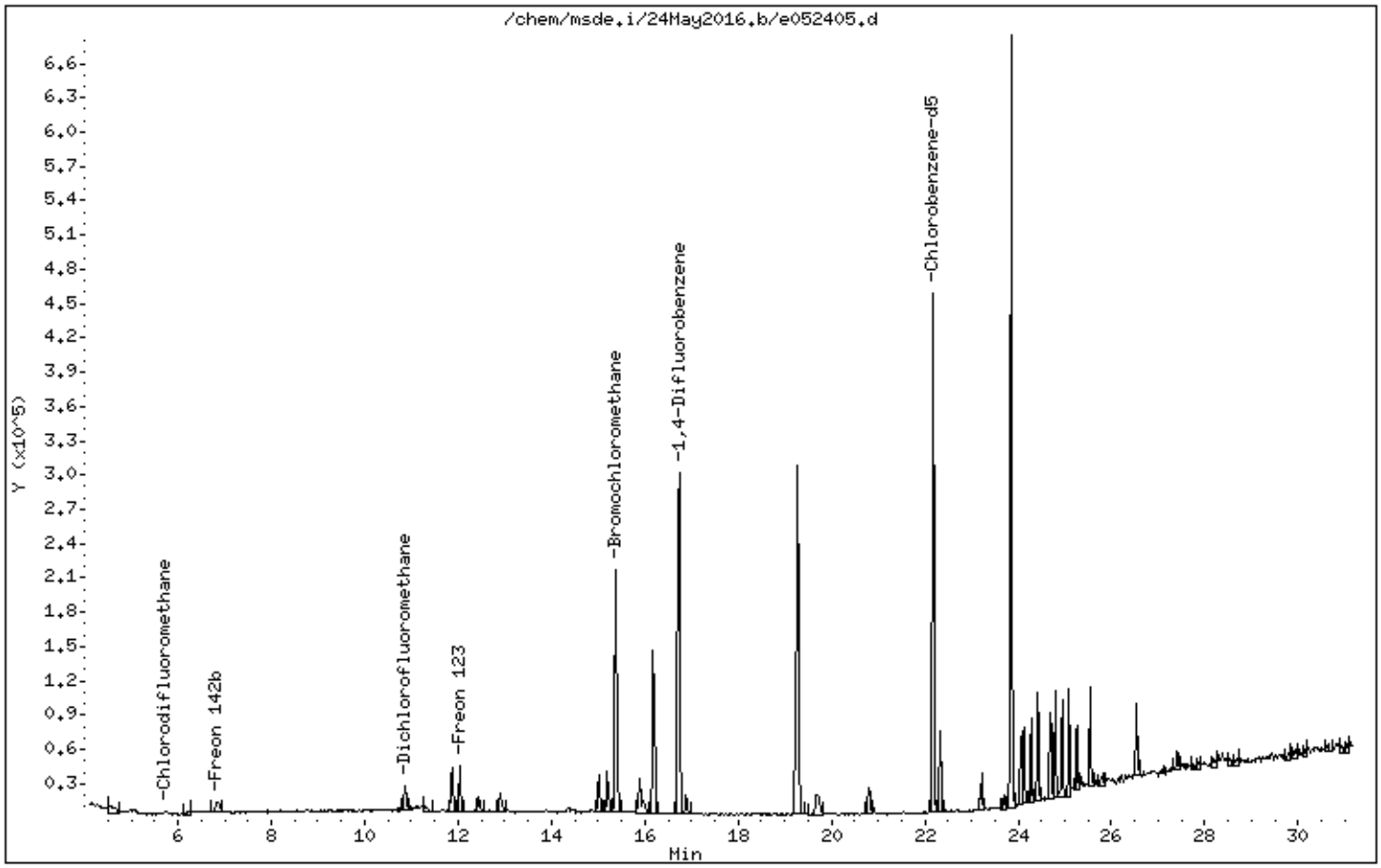
Instrument: msde.i

Sample Info: 25mL# 2789-129

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/19May2016.b/e051907.d
Lab Smp Id: ICAL Level 7
Inj Date : 19-MAY-2016 14:02
Operator : ef Inst ID: msde.i
Smp Info : 25mL# 2789-151
Misc Info : 0.5ppbv (5.0ppbv) Acetonitrile
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/19May2016.b/e16l0317e.m
Meth Date : 19-May-2016 17:13 efinn Quant Type: ISTD
Cal Date : 19-MAY-2016 14:02 Cal File: e051907.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AcetonitrileCrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
63 Acetonitrile					CAS #: 75-05-8		
13.012	13.012 (0.845)	41	10564	0.50000	0.5979	0.00- 0.00	100.00
13.012	13.012 (0.845)	40	10114			0.00- 0.00	95.74
13.012	13.012 (0.845)	39	2382			0.00- 0.00	22.55
* 98 Bromochloromethane					CAS #: 74-97-5		
15.391	15.391 (1.000)	130	120819	5.00000		80.00- 120.00	100.00
15.391	15.391 (1.000)	128	90698			52.25- 112.25	75.07
15.391	15.391 (1.000)	49	87529			89.81- 149.81	72.45
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
16.737	16.737 (1.000)	114	411009	5.00000		80.00- 120.00	100.00
16.737	16.737 (1.000)	88	56958			0.00- 45.20	13.86
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.177	22.177 (1.000)	117	384468	5.00000		80.00- 120.00	100.00
22.177	22.177 (1.000)	82	189438			20.64- 80.64	49.27

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e051907.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/19May2016.b/e16l0317e.m
Misc Info: 0.5ppbv (5.0ppbv) Acetonitrile

Calibration Date: 19-MAY-2016
Calibration Time: 09:53

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	151740	91044	212436	120819	-20.38
123 1,4-Difluorobenze	581412	348847	813977	411009	-29.31
163 Chlorobenzene-d5	508099	304859	711339	384468	-24.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/19May2016.b/e051907.d

Date : 19-MAY-2016 14:02

Client ID:

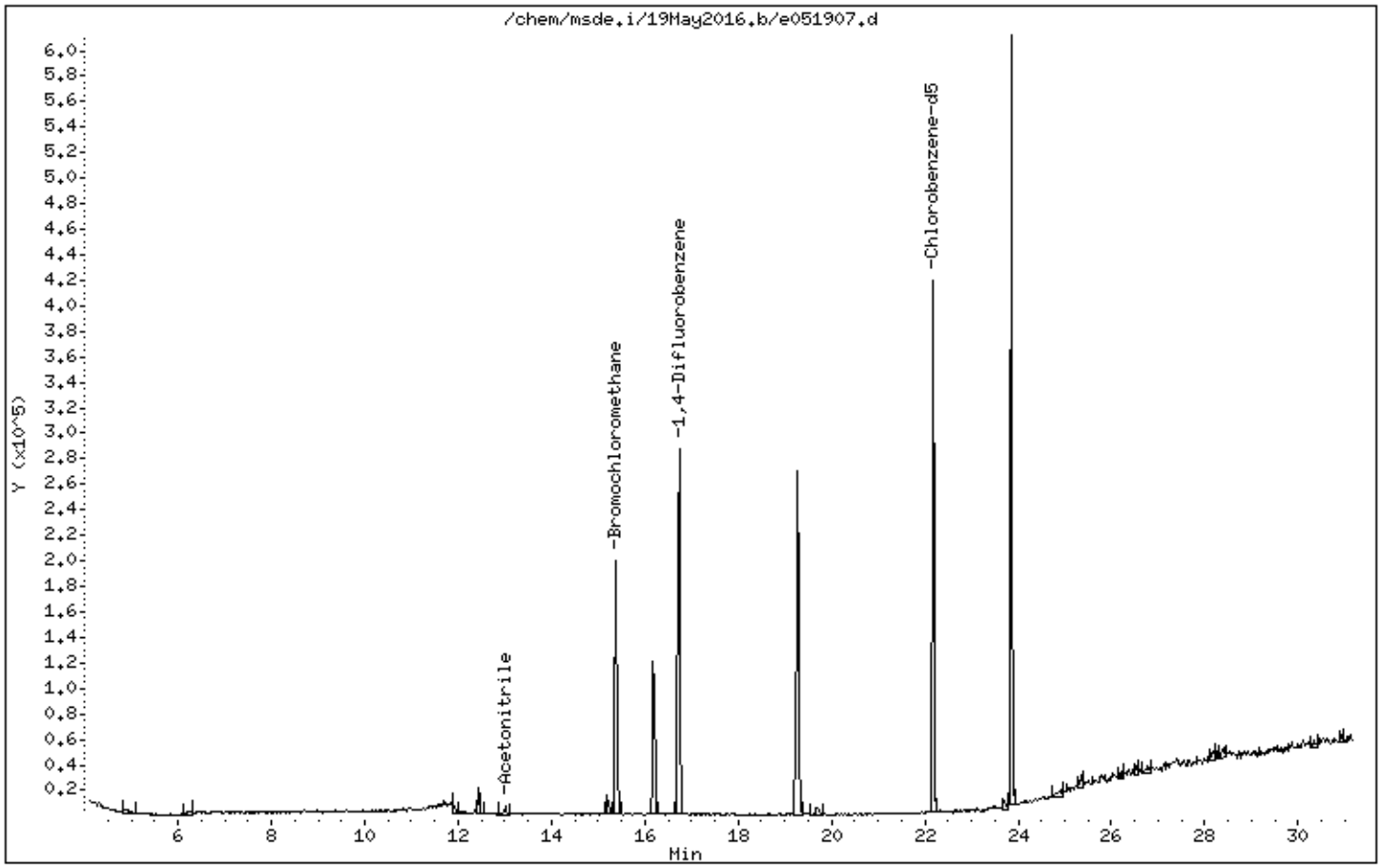
Instrument: msde.i

Sample Info: 25mL# 2789-151

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/09May2016.b/e050907.d
Lab Smp Id: ICAL Level 7
Inj Date : 09-MAY-2016 11:01
Operator : ef Inst ID: msde.i
Smp Info : 25mL# 2789-105
Misc Info : 0.5ppbv (5.0ppbv) Combo
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/09May2016.b/e16l0317d.m
Meth Date : 09-May-2016 17:07 efinn Quant Type: ISTD
Cal Date : 09-MAY-2016 11:01 Cal File: e050907.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ComboICAL-VB.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
36 1-Pentene					CAS #: 109-67-1		
10.823	10.823 (0.703)	55	12545	0.50000	0.5705	0.00- 0.00	100.00
10.823	10.823 (0.703)	42	15066			0.00- 0.00	120.10
34 Pentane					CAS #: 109-66-0		
10.957	10.957 (0.712)	43	22901	0.50000	0.5941	0.00- 0.00	100.00
10.976	10.976 (0.713)	57	3717			0.00- 0.00	16.23
10.957	10.957 (0.712)	72	3554			0.00- 0.00	15.52
44 Ethyl Ether					CAS #: 60-29-7		
11.642	11.642 (0.756)	74	9486	0.50000	0.5308	0.00- 0.00	100.00(T)
11.642	11.642 (0.756)	59	10912			0.00- 0.00	115.03
0.000	1.000 (0.000)	31	0			0.00- 0.00	0.00
53 Iodomethane					CAS #: 74-88-4		
12.404	12.404 (0.806)	142	62236	0.50000	0.5613	0.00- 0.00	100.00
12.404	12.404 (0.806)	127	28198			0.00- 0.00	45.31
59 Cyclopentene					CAS #: 142-29-0		
12.900	12.900 (0.838)	67	42644	0.50000	0.5670	0.00- 0.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
59 Cyclopentene (continued)							
12.900	12.900 (0.838)	68	17506			0.00- 0.00	41.05
12.900	12.900 (0.838)	53	6743			0.00- 0.00	15.81
64 Cyclopentane					CAS #: 287-92-3		
13.094	13.094 (0.851)	70	11569	0.50000	0.5961	0.00- 0.00	100.00
13.066	13.066 (0.849)	55	13067			0.00- 0.00	112.95
74 Acrylonitrile					CAS #: 107-13-1		
13.671	13.671 (0.888)	53	12741	0.50000	0.5629	0.00- 0.00	100.00
13.643	13.643 (0.886)	52	11439			0.00- 0.00	89.78
76 1-Hexene					CAS #: 592-41-6		
13.725	13.725 (0.892)	55	11663	0.50000	0.5918	0.00- 0.00	100.00
13.725	13.725 (0.892)	41	13853			0.00- 0.00	118.78
13.725	13.725 (0.892)	84	6139			0.00- 0.00	52.64
84 1-Propanol					CAS #: 71-23-8		
14.357	14.357 (0.933)	59	2464	0.50000	0.4016	0.00- 0.00	100.00(a)
14.357	14.357 (0.933)	42	2083			0.00- 0.00	84.54
14.384	14.384 (0.935)	41	1756			0.00- 0.00	71.27
90 2,2-Dichloropropane					CAS #: 594-20-7		
15.008	15.008 (0.975)	77	47974	0.50000	0.5466	0.00- 0.00	100.00
15.008	15.008 (0.975)	79	16500			0.00- 0.00	34.39
15.008	15.008 (0.975)	97	10802			0.00- 0.00	22.52
94 Ethyl Acetate					CAS #: 141-78-6		
15.047	15.047 (0.978)	70	4010	0.50000	0.5294	0.00- 0.00	100.00
15.047	15.047 (0.978)	43	30872			0.00- 0.00	769.88
15.008	15.008 (0.975)	61	10394			0.00- 0.00	259.20
93 Methyl Acrylate					CAS #: 96-33-3		
15.123	15.123 (0.983)	55	30899	0.50000	0.5297	0.00- 0.00	100.00
15.123	15.123 (0.983)	85	7485			0.00- 0.00	24.22
15.123	15.123 (0.983)	58	3337			0.00- 0.00	10.80
* 98 Bromochloromethane					CAS #: 74-97-5		
15.391	15.391 (1.000)	130	135071	5.00000		80.00- 120.00	100.00
15.391	15.391 (1.000)	128	105261			52.25- 112.25	77.93
15.391	15.391 (1.000)	49	96231			89.81- 149.81	71.24
107 1,1-Dichloropropene					CAS #: 563-58-6		
15.884	15.884 (1.032)	110	14595	0.50000	0.5784	0.00- 0.00	100.00
15.884	15.884 (1.032)	75	36527			0.00- 0.00	250.27

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
115 Isobutanol					CAS #: 78-83-1		
15.977	15.977 (1.038)	43	17784	0.50000	0.6572	0.00- 0.00	100.00
15.977	15.977 (1.038)	41	15234			0.00- 0.00	85.66
15.977	15.977 (1.038)	55	2101			0.00- 0.00	11.81
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
16.737	16.737 (1.000)	114	500953	5.00000		80.00- 120.00	100.00
16.737	16.737 (1.000)	88	71239			0.00- 45.20	14.22
124 n-Butanol					CAS #: 71-36-3		
16.882	16.882 (1.009)	56	23427	0.50000	0.5203	0.00- 0.00	100.00
16.882	16.882 (1.009)	41	14387			0.00- 0.00	61.41
16.882	16.882 (1.009)	43	11620			0.00- 0.00	49.60
128 Ethyl acrylate					CAS #: 140-88-5		
17.171	17.171 (1.026)	99	4246	0.50000	0.5670	0.00- 0.00	100.00
17.171	17.171 (1.026)	45	2879			0.00- 0.00	67.80
17.171	17.171 (1.026)	55	33102			0.00- 0.00	779.60
131 2-Pentanone					CAS #: 107-87-9		
17.388	17.388 (1.039)	43	42016	0.50000	0.5412	0.00- 0.00	100.00
17.388	17.388 (1.039)	58	4020			0.00- 0.00	9.57
17.388	17.388 (1.039)	86	12328			0.00- 0.00	29.34
134 Methyl Methacrylate					CAS #: 80-62-6		
17.556	17.556 (1.049)	41	20330	0.50000	0.5018	0.00- 0.00	100.00
17.556	17.556 (1.049)	69	23151			0.00- 0.00	113.88
17.556	17.556 (1.049)	100	10495			0.00- 0.00	51.62
137 Dibromomethane					CAS #: 74-95-3		
17.797	17.797 (1.063)	174	40812	0.50000	0.5449	0.00- 0.00	100.00
17.797	17.797 (1.063)	93	32308			0.00- 0.00	79.16
17.797	17.797 (1.063)	95	27948			0.00- 0.00	68.48
148 Octane					CAS #: 111-65-9		
19.320	19.320 (1.154)	57	14175	0.50000	0.5621	0.00- 0.00	100.00
19.320	19.320 (1.154)	85	19479			0.00- 0.00	137.42
19.320	19.320 (1.154)	43	26777			0.00- 0.00	188.90
157 1,3-Dichloropropane					CAS #: 142-28-9		
20.795	20.795 (0.938)	76	43082	0.50000	0.5656	0.00- 0.00	100.00
20.795	20.795 (0.938)	41	19546			0.00- 0.00	45.37
20.795	20.795 (0.938)	78	13754			0.00- 0.00	31.93
159 Butyl Acetate					CAS #: 123-86-4		
20.905	20.905 (0.943)	56	4232	0.50000	0.5692	0.00- 0.00	100.00

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

  159 Butyl Acetate (continued)
 20.905  20.905 (0.943)    73      2267                     0.00-   0.00    53.57
 20.905  20.905 (0.943)    43      9465                     0.00-   0.00   223.65
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                              CAS #: 3114-55-4
 22.177  22.177 (1.000)   117    441801 5.00000            80.00- 120.00   100.00
 22.177  22.177 (1.000)    82    224872                    20.64-  80.64    50.90
-------------------------------------------------------------------------------
  168 1,1,1,2-Tetrachloroethane                     CAS #: 630-20-6
 22.343  22.343 (1.007)   131     53926 0.50000   0.6109   0.00-   0.00   100.00
 22.343  22.343 (1.007)   117     32406                    0.00-   0.00    60.09
 22.343  22.343 (1.007)    95     17304                    0.00-   0.00    32.09
-------------------------------------------------------------------------------
  170 Nonane                                        CAS #: 111-84-2
 22.301  22.301 (1.006)    43     24409 0.50000   0.5518   0.00-   0.00   100.00
 22.301  22.301 (1.006)    57     22963                    0.00-   0.00    94.08
 22.301  22.301 (1.006)    85     11765                    0.00-   0.00    48.20
-------------------------------------------------------------------------------
  173 2-Heptanone                                   CAS #: 110-43-0
 23.214  23.214 (1.047)    58     25729 0.50000   0.5626   0.00-   0.00   100.00
 23.214  23.214 (1.047)    43     33964                    0.00-   0.00   132.01
-------------------------------------------------------------------------------
  176 Cyclohexanone                                 CAS #: 108-94-1
 23.811  23.811 (1.074)    55     20261 0.50000   0.5321   0.00-   0.00   100.00
 23.811  23.811 (1.074)    98     12845                    0.00-   0.00    63.40
 23.811  23.811 (1.074)    42     13203                    0.00-   0.00    65.16
-------------------------------------------------------------------------------
  179 alpha-Pinene                                  CAS #: 80-56-8
 23.497  23.497 (1.060)    93     92215 0.50000   0.5234   0.00-   0.00   100.00
 23.497  23.497 (1.060)   121     14183                    0.00-   0.00    15.38
 23.497  23.497 (1.060)    92     39789                    0.00-   0.00    43.15
-------------------------------------------------------------------------------
  180 Bromobenzene                                  CAS #: 108-86-1
 24.080  24.080 (1.086)   156     51947 0.50000   0.5850   0.00-   0.00   100.00
 24.080  24.080 (1.086)   158     49824                    0.00-   0.00    95.91
 24.080  24.080 (1.086)    77     58476                    0.00-   0.00   112.57
-------------------------------------------------------------------------------
  185 1,2,3-Trichloropropane                        CAS #: 96-18-4
 24.125  24.125 (1.088)   110     20750 0.50000   0.5820   0.00-   0.00   100.00
 24.125  24.125 (1.088)    75     65384                    0.00-   0.00   315.10
 24.125  24.125 (1.088)    61     10318                    0.00-   0.00    49.73
-------------------------------------------------------------------------------
  187 Decane                                        CAS #: 124-18-5
 24.170  24.170 (1.090)    57     19595 0.50000   0.5435   0.00-   0.00   100.00
 24.170  24.170 (1.090)    71     10319                    0.00-   0.00    52.66
 24.170  24.170 (1.090)   142      1417                    0.00-   0.00     7.23
-------------------------------------------------------------------------------
```

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

  189 2-Chlorotoluene                                CAS #: 95-49-8
 24.282  24.282 (1.095)   126     32805 0.50000   0.5758   0.00-   0.00   100.00
 24.282  24.282 (1.095)    91     83847                    0.00-   0.00   255.59
 24.282  24.282 (1.095)    65      7267                    0.00-   0.00    22.15
-------------------------------------------------------------------------------
  191 4-Chlorotoluene                                CAS #: 106-43-4
 24.416  24.416 (1.101)   126     27469 0.50000   0.5201   0.00-   0.00   100.00
 24.416  24.416 (1.101)    91     75110                    0.00-   0.00   273.44
 24.416  24.416 (1.101)    63      8459                    0.00-   0.00    30.79
-------------------------------------------------------------------------------
  195 tert-Butylbenzene                              CAS #: 98-06-6
 24.708  24.708 (1.114)   119     83029 0.50000   0.5577   0.00-   0.00   100.00
 24.708  24.708 (1.114)   134     20948                    0.00-   0.00    25.23
 24.685  24.685 (1.113)    91     51429                    0.00-   0.00    61.94
-------------------------------------------------------------------------------
  197 Pentachloroethane                              CAS #: 76-01-7
 24.798  24.798 (1.118)   167     34432 0.50000   0.5706   0.00-   0.00   100.00
 24.798  24.798 (1.118)   117     29645                    0.00-   0.00    86.10
 24.798  24.798 (1.118)   169     16398                    0.00-   0.00    47.62
-------------------------------------------------------------------------------
  199 D-Limonene                                     CAS #: 5989-27-5
 25.022  25.022 (1.128)    68     30679 0.50000   0.5467   0.00-   0.00   100.00
 25.044  25.044 (1.129)    93     74885                    0.00-   0.00   244.09
-------------------------------------------------------------------------------
  203 sec-Butylbenzene                               CAS #: 135-98-8
 24.955  24.955 (1.125)   105    158030 0.50000   0.5626   0.00-   0.00   100.00
 24.955  24.955 (1.125)   134     23571                    0.00-   0.00    14.92
 24.955  24.955 (1.125)    91     22007                    0.00-   0.00    13.93
-------------------------------------------------------------------------------
  206 bis(2-Chloroethyl) Ether                       CAS #: 111-44-4
 25.044  25.044 (1.129)    93     73953 0.50000   0.5300   0.00-   0.00   100.00
 25.044  25.044 (1.129)    95     18558                    0.00-   0.00    25.09
 25.044  25.044 (1.129)    63     31253                    0.00-   0.00    42.26
-------------------------------------------------------------------------------
  207 p-Cymene                                       CAS #: 99-87-6
 25.089  25.089 (1.131)   119     90034 0.50000   0.5249   0.00-   0.00   100.00
 25.089  25.089 (1.131)   134     24777                    0.00-   0.00    27.52
 25.089  25.089 (1.131)    91     21248                    0.00-   0.00    23.60
-------------------------------------------------------------------------------
  210 1,2,3-Trimethylbenzene                         CAS #: 526-73-8
 25.268  25.268 (1.139)   120     31368 0.50000   0.5711   0.00-   0.00   100.00
 25.268  25.268 (1.139)   105     67192                    0.00-   0.00   214.21
 25.268  25.268 (1.139)    77      9384                    0.00-   0.00    29.92
-------------------------------------------------------------------------------
  213 Butylbenzene                                   CAS #: 104-51-8
 25.537  25.537 (1.152)   134     24727 0.50000   0.5747   0.00-   0.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
213 Butylbenzene (continued)							
25.537	25.537 (1.152)	91	76081			0.00- 0.00	307.68
25.537	25.537 (1.152)	92	40609			0.00- 0.00	164.23
215 Undecane					CAS #: 1120-21-4		
25.515	25.515 (1.151)	57	13951	0.50000	0.5339	0.00- 0.00	100.00
25.515	25.515 (1.151)	43	9725			0.00- 0.00	69.71
25.515	25.515 (1.151)	85	6115			0.00- 0.00	43.83
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
26.546	26.546 (1.197)	157	36314	0.50000	0.5205	0.00- 0.00	100.00
26.546	26.546 (1.197)	75	26559			0.00- 0.00	73.14
26.546	26.546 (1.197)	155	28351			0.00- 0.00	78.07
225 Dodecane					CAS #: 112-40-3		
26.613	26.613 (1.200)	85	4951	0.50000	0.6360	0.00- 0.00	100.00
26.613	26.613 (1.200)	57	10256			0.00- 0.00	207.15
26.613	26.613 (1.200)	43	7461			0.00- 0.00	150.70

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e050907.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/09May2016.b/e16l0317d.m
Misc Info: 0.5ppbv (5.0ppbv) Combo

Calibration Date: 09-MAY-2016
Calibration Time: 07:51

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	159373	95624	223122	135071	-15.25
123 1,4-Difluorobenze	624905	374943	874867	500953	-19.84
163 Chlorobenzene-d5	549919	329951	769887	441801	-19.66

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/09May2016.b/e050907.d

Date : 09-MAY-2016 11:01

Client ID:

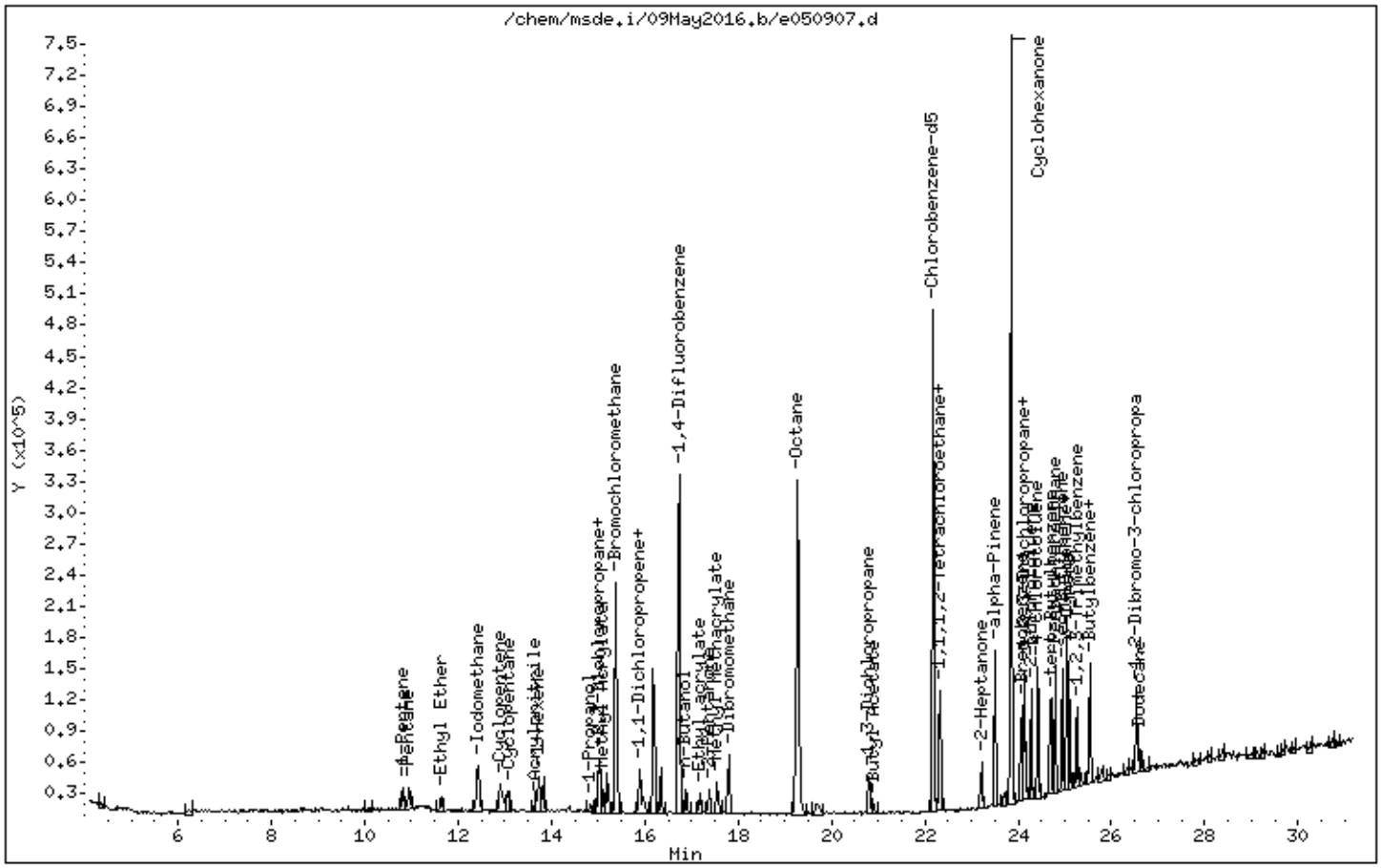
Instrument: msde.i

Sample Info: 25mL# 2789-105

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/30Mar2016.b/e033007.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 30-MAR-2016 14:41
Operator : ef Inst ID: msde.i
Smp Info : 25mL# 2789-45
Misc Info : 0.5ppbv (5.0ppbv) Acrolein
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/30Mar2016.b/e16l0317c.m
Meth Date : 30-Mar-2016 17:06 ealcan Quant Type: ISTD
Cal Date : 30-MAR-2016 14:41 Cal File: e033007.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AcroleinICAL.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 Acrolein						CAS #: 107-02-8		
12.233	12.233	(0.785)	56	5072	0.50000	0.5470	0.00- 0.00	100.00
12.233	12.233	(0.785)	55	3491			0.00- 0.00	68.83
* 98 Bromochloromethane						CAS #: 74-97-5		
15.580	15.580	(1.000)	130	160675	5.00000		80.00- 120.00	100.00
15.580	15.580	(1.000)	128	122937			52.25- 112.25	76.51
15.580	15.580	(1.000)	49	122426			89.81- 149.81	76.19
* 123 1,4-Difluorobenzene						CAS #: 540-36-3		
16.939	16.939	(1.000)	114	583618	5.00000		80.00- 120.00	100.00
16.939	16.939	(1.000)	88	86106			0.00- 45.20	14.75
* 163 Chlorobenzene-d5						CAS #: 3114-55-4		
22.366	22.366	(1.000)	117	538362	5.00000		80.00- 120.00	100.00
22.366	22.366	(1.000)	82	280990			20.64- 80.64	52.19

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e033007.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/30Mar2016.b/e16l0317c.m
Misc Info: 0.5ppbv (5.0ppbv) Acrolein

Calibration Date: 30-MAR-2016
Calibration Time: 11:07
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	190719	114431	267007	160675	-15.75
123 1,4-Difluorobenze	725285	435171	1015399	583618	-19.53
163 Chlorobenzene-d5	658854	395312	922396	538362	-18.29

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/30Mar2016.b/e033007.d

Date : 30-MAR-2016 14:41

Client ID: Level 7

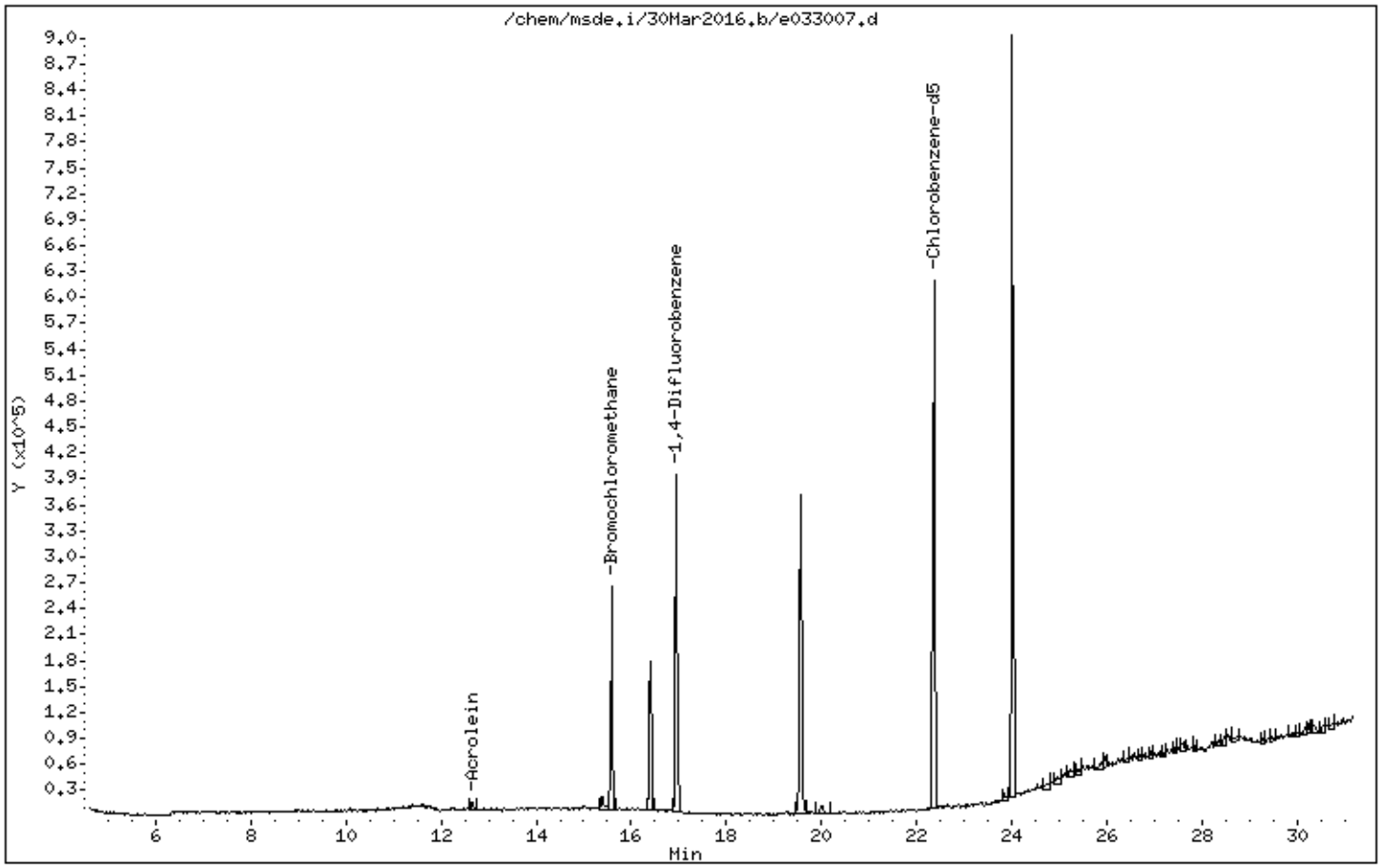
Instrument: msde.i

Sample Info: 25mL# 2789-45

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/25Mar2016.b/e032505.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 25-MAR-2016 12:18
Operator : ef Inst ID: msde.i
Smp Info : 25mL# 2789-4
Misc Info : 0.5ppbv (5.0ppbv) Combo
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/25Mar2016.b/e16l0317b.m
Meth Date : 25-Mar-2016 15:05 efinn Quant Type: ISTD
Cal Date : 25-MAR-2016 12:18 Cal File: e032505.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Combo-AT1ICAL.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
32 Vinyl Bromide					CAS #: 593-60-2		
10.786	10.786 (0.692)	106	21029	0.50000	0.5038	0.00- 0.00	100.00
10.786	10.786 (0.692)	108	18049			0.00- 0.00	85.83
36 1-Pentene					CAS #: 109-67-1		
11.014	11.014 (0.707)	55	16128	0.50000	0.5057	0.00- 0.00	100.00
11.014	11.014 (0.707)	42	17081			0.00- 0.00	105.91
34 Pentane					CAS #: 109-66-0		
11.147	11.147 (0.715)	43	26431	0.50000	0.4647	0.00- 0.00	100.00(a)
11.166	11.166 (0.717)	57	4681			0.00- 0.00	17.71
11.147	11.147 (0.715)	72	4082			0.00- 0.00	15.44
44 Ethyl Ether					CAS #: 60-29-7		
11.833	11.833 (0.759)	74	12085	0.50000	0.5604	0.00- 0.00	100.00(T)
11.833	11.833 (0.759)	59	12751			0.00- 0.00	105.51
0.000	1.000 (0.000)	31	0			0.00- 0.00	0.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
53 Iodomethane					CAS #: 74-88-4		
12.614	12.614 (0.810)	142	62424	0.50000	0.4643	0.00- 0.00	100.00(a)
12.614	12.614 (0.810)	127	29979			0.00- 0.00	48.02
63 Acetonitrile					CAS #: 75-05-8		
13.185	13.185 (0.846)	41	11554	0.50000	0.4344	0.00- 0.00	100.00(a)
13.185	13.185 (0.846)	40	7909			0.00- 0.00	68.45
13.185	13.185 (0.846)	39	2478			0.00- 0.00	21.45
64 Cyclopentane					CAS #: 287-92-3		
13.280	13.280 (0.852)	70	12859	0.50000	0.4684	0.00- 0.00	100.00(a)
13.280	13.280 (0.852)	55	12297			0.00- 0.00	95.63
74 Acrylonitrile					CAS #: 107-13-1		
13.838	13.838 (0.888)	53	13449	0.50000	0.4605	0.00- 0.00	100.00(a)
13.838	13.838 (0.888)	52	11693			0.00- 0.00	86.94
76 1-Hexene					CAS #: 592-41-6		
13.921	13.921 (0.894)	55	14001	0.50000	0.5167	0.00- 0.00	100.00
13.921	13.921 (0.894)	41	18178			0.00- 0.00	129.83
13.921	13.921 (0.894)	84	6440			0.00- 0.00	46.00
94 Ethyl Acetate					CAS #: 141-78-6		
15.221	15.221 (0.977)	70	3856	0.50000	0.4392	0.00- 0.00	100.00(a)
15.221	15.221 (0.977)	43	30291			0.00- 0.00	785.55
15.202	15.202 (0.976)	61	11197			0.00- 0.00	290.38
93 Methyl Acrylate					CAS #: 96-33-3		
15.316	15.316 (0.983)	55	28307	0.50000	0.4627	0.00- 0.00	100.00(a)
15.316	15.316 (0.983)	85	5739			0.00- 0.00	20.27
15.316	15.316 (0.983)	58	2663			0.00- 0.00	9.41
* 98 Bromochloromethane					CAS #: 74-97-5		
15.580	15.580 (1.000)	130	218878	5.00000		80.00- 120.00	100.00
15.580	15.580 (1.000)	128	136361			52.25- 112.25	62.30
15.580	15.580 (1.000)	49	166797			89.81- 149.81	76.21
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
16.939	16.939 (1.000)	114	679944	5.00000		80.00- 120.00	100.00
16.939	16.939 (1.000)	88	104204			0.00- 45.20	15.33
128 Ethyl acrylate					CAS #: 140-88-5		
17.397	17.397 (1.027)	99	2819	0.50000	0.5553	0.00- 0.00	100.00
17.397	17.397 (1.027)	45	2551			0.00- 0.00	90.49
17.397	17.397 (1.027)	55	25777			0.00- 0.00	914.40

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE		RATIO
131 2-Pentanone					CAS #: 107-87-9			
17.614	17.614 (1.040)	43	33285	0.50000	0.5214	0.00-	0.00	100.00
17.614	17.614 (1.040)	58	3270			0.00-	0.00	9.82
17.614	17.614 (1.040)	86	8440			0.00-	0.00	25.36
134 Methyl Methacrylate					CAS #: 80-62-6			
17.782	17.782 (1.050)	41	17123	0.50000	0.5376	0.00-	0.00	100.00
17.782	17.782 (1.050)	69	15233			0.00-	0.00	88.96
17.782	17.782 (1.050)	100	7284			0.00-	0.00	42.54
137 Dibromomethane					CAS #: 74-95-3			
18.047	18.047 (1.065)	174	25362	0.50000	0.5264	0.00-	0.00	100.00
18.047	18.047 (1.065)	93	22219			0.00-	0.00	87.61
18.047	18.047 (1.065)	95	18107			0.00-	0.00	71.39
148 Octane					CAS #: 111-65-9			
19.601	19.601 (1.157)	57	19810	0.50000	0.5422	0.00-	0.00	100.00
19.624	19.624 (1.158)	85	27203			0.00-	0.00	137.32
19.624	19.624 (1.158)	43	41315			0.00-	0.00	208.56
* 163 Chlorobenzene-d5					CAS #: 3114-55-4			
22.365	22.365 (1.000)	117	614814	5.00000		80.00-	120.00	100.00
22.365	22.365 (1.000)	82	320182			20.64-	80.64	52.08
170 Nonane					CAS #: 111-84-2			
22.490	22.490 (1.006)	43	37181	0.50000	0.5410	0.00-	0.00	100.00
22.490	22.490 (1.006)	57	38130			0.00-	0.00	102.55
22.490	22.490 (1.006)	85	17244			0.00-	0.00	46.38
184 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6			
24.289	24.289 (1.086)	75	49675	0.50000	0.5321	0.00-	0.00	100.00
24.289	24.289 (1.086)	89	4890			0.00-	0.00	9.84
24.267	24.267 (1.085)	53	7822			0.00-	0.00	15.75
187 Decane					CAS #: 124-18-5			
24.581	24.581 (1.099)	57	33845	0.50000	0.5216	0.00-	0.00	100.00
24.581	24.581 (1.099)	71	631			0.00-	0.00	1.86
24.603	24.603 (1.100)	142	6779			0.00-	0.00	20.03
206 bis(2-Chloroethyl) Ether					CAS #: 111-44-4			
25.186	25.186 (1.126)	93	41182	0.50000	0.5312	0.00-	0.00	100.00
25.186	25.186 (1.126)	95	9523			0.00-	0.00	23.12
25.186	25.186 (1.126)	63	23115			0.00-	0.00	56.13
215 Undecane					CAS #: 1120-21-4			
25.657	25.657 (1.147)	57	13932	0.50000	0.5166	0.00-	0.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
215 Undecane (continued)								
25.657	25.657	(1.147)	43	9219			0.00- 0.00	66.17
25.657	25.657	(1.147)	85	4842			0.00- 0.00	34.75
225 Dodecane						CAS #: 112-40-3		
26.800	26.800	(1.198)	85	1238	0.50000	0.3231	0.00- 0.00	100.00(a)
26.800	26.800	(1.198)	57	2628			0.00- 0.00	212.28
26.800	26.800	(1.198)	43	4515			0.00- 0.00	364.70

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e032505.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/25Mar2016.b/e16l0317b.m
Misc Info: 0.5ppbv (5.0ppbv) Combo

Calibration Date: 25-MAR-2016
Calibration Time: 09:25
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	196631	117979	275283	218878	11.31
123 1,4-Difluorobenze	760212	456127	1064297	679944	-10.56
163 Chlorobenzene-d5	680500	408300	952700	614814	-9.65

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/25Mar2016.b/e032505.d

Date : 25-MAR-2016 12:18

Client ID: Level 7

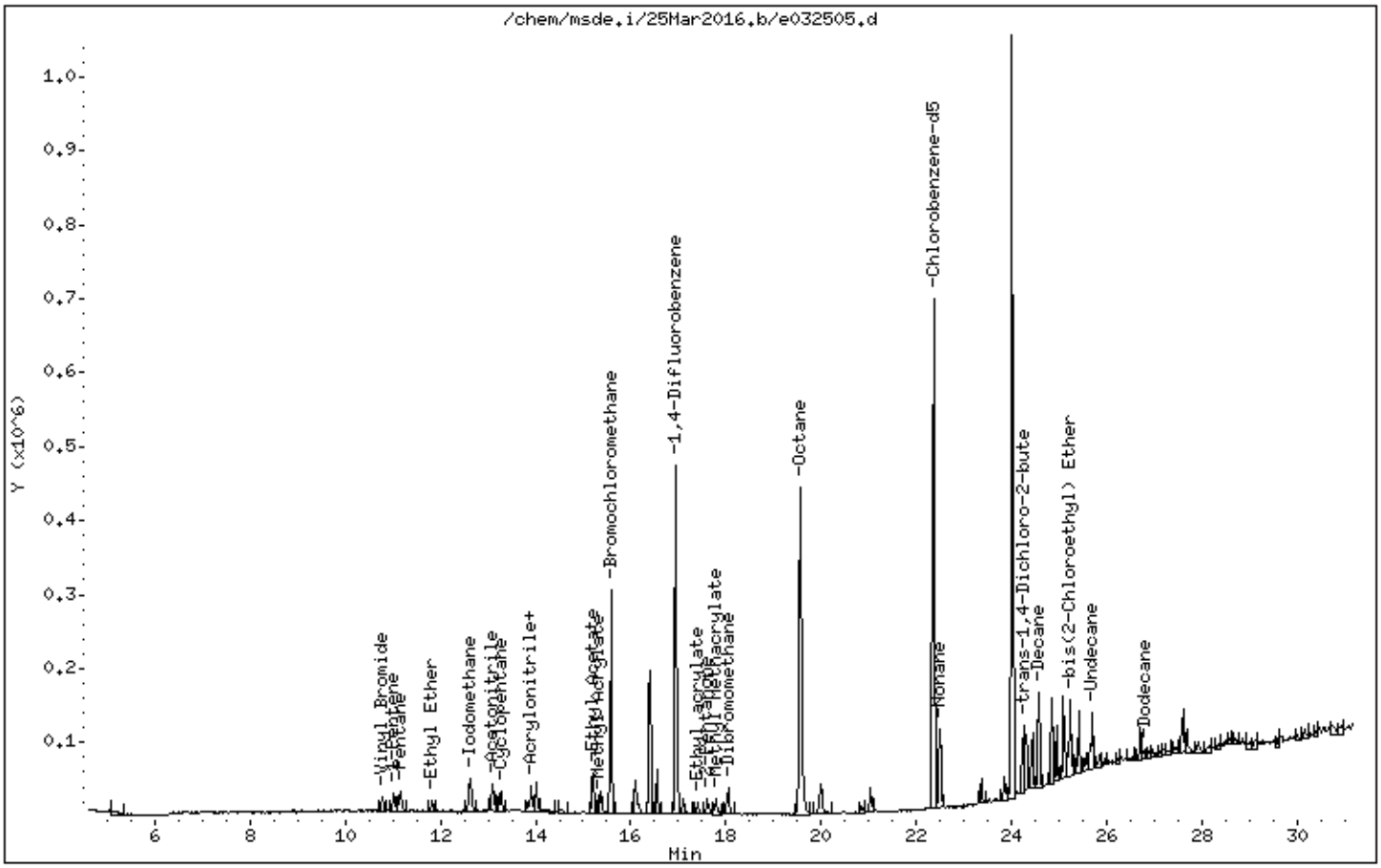
Instrument: msde.i

Sample Info: 25mL# 2789-4

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/22Mar2016.b/e032205.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 22-MAR-2016 12:05
Operator : ef Inst ID: msde.i
Smp Info : 25mL# 2759-238
Misc Info : 0.5ppbv (5.0ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/22Mar2016.b/e16l0317a.m
Meth Date : 24-Mar-2016 08:33 efinn Quant Type: ISTD
Cal Date : 22-MAR-2016 12:05 Cal File: e032205.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1.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
13 Chlorodifluoromethane						CAS #: 75-45-6		
5.962	5.962 (0.383)	51	9267	0.50000	0.5434	0.00-	0.00	100.00(Ta)
5.937	5.937 (0.381)	67	2452			0.00-	0.00	26.46
0.000	1.000 (0.000)	85	0			0.00-	0.00	0.00
16 Freon 142b						CAS #: 75-68-3		
7.070	7.070 (0.454)	65	18373	0.50000	0.5311	0.00-	0.00	100.00(a)
7.070	7.070 (0.454)	45	5069			0.00-	0.00	27.59
7.094	7.094 (0.455)	81	1319			0.00-	0.00	7.18
37 Dichlorofluoromethane						CAS #: 75-43-4		
11.071	11.071 (0.711)	67	20690	0.50000	0.5727	0.00-	0.00	100.00(a)
11.052	11.052 (0.709)	69	8098			0.00-	0.00	39.14
11.071	11.071 (0.711)	47	1883			0.00-	0.00	9.10
48 Freon 123						CAS #: 306-83-2		
12.214	12.214 (0.784)	83	29557	0.50000	0.5298	0.00-	0.00	100.00(a)

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

   48 Freon 123 (continued)
 12.214  12.214 (0.784)   133     10902                     0.00-   0.00    36.88
 12.214  12.214 (0.784)    85     20051                     0.00-   0.00    67.84
-------------------------------------------------------------------------------
   59 Cyclopentene                                  CAS #: 142-29-0
 13.090  13.090 (0.840)    67     14133 0.50000   0.5514   0.00-   0.00   100.00(a)
 13.109  13.109 (0.841)    68      5945                     0.00-   0.00    42.06
 13.090  13.090 (0.840)    53      2628                     0.00-   0.00    18.59
-------------------------------------------------------------------------------
   84 1-Propanol                                    CAS #: 71-23-8
 14.552  14.552 (0.934)    59      2979 0.50000   0.4143   0.00-   0.00   100.00(a)
 14.552  14.552 (0.934)    42      2826                     0.00-   0.00    94.86
 14.552  14.552 (0.934)    41      3572                     0.00-   0.00   119.91
-------------------------------------------------------------------------------
   90 2,2-Dichloropropane                           CAS #: 594-20-7
 15.202  15.202 (0.976)    77     23752 0.50000   0.5242   0.00-   0.00   100.00(a)
 15.202  15.202 (0.976)    79      8681                     0.00-   0.00    36.55
 15.202  15.202 (0.976)    97      3915                     0.00-   0.00    16.48
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.580  15.580 (1.000)   130    192463 5.00000            80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    151465                    52.25- 112.25    78.70
 15.580  15.580 (1.000)    49    149562                    89.81- 149.81    77.71
-------------------------------------------------------------------------------
  107 1,1-Dichloropropene                           CAS #: 563-58-6
 16.104  16.104 (1.034)   110      6292 0.50000   0.5326   0.00-   0.00   100.00(a)
 16.104  16.104 (1.034)    75     18702                     0.00-   0.00   297.23
-------------------------------------------------------------------------------
  115 Isobutanol                                    CAS #: 78-83-1
 16.166  16.166 (1.038)    43     18773 0.50000   0.5402   0.00-   0.00   100.00(a)
 16.166  16.166 (1.038)    41     13114                     0.00-   0.00    69.86
 16.166  16.166 (1.038)    55      1703                     0.00-   0.00     9.07
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                          CAS #: 540-36-3
 16.939  16.939 (1.000)   114    745012 5.00000            80.00- 120.00   100.00
 16.939  16.939 (1.000)    88    117815                     0.00-  45.20    15.81
-------------------------------------------------------------------------------
  124 n-Butanol                                     CAS #: 71-36-3
 17.108  17.108 (1.010)    56     21650 0.50000   0.4598   0.00-   0.00   100.00(a)
 17.108  17.108 (1.010)    41     14122                     0.00-   0.00    65.23
 17.108  17.108 (1.010)    43     11513                     0.00-   0.00    53.18
-------------------------------------------------------------------------------
  157 1,3-Dichloropropane                           CAS #: 142-28-9
 21.046  21.046 (0.941)    76     28348 0.50000   0.4992   0.00-   0.00   100.00(a)
 21.046  21.046 (0.941)    41     17177                     0.00-   0.00    60.59
 21.046  21.046 (0.941)    78      9427                     0.00-   0.00    33.25
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
159 Butyl Acetate					CAS #: 123-86-4		
21.128	21.128 (0.945)	56	3101	0.50000	0.4646	0.00- 0.00	100.00(a)
21.128	21.128 (0.945)	73	2689			0.00- 0.00	86.71
21.128	21.128 (0.945)	43	9258			0.00- 0.00	298.55
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.366	22.366 (1.000)	117	668249	5.00000		80.00- 120.00	100.00
22.366	22.366 (1.000)	82	345142			20.64- 80.64	51.65
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.511	22.511 (1.006)	131	33708	0.50000	0.4972	0.00- 0.00	100.00(a)
22.511	22.511 (1.006)	117	26328			0.00- 0.00	78.11
22.511	22.511 (1.006)	95	13212			0.00- 0.00	39.20
173 2-Heptanone					CAS #: 110-43-0		
23.381	23.381 (1.045)	58	23124	0.50000	0.4706	0.00- 0.00	100.00(a)
23.381	23.381 (1.045)	43	32464			0.00- 0.00	140.39
176 Cyclohexanone					CAS #: 108-94-1		
23.975	23.975 (1.072)	55	21636	0.50000	0.5212	0.00- 0.00	100.00(a)
23.975	23.975 (1.072)	98	13327			0.00- 0.00	61.60
23.975	23.975 (1.072)	42	11932			0.00- 0.00	55.15
180 Bromobenzene					CAS #: 108-86-1		
24.244	24.244 (1.084)	156	39767	0.50000	0.5430	0.00- 0.00	100.00(a)
24.244	24.244 (1.084)	158	38643			0.00- 0.00	97.17
24.222	24.222 (1.083)	77	53589			0.00- 0.00	134.76
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
24.289	24.289 (1.086)	110	18955	0.50000	0.5216	0.00- 0.00	100.00(a)
24.289	24.289 (1.086)	75	47259			0.00- 0.00	249.32
24.289	24.289 (1.086)	61	9344			0.00- 0.00	49.30
189 2-Chlorotoluene					CAS #: 95-49-8		
24.446	24.446 (1.093)	126	25270	0.50000	0.5082	0.00- 0.00	100.00(a)
24.446	24.446 (1.093)	91	70935			0.00- 0.00	280.71
24.446	24.446 (1.093)	65	6930			0.00- 0.00	27.42
191 4-Chlorotoluene					CAS #: 106-43-4		
24.581	24.581 (1.099)	126	27876	0.50000	0.5615	0.00- 0.00	100.00(a)
24.581	24.581 (1.099)	91	67532			0.00- 0.00	242.26
24.581	24.581 (1.099)	63	8195			0.00- 0.00	29.40
195 tert-Butylbenzene					CAS #: 98-06-6		
24.850	24.850 (1.111)	119	81174	0.50000	0.5238	0.00- 0.00	100.00(a)
24.850	24.850 (1.111)	134	21539			0.00- 0.00	26.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
195 tert-Butylbenzene (continued)							
24.850	24.850 (1.111)	91	53405			0.00- 0.00	65.79
197 Pentachloroethane					CAS #: 76-01-7		
24.962	24.962 (1.116)	167	28618	0.50000	0.5152	0.00- 0.00	100.00(a)
24.962	24.962 (1.116)	117	25778			0.00- 0.00	90.08
24.962	24.962 (1.116)	169	12242			0.00- 0.00	42.78
203 sec-Butylbenzene					CAS #: 135-98-8		
25.097	25.097 (1.122)	105	106628	0.50000	0.5122	0.00- 0.00	100.00(a)
25.097	25.097 (1.122)	134	25413			0.00- 0.00	23.83
25.097	25.097 (1.122)	91	18784			0.00- 0.00	17.62
207 p-Cymene					CAS #: 99-87-6		
25.253	25.253 (1.129)	119	80868	0.50000	0.4928	0.00- 0.00	100.00(a)
25.253	25.253 (1.129)	134	25683			0.00- 0.00	31.76
25.253	25.253 (1.129)	91	19488			0.00- 0.00	24.10
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.410	25.410 (1.136)	120	24614	0.50000	0.4848	0.00- 0.00	100.00(a)
25.410	25.410 (1.136)	105	60754			0.00- 0.00	246.83
25.410	25.410 (1.136)	77	7429			0.00- 0.00	30.18
213 Butylbenzene					CAS #: 104-51-8		
25.702	25.702 (1.149)	134	20130	0.50000	0.5473	0.00- 0.00	100.00(a)
25.702	25.702 (1.149)	91	65379			0.00- 0.00	324.78
25.702	25.702 (1.149)	92	33177			0.00- 0.00	164.81
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
26.711	26.711 (1.194)	157	34549	0.50000	0.5229	0.00- 0.00	100.00(a)
26.711	26.711 (1.194)	75	27187			0.00- 0.00	78.69
26.711	26.711 (1.194)	155	25099			0.00- 0.00	72.65

QC Flag Legend

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

Report Date: 24-Mar-2016 08:33

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e032205.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/22Mar2016.b/e16l0317a.m
Misc Info: 0.5ppbv (5.0ppbv)

Calibration Date: 22-MAR-2016
Calibration Time: 09:49
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	190421	114253	266589	192463	1.07
123 1,4-Difluorobenze	736283	441770	1030796	745012	1.19
163 Chlorobenzene-d5	650623	390374	910872	668249	2.71

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/22Mar2016.b/e032205.d

Date : 22-MAR-2016 12:05

Client ID: Level 7

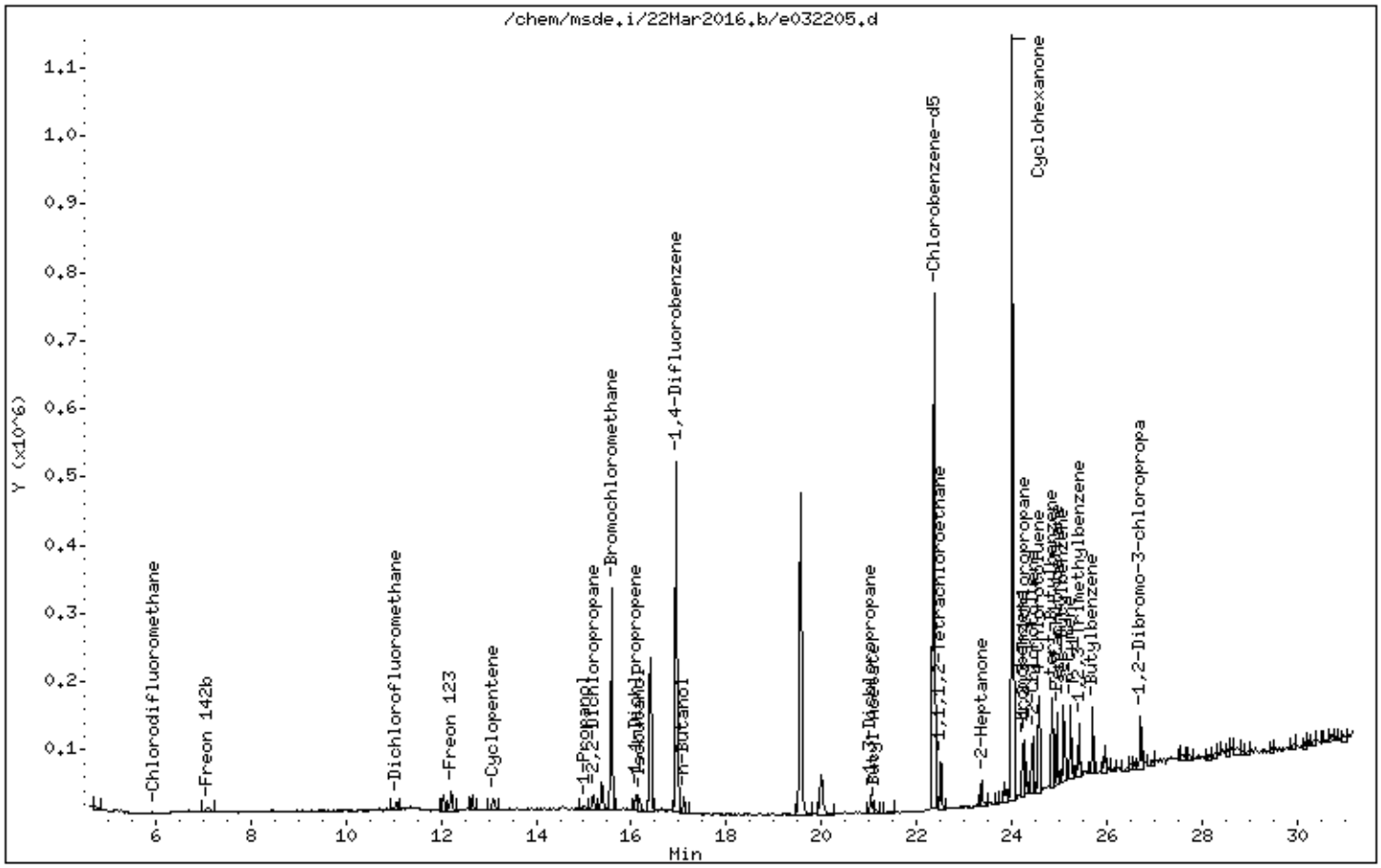
Instrument: msde.i

Sample Info: 25mL# 2759-238

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/17Mar2016.b/e031708.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 17-MAR-2016 15:49
Operator : ef Inst ID: msde.i
Smp Info : 125mL# 2789-14
Misc Info : 0.5ppbv (1.0ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/17Mar2016.b/e16l0317a.m
Meth Date : 23-Mar-2016 08:52 efinn Quant Type: ISTD
Cal Date : 17-MAR-2016 15:49 Cal File: e031708.d
Als bottle: 1 Calibration Sample, Level: 7
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
11 Freon 12					CAS #: 75-71-8		
5.479	5.479 (0.352)	85	65863	0.50000	0.4886	80.00- 120.00	100.00
5.455	5.455 (0.350)	87	11796			2.00- 62.00	17.91
15 Freon 114					CAS #: 76-14-2		
6.829	6.829 (0.438)	135	48005	0.50000	0.4866	80.00- 120.00	100.00
6.853	6.853 (0.440)	137	16207			1.31- 61.31	33.76
6.829	6.829 (0.438)	85	61866			93.88- 153.88	128.87
17 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.462)	50	12865	0.50000	0.5030	80.00- 120.00	100.00
7.191	7.191 (0.462)	52	4013			5.50- 65.50	31.19
23 Butane					CAS #: 106-97-8		
7.871	7.871 (0.505)	58	3240	0.50000	0.4890	80.00- 120.00	100.00
7.889	7.889 (0.506)	43	22050			588.57- 648.57	680.56

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
25 Vinyl Chloride					CAS #: 75-01-4		
8.010	8.010 (0.514)	62	17191	0.50000	0.4778	80.00- 120.00	100.00
8.028	8.028 (0.515)	64	6804			3.14- 63.14	39.58
26 1,3-Butadiene					CAS #: 106-99-0		
8.236	8.236 (0.529)	54	10553	0.50000	0.4360	80.00- 120.00	100.00
8.253	8.253 (0.530)	39	11479			65.21- 125.21	108.77
29 Bromomethane					CAS #: 74-83-9		
9.711	9.711 (0.623)	94	17963	0.50000	0.4575	80.00- 120.00	100.00
9.729	9.729 (0.624)	96	16493			64.16- 124.16	91.82
30 Chloroethane					CAS #: 75-00-3		
10.195	10.195 (0.654)	64	7912	0.50000	0.4654	80.00- 120.00	100.00
10.195	10.195 (0.654)	49	2714			0.00- 54.91	34.30
10.214	10.214 (0.656)	66	3526			3.62- 63.62	44.57
31 Isopentane					CAS #: 78-78-4		
10.328	10.328 (0.663)	57	13727	0.50000	0.5570	80.00- 120.00	100.00
10.328	10.328 (0.663)	43	16333			82.69- 142.69	118.98
10.328	10.328 (0.663)	42	14683			68.65- 128.65	106.96
35 Freon 11					CAS #: 75-69-4		
10.957	10.957 (0.703)	101	71732	0.50000	0.4942	80.00- 120.00	100.00
10.957	10.957 (0.703)	103	45080			37.17- 97.17	62.85
42 Ethanol					CAS #: 64-17-5		
11.852	11.852 (0.761)	45	6179	0.50000	0.5875	80.00- 120.00	100.00
11.852	11.852 (0.761)	46	2212			6.61- 66.61	35.80
11.871	11.871 (0.762)	43	1269			0.00- 54.66	20.54
49 Freon 113					CAS #: 76-13-1		
12.271	12.271 (0.788)	151	50809	0.50000	0.4671	80.00- 120.00	100.00
12.271	12.271 (0.788)	153	32638			33.64- 93.64	64.24
12.252	12.252 (0.786)	101	52073			80.40- 140.40	102.49
50 1,1-Dichloroethene					CAS #: 75-35-4		
12.290	12.290 (0.789)	98	15291	0.50000	0.5041	80.00- 120.00	100.00
12.290	12.290 (0.789)	61	32072			204.89- 264.89	209.74
12.290	12.290 (0.789)	96	27183			127.69- 187.69	177.77
52 Acetone					CAS #: 67-64-1		
12.556	12.556 (0.806)	58	11049	0.50000	0.6229	80.00- 120.00	100.00
12.556	12.556 (0.806)	43	37354			321.47- 381.47	338.08
56 Carbon Disulfide					CAS #: 75-15-0		
12.652	12.652 (0.812)	76	81551	0.50000	0.6032	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 2-Propanol					CAS #: 67-63-0		
12.899	12.899 (0.828)	45	26616	0.50000	0.4905	80.00- 120.00	100.00
12.918	12.918 (0.829)	43	7294			0.00- 54.09	27.40
12.899	12.899 (0.828)	59	1062			0.00- 34.43	3.99
58 3-Chloropropene					CAS #: 107-05-1		
13.071	13.071 (0.839)	76	11083	0.50000	0.5484	80.00- 120.00	100.00
13.071	13.071 (0.839)	41	18332			163.76- 223.76	165.41
66 Methylene Chloride					CAS #: 75-09-2		
13.356	13.356 (0.857)	84	21026	0.50000	0.4947	80.00- 120.00	100.00
13.356	13.356 (0.857)	49	19793			63.99- 123.99	94.14
13.356	13.356 (0.857)	51	5085			0.29- 60.29	24.18
71 tert-Butyl alcohol					CAS #: 75-65-0		
13.564	13.564 (0.871)	59	50938	0.50000	0.5132	80.00- 120.00	100.00
13.564	13.564 (0.871)	41	10281			0.00- 51.66	20.18
13.564	13.564 (0.871)	57	5356			0.00- 43.50	10.51
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
13.674	13.674 (0.878)	73	66341	0.50000	0.4881	80.00- 120.00	100.00
13.674	13.674 (0.878)	57	11347			0.00- 48.26	17.10
13.674	13.674 (0.878)	41	11703			0.00- 45.58	17.64
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.728	13.728 (0.881)	98	14424	0.50000	0.4682	80.00- 120.00	100.00
13.728	13.728 (0.881)	61	30977			155.28- 215.28	214.76
13.728	13.728 (0.881)	96	28787			126.18- 186.18	199.58
78 Hexane					CAS #: 110-54-3		
14.003	14.003 (0.899)	57	24870	0.50000	0.4691	80.00- 120.00	100.00
14.003	14.003 (0.899)	43	16635			21.48- 81.48	66.89
14.003	14.003 (0.899)	86	6568			0.00- 51.51	26.41
83 Isopropyl ether					CAS #: 108-20-3		
14.360	14.360 (0.922)	45	47980	0.50000	0.4962	80.00- 120.00	100.00
14.360	14.360 (0.922)	87	21297			9.88- 69.88	44.39
14.360	14.360 (0.922)	59	6200			0.00- 42.70	12.92
82 1,1-Dichloroethane					CAS #: 75-34-3		
14.415	14.415 (0.925)	63	39305	0.50000	0.4875	80.00- 120.00	100.00
14.415	14.415 (0.925)	65	14597			1.78- 61.78	37.14
86 Vinyl Acetate					CAS #: 108-05-4		
14.442	14.442 (0.927)	86	6358	0.50000	0.5069	80.00- 120.00	100.00
14.442	14.442 (0.927)	42	5047			44.70- 104.70	79.38

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

   86 Vinyl Acetate (continued)
 14.442  14.442 (0.927)    43     42791                  757.33- 817.33   673.03
-------------------------------------------------------------------------------
   88 Ethyl-tert-butyl ether                       CAS #: 637-92-3
 14.859  14.859 (0.954)    59     56396 0.50000   0.4569  80.00- 120.00   100.00
 14.859  14.859 (0.954)    87     32355                   19.74-  79.74    57.37
 14.859  14.859 (0.954)    41     10148                    0.00-  46.34    17.99
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                       CAS #: 156-59-2
 15.240  15.240 (0.978)    98     16370 0.50000   0.4857  80.00- 120.00   100.00
 15.240  15.240 (0.978)    61     30060                  145.90- 205.90   183.63
 15.240  15.240 (0.978)    96     27852                  125.53- 185.53   170.14
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
 15.240  15.240 (0.978)    72     10323 0.50000   0.4832  80.00- 120.00   100.00
 15.240  15.240 (0.978)    43     33949                  262.26- 322.26   328.87
 15.240  15.240 (0.978)    57      3372                    0.00-  55.71    32.66
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                              CAS #: 109-99-9
 15.580  15.580 (1.000)    42     17322 0.50000   0.4418  80.00- 120.00   100.00
 15.580  15.580 (1.000)    71      9116                   26.85-  86.85    52.63
 15.580  15.580 (1.000)    72      9066                   32.22-  92.22    52.34
-------------------------------------------------------------------------------
*  98 Bromochloromethane                          CAS #: 74-97-5
 15.580  15.580 (1.000)   130    160269 5.00000           80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    123651                   52.25- 112.25    77.15
 15.580  15.580 (1.000)    49    130750                   89.81- 149.81    81.58
-------------------------------------------------------------------------------
  100 Chloroform                                  CAS #: 67-66-3
 15.641  15.641 (1.004)    83     55910 0.50000   0.4832  80.00- 120.00   100.00
 15.641  15.641 (1.004)    85     40228                   33.97-  93.97    71.95
-------------------------------------------------------------------------------
  102 Cyclohexane                                 CAS #: 110-82-7
 15.888  15.888 (1.020)    84     29124 0.50000   0.4850  80.00- 120.00   100.00
 15.888  15.888 (1.020)    56     25780                   58.69- 118.69    88.52
 15.888  15.888 (1.020)    41     16174                   18.98-  78.98    55.53
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                       CAS #: 71-55-6
 15.888  15.888 (1.020)    97     62304 0.50000   0.4629  80.00- 120.00   100.00
 15.888  15.888 (1.020)    99     41465                   34.21-  94.21    66.55
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                        CAS #: 56-23-5
 16.073  16.073 (1.032)   119     58091 0.50000   0.4407  80.00- 120.00   100.00
 16.073  16.073 (1.032)   117     61776                   74.09- 134.09   106.34
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                      CAS #: 540-84-1
 16.313  16.313 (1.047)    56     32515 0.50000   0.4843  80.00- 120.00   100.00
```

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

  113 2,2,4-Trimethylpentane (continued)
 16.313  16.313 (1.047)    57    100557                   306.64- 366.64   309.26
 16.313  16.313 (1.047)    41     30898                    64.14- 124.14    95.03
-------------------------------------------------------------------------------
  116 Benzene                                      CAS #: 71-43-2
 16.409  16.409 (0.969)    78     67573 0.50000   0.4865  80.00- 120.00   100.00
 16.409  16.409 (0.969)    77     16104                     0.00-  53.97    23.83
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                        CAS #: 17060-07-0
 16.409  16.409 (1.053)    65    228730 5.00000    4.971  80.00- 120.00   100.00
 16.409  16.409 (1.053)    67    116209                    21.16-  81.16    50.81
-------------------------------------------------------------------------------
  119 tert-Amyl methyl ether                       CAS #: 994-05-8
 16.433  16.433 (0.970)    87     19877 0.50000   0.5573  80.00- 120.00   100.00
 16.433  16.433 (0.970)    73     66562                   338.86- 398.86   334.87
 16.433  16.433 (0.970)    55     13779                    44.52- 104.52    69.32
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                           CAS #: 107-06-2
 16.505  16.505 (0.974)    62     36953 0.50000   0.5104  80.00- 120.00   100.00
 16.505  16.505 (0.974)    64     14071                     1.03-  61.03    38.08
-------------------------------------------------------------------------------
  121 Heptane                                      CAS #: 142-82-5
 16.553  16.553 (0.977)    57     15401 0.50000   0.4677  80.00- 120.00   100.00
 16.553  16.553 (0.977)   100      9707                    28.67-  88.67    63.03
 16.553  16.553 (0.977)    43     25968                   128.92- 188.92   168.61
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                          CAS #: 540-36-3
 16.939  16.939 (1.000)   114    579661 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88     87795                     0.00-  45.20    15.15
-------------------------------------------------------------------------------
  125 Trichloroethene                              CAS #: 79-01-6
 17.373  17.373 (1.026)   130     36646 0.50000   0.5086  80.00- 120.00   100.00
 17.373  17.373 (1.026)    95     35493                    63.99- 123.99    96.85
 17.373  17.373 (1.026)    97     20508                    29.21-  89.21    55.96
-------------------------------------------------------------------------------
  127 Methylcyclohexane                            CAS #: 108-87-2
 17.590  17.590 (1.038)    83     38644 0.50000   0.4997  80.00- 120.00   100.00
 17.590  17.590 (1.038)    55     24891                    31.29-  91.29    64.41
 17.590  17.590 (1.038)    56      8129                     0.00-  48.78    21.04
-------------------------------------------------------------------------------
  132 1,2-Dichloropropane                          CAS #: 78-87-5
 17.806  17.806 (1.051)    63     19925 0.50000   0.4455  80.00- 120.00   100.00
 17.806  17.806 (1.051)    62     14997                    34.19-  94.19    75.27
 17.806  17.806 (1.051)    41     13836                    27.38-  87.38    69.44
-------------------------------------------------------------------------------
  136 1,4-Dioxane                                  CAS #: 123-91-1
 17.951  17.951 (1.060)    88     16822 0.50000   0.5022  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
136 1,4-Dioxane (continued)							
17.927	17.927 (1.058)	58	8683			25.03- 85.03	51.62
17.927	17.927 (1.058)	57	3866			0.00- 50.67	22.98
138 Bromodichloromethane					CAS #: 75-27-4		
18.240	18.240 (1.077)	83	59163	0.50000	0.5132	80.00- 120.00	100.00
18.240	18.240 (1.077)	85	36683			35.15- 95.15	62.00
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.086	19.086 (1.127)	75	42928	0.50000	0.4997	80.00- 120.00	100.00
19.086	19.086 (1.127)	77	12905			0.45- 60.45	30.06
19.063	19.063 (1.125)	39	18050			13.69- 73.69	42.05
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.265	19.265 (1.137)	43	34130	0.50000	0.4761	80.00- 120.00	100.00
19.265	19.265 (1.137)	58	14887			15.64- 75.64	43.62
19.265	19.265 (1.137)	85	8101			0.00- 56.71	23.74
$ 146 Toluene-d8					CAS #: 2037-26-5		
19.556	19.556 (1.155)	98	564476	5.00000	4.958	80.00- 120.00	100.00
19.556	19.556 (1.155)	70	62501			0.00- 40.11	11.07
19.556	19.556 (1.155)	100	373467			37.58- 97.58	66.16
147 Toluene					CAS #: 108-88-3		
19.713	19.713 (1.164)	91	82745	0.50000	0.5001	80.00- 120.00	100.00
19.713	19.713 (1.164)	92	47639			28.92- 88.92	57.57
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.304	20.304 (0.908)	75	38297	0.50000	0.4633	80.00- 120.00	100.00
20.304	20.304 (0.908)	77	12107			0.55- 60.55	31.61
20.276	20.276 (0.907)	39	15380			8.25- 68.25	40.16
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.688	20.688 (0.925)	97	29235	0.50000	0.4543	80.00- 120.00	100.00
20.688	20.688 (0.925)	99	18922			32.91- 92.91	64.72
20.688	20.688 (0.925)	83	25757			47.93- 107.93	88.10
156 Tetrachloroethene					CAS #: 127-18-4		
20.853	20.853 (0.932)	166	50034	0.50000	0.5046	80.00- 120.00	100.00
20.853	20.853 (0.932)	129	32964			42.31- 102.31	65.88
20.853	20.853 (0.932)	131	36148			40.11- 100.11	72.25
158 2-Hexanone					CAS #: 591-78-6		
21.018	21.018 (0.940)	58	18262	0.50000	0.4410	80.00- 120.00	100.00
21.018	21.018 (0.940)	43	32894			140.44- 200.44	180.12
21.018	21.018 (0.940)	100	5378			0.00- 59.62	29.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
160 Dibromochloromethane						CAS #: 124-48-1	
21.430	21.430 (0.958)	129	64792	0.50000	0.4960	80.00- 120.00	100.00
21.430	21.430 (0.958)	127	52098			46.82- 106.82	80.41
161 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
21.677	21.677 (0.969)	107	48325	0.50000	0.4894	80.00- 120.00	100.00
21.677	21.677 (0.969)	109	46737			65.45- 125.45	96.71
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
22.365	22.365 (1.000)	117	533837	5.00000		80.00- 120.00	100.00
22.365	22.365 (1.000)	82	273041			20.64- 80.64	51.15
165 Chlorobenzene						CAS #: 108-90-7	
22.407	22.407 (1.002)	112	71133	0.50000	0.4925	80.00- 120.00	100.00
22.407	22.407 (1.002)	114	22289			2.42- 62.42	31.33
22.407	22.407 (1.002)	77	45094			23.54- 83.54	63.39
167 Ethyl Benzene						CAS #: 100-41-4	
22.490	22.490 (1.006)	106	33987	0.50000	0.4832	80.00- 120.00	100.00
22.490	22.490 (1.006)	91	104532			282.51- 342.51	307.56
169 m,p-Xylene						CAS #: 108-38-3	
22.656	22.656 (1.013)	106	39486	0.50000	0.4832	80.00- 120.00	100.00
22.656	22.656 (1.013)	91	82293			166.46- 226.46	208.41
171 o-Xylene						CAS #: 95-47-6	
23.257	23.257 (1.040)	106	35774	0.50000	0.4773	80.00- 120.00	100.00
23.257	23.257 (1.040)	91	79785			184.01- 244.01	223.03
172 Styrene						CAS #: 100-42-5	
23.298	23.298 (1.042)	104	57514	0.50000	0.4535	80.00- 120.00	100.00
23.298	23.298 (1.042)	78	31788			20.27- 80.27	55.27
174 Bromoform						CAS #: 75-25-2	
23.639	23.639 (1.057)	173	61161	0.50000	0.4726	80.00- 120.00	100.00
23.639	23.639 (1.057)	171	30338			20.88- 80.88	49.60
175 Cumene						CAS #: 98-82-8	
23.728	23.728 (1.061)	105	119322	0.50000	0.4682	80.00- 120.00	100.00
23.728	23.728 (1.061)	120	32756			0.00- 57.47	27.45
$ 177 4-Bromofluorobenzene						CAS #: 460-00-4	
24.020	24.020 (1.074)	174	364296	5.00000	4.973	80.00- 120.00	100.00
24.020	24.020 (1.074)	95	393023			77.42- 137.42	107.89
24.020	24.020 (1.074)	176	348893			65.38- 125.38	95.77

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
24.199	24.199 (1.082)	83	54946	0.50000	0.4630	80.00- 120.00	100.00
24.199	24.199 (1.082)	85	38975			35.73- 95.73	70.93
182 Propylbenzene					CAS #: 103-65-1		
24.267	24.267 (1.085)	91	134960	0.50000	0.5028	80.00- 120.00	100.00
24.267	24.267 (1.085)	120	30260			0.00- 55.24	22.42
188 4-Ethyltoluene					CAS #: 622-96-8		
24.401	24.401 (1.091)	105	104115	0.50000	0.4576	80.00- 120.00	100.00
24.401	24.401 (1.091)	120	34032			1.08- 61.08	32.69
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.468	24.468 (1.094)	105	82544	0.50000	0.4672	80.00- 120.00	100.00
24.468	24.468 (1.094)	120	44179			18.44- 78.44	53.52
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.917	24.917 (1.114)	105	66372	0.50000	0.4336	80.00- 120.00	100.00
24.917	24.917 (1.114)	120	32147			16.20- 76.20	48.43
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.320	25.320 (1.132)	146	68785	0.50000	0.4759	80.00- 120.00	100.00
25.320	25.320 (1.132)	148	45513			35.51- 95.51	66.17
25.320	25.320 (1.132)	111	26877			9.35- 69.35	39.07
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.433	25.433 (1.137)	146	62668	0.50000	0.4623	80.00- 120.00	100.00
25.433	25.433 (1.137)	148	38731			32.61- 92.61	61.80
25.433	25.433 (1.137)	111	24998			6.90- 66.90	39.89
212 alpha-Chlorotoluene					CAS #: 100-44-7		
25.567	25.567 (1.143)	91	78449	0.50000	0.4600	80.00- 120.00	100.00
25.567	25.567 (1.143)	126	17914			0.00- 51.82	22.84
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.858	25.858 (1.156)	146	61135	0.50000	0.4931	80.00- 120.00	100.00
25.858	25.858 (1.156)	148	39452			33.69- 93.69	64.53
25.858	25.858 (1.156)	111	25261			8.96- 68.96	41.32
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.607	27.607 (1.234)	180	27688	0.50000	0.4925	80.00- 120.00	100.00
27.607	27.607 (1.234)	182	29902			66.05- 126.05	108.00
227 Hexachlorobutadiene					CAS #: 87-68-3		
27.697	27.697 (1.238)	225	37612	0.50000	0.4920	80.00- 120.00	100.00
27.697	27.697 (1.238)	223	25813			33.78- 93.78	68.63

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
228 Naphthalene						CAS #: 91-20-3		
27.921	27.921	(1.248)	128	3806	0.05000	0.04636	80.00- 120.00	100.00(a)
27.898	27.898	(1.247)	127	2356			0.00- 46.39	61.90

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e031708.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/17Mar2016.b/e16l0317a.m
Misc Info: 0.5ppbv (1.0ppbv)

Calibration Date: 17-MAR-2016
Calibration Time: 17:24
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	164946	98968	230924	160269	-2.84
123 1,4-Difluorobenze	626935	376161	877709	579661	-7.54
163 Chlorobenzene-d5	567678	340607	794749	533837	-5.96

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/17Mar2016.b/e031708.d

Date : 17-MAR-2016 15:49

Client ID: Level 7

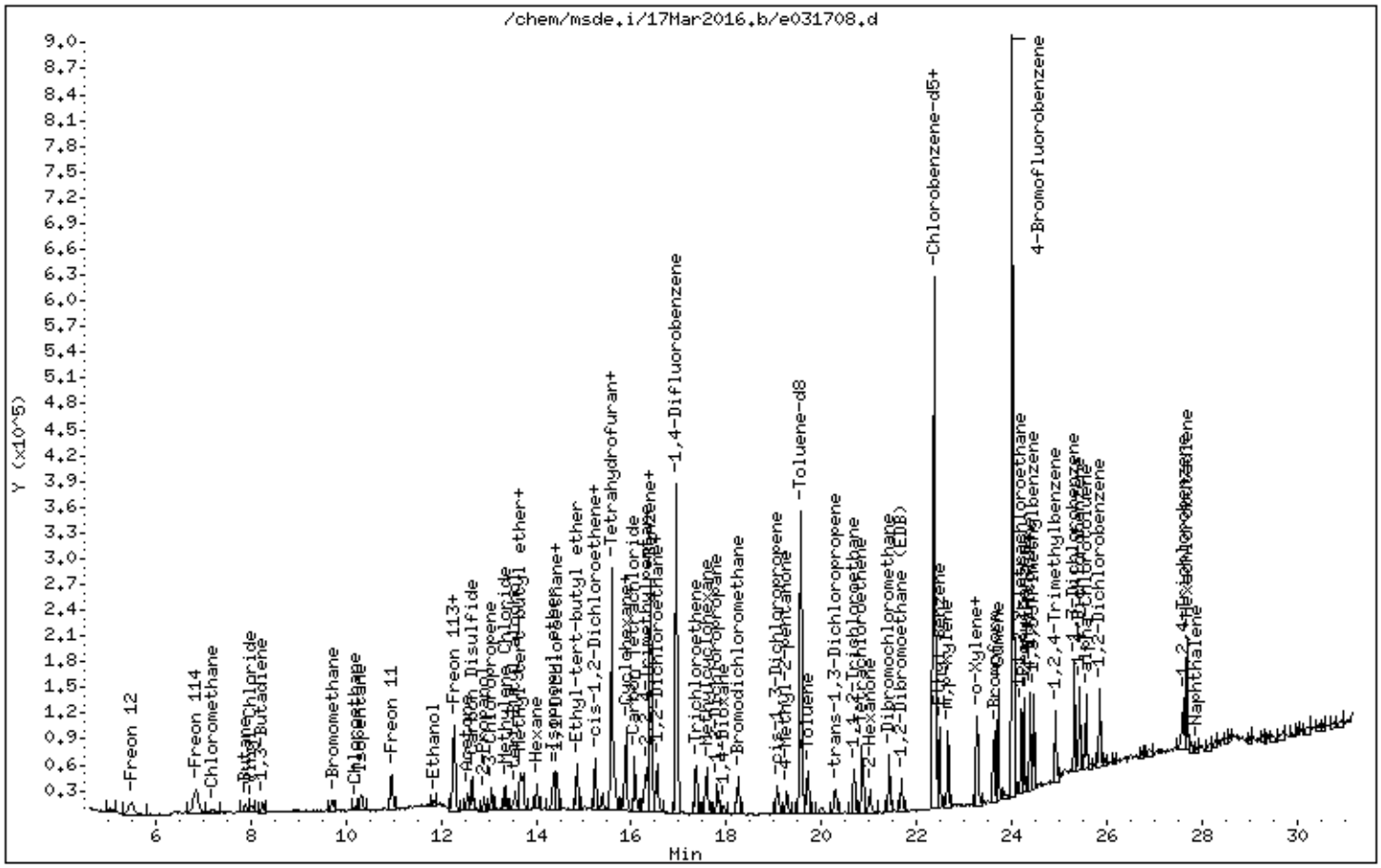
Instrument: msde.i

Sample Info: 125mL# 2789-14

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/24May2016.b/e052406.d
Lab Smp Id: ICAL Level 8
Inj Date : 24-MAY-2016 10:14
Operator : ef Inst ID: msde.i
Smp Info : 50mL# 2789-129
Misc Info : 1.0ppbv (5.0ppbv) AT-1
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/24May2016.b/e16l0317f.m
Meth Date : 24-May-2016 14:26 efinn Quant Type: ISTD
Cal Date : 24-MAY-2016 10:14 Cal File: e052406.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FreonICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
10 1,1-Difluoroethane					CAS #: 75-37-6		
5.027	5.027 (0.327)	65	10049	1.00000	0.9683	0.00- 0.00	100.00(a)
5.052	5.052 (0.328)	51	18734			0.00- 0.00	186.43
13 Chlorodifluoromethane					CAS #: 75-45-6		
5.751	5.751 (0.374)	51	28281	1.00000	0.9982	0.00- 0.00	100.00(a)
5.751	5.751 (0.374)	67	6717			0.00- 0.00	23.75
5.726	5.726 (0.372)	85	232			0.00- 0.00	0.82
16 Freon 142b					CAS #: 75-68-3		
6.835	6.835 (0.444)	65	60222	1.00000	1.061	0.00- 0.00	100.00(a)
6.835	6.835 (0.444)	45	11892			0.00- 0.00	19.75
6.859	6.859 (0.446)	81	4324			0.00- 0.00	7.18
37 Dichlorofluoromethane					CAS #: 75-43-4		
10.880	10.880 (0.707)	67	61744	1.00000	0.9869	0.00- 0.00	100.00(a)
10.880	10.880 (0.707)	69	22225			0.00- 0.00	36.00
10.880	10.880 (0.707)	47	5624			0.00- 0.00	9.11
48 Freon 123					CAS #: 306-83-2		
12.023	12.023 (0.781)	83	72480	1.00000	0.9997	0.00- 0.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
48 Freon 123 (continued)							
12.042	12.042 (0.782)	133	20577			0.00- 0.00	28.39
12.042	12.042 (0.782)	85	46989			0.00- 0.00	64.83
* 98 Bromochloromethane						CAS #: 74-97-5	
15.391	15.391 (1.000)	130	128204	5.00000		80.00- 120.00	100.00
15.391	15.391 (1.000)	128	100906			52.25- 112.25	78.71
15.391	15.391 (1.000)	49	92458			89.81- 149.81	72.12
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
16.737	16.737 (1.000)	114	481573	5.00000		80.00- 120.00	100.00
16.737	16.737 (1.000)	88	72859			0.00- 45.20	15.13
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
22.177	22.177 (1.000)	117	421843	5.00000		80.00- 120.00	100.00
22.177	22.177 (1.000)	82	208291			20.64- 80.64	49.38

QC Flag Legend

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

Report Date: 24-May-2016 14:26

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e052406.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/24May2016.b/e16l0317f.m
Misc Info: 1.0ppbv (5.0ppbv) AT-1

Calibration Date: 24-MAY-2016
Calibration Time: 07:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	155366	93220	217512	128204	-17.48
123 1,4-Difluorobenze	569598	341759	797437	481573	-15.45
163 Chlorobenzene-d5	506881	304129	709633	421843	-16.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/24May2016.b/e052406.d

Date : 24-MAY-2016 10:14

Client ID:

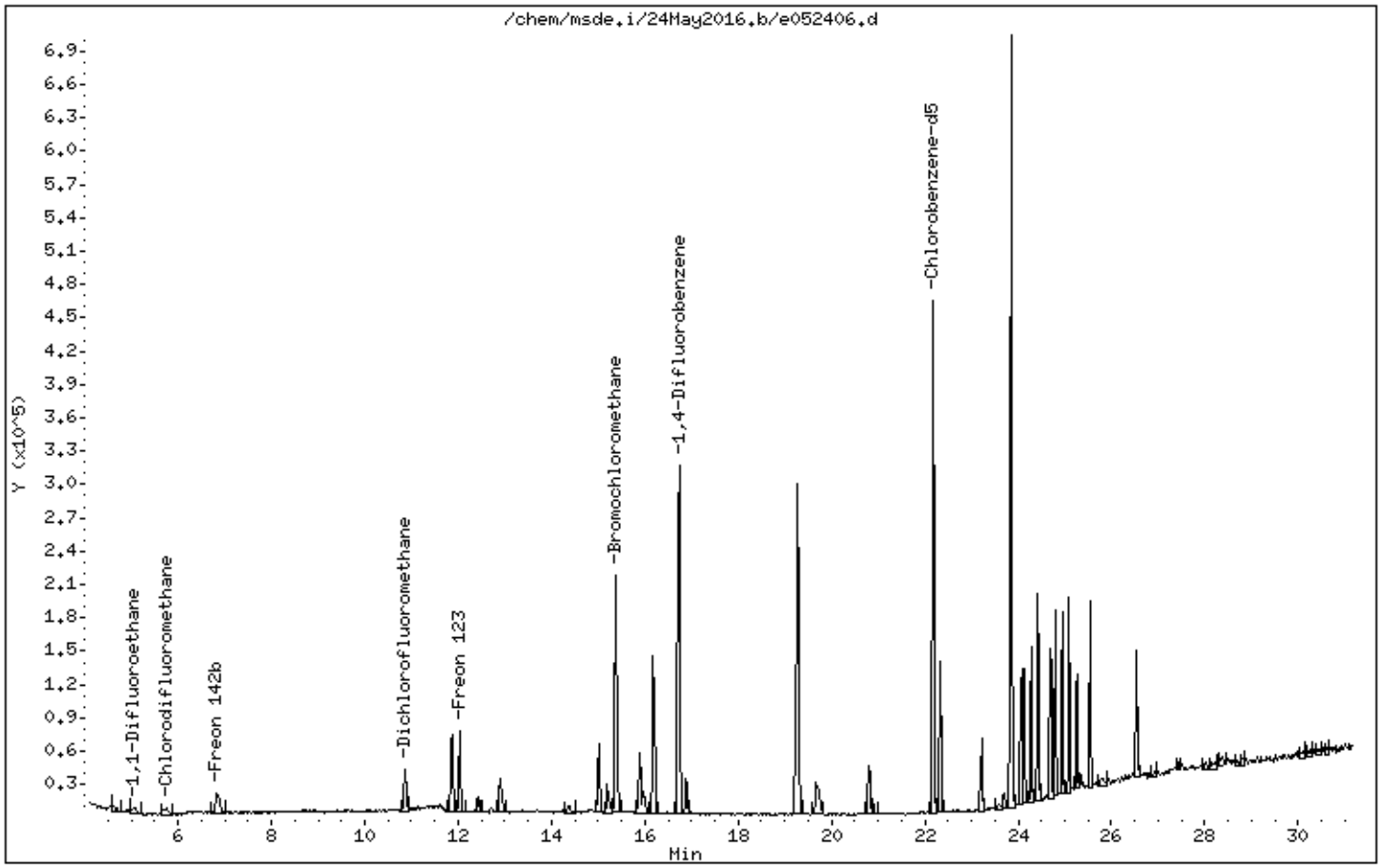
Instrument: msde.i

Sample Info: 50mL# 2789-129

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/19May2016.b/e051908.d
Lab Smp Id: ICAL Level 8
Inj Date : 19-MAY-2016 14:44
Operator : ef Inst ID: msde.i
Smp Info : 50mL# 2789-151
Misc Info : 1.0ppbv (5.0ppbv) Acetonitrile
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/19May2016.b/e16l0317e.m
Meth Date : 19-May-2016 17:13 efinn Quant Type: ISTD
Cal Date : 19-MAY-2016 14:44 Cal File: e051908.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AcetonitrileCrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
63 Acetonitrile					CAS #: 75-05-8		
13.012	13.012 (0.845)	41	16922	1.00000	0.9629	0.00- 0.00	100.00
13.012	13.012 (0.845)	40	11227			0.00- 0.00	66.35
13.012	13.012 (0.845)	39	5216			0.00- 0.00	30.82
* 98 Bromochloromethane					CAS #: 74-97-5		
15.391	15.391 (1.000)	130	120162	5.00000		80.00- 120.00	100.00
15.391	15.391 (1.000)	128	91376			52.25- 112.25	76.04
15.391	15.391 (1.000)	49	86529			89.81- 149.81	72.01
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
16.737	16.737 (1.000)	114	426643	5.00000		80.00- 120.00	100.00
16.737	16.737 (1.000)	88	61906			0.00- 45.20	14.51
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.177	22.177 (1.000)	117	394341	5.00000		80.00- 120.00	100.00
22.177	22.177 (1.000)	82	185669			20.64- 80.64	47.08

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e051908.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/19May2016.b/e16l0317e.m
Misc Info: 1.0ppbv (5.0ppbv) Acetonitrile

Calibration Date: 19-MAY-2016
Calibration Time: 09:53

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	151740	91044	212436	120162	-20.81
123 1,4-Difluorobenze	581412	348847	813977	426643	-26.62
163 Chlorobenzene-d5	508099	304859	711339	394341	-22.39

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/19May2016.b/e051908.d

Date : 19-MAY-2016 14:44

Client ID:

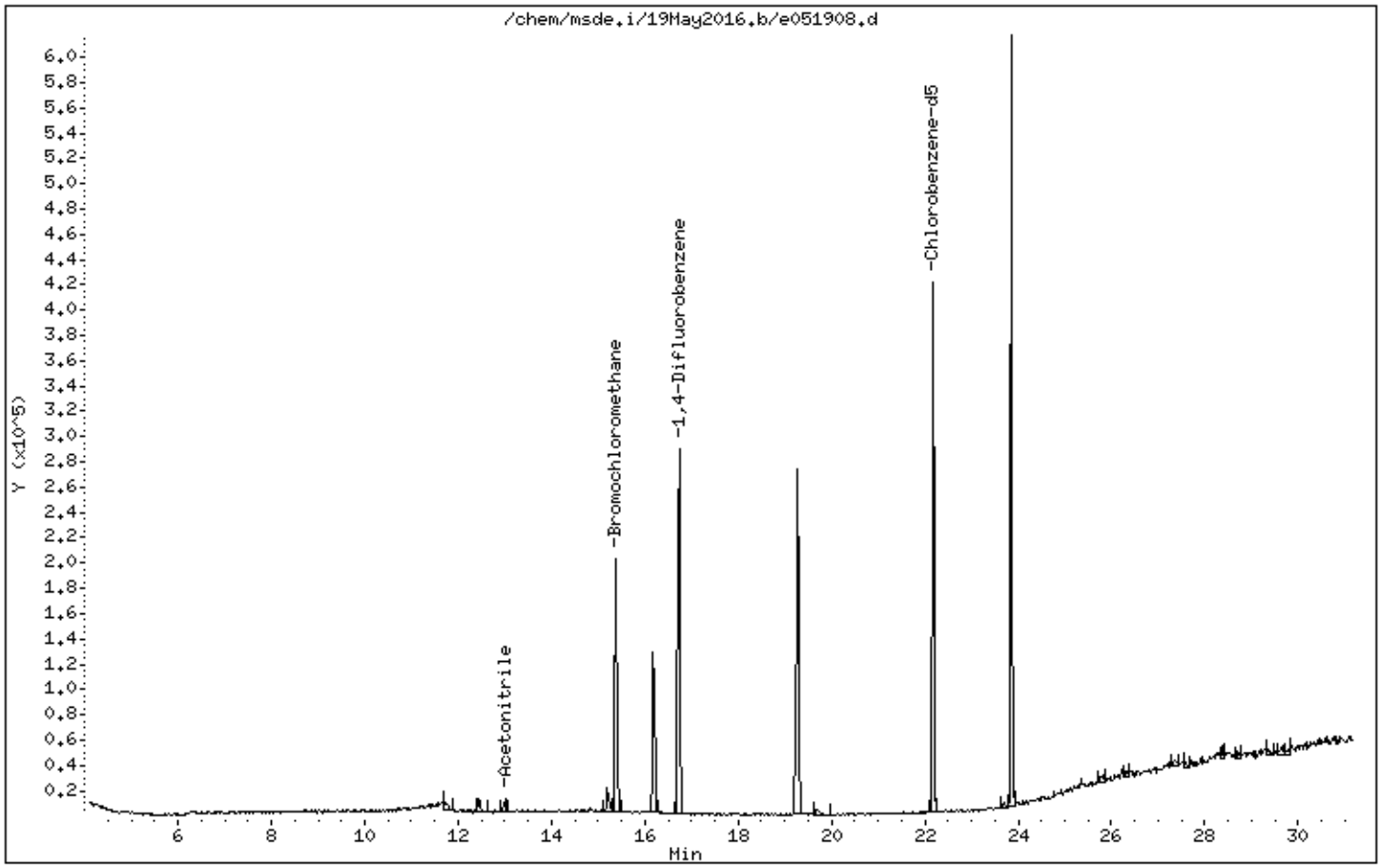
Instrument: msde.i

Sample Info: 50mL# 2789-151

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/09May2016.b/e050908.d
Lab Smp Id: ICAL Level 8
Inj Date : 09-MAY-2016 12:03
Operator : ef Inst ID: msde.i
Smp Info : 50mL# 2789-105
Misc Info : 1.0ppbv (5.0ppbv) Combo
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/09May2016.b/e16l0317d.m
Meth Date : 10-May-2016 10:48 efinn Quant Type: ISTD
Cal Date : 09-MAY-2016 12:03 Cal File: e050908.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ComboICAL-VB.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
36 1-Pentene					CAS #: 109-67-1		
10.824	10.824 (0.703)	55	21035	1.00000	0.9431	0.00- 0.00	100.00
10.824	10.824 (0.703)	42	23586			0.00- 0.00	112.13
34 Pentane					CAS #: 109-66-0		
10.957	10.957 (0.712)	43	39909	1.00000	1.021	0.00- 0.00	100.00
10.957	10.957 (0.712)	57	7911			0.00- 0.00	19.82
10.957	10.957 (0.712)	72	6275			0.00- 0.00	15.72
44 Ethyl Ether					CAS #: 60-29-7		
11.643	11.643 (0.756)	74	19929	1.00000	1.100	0.00- 0.00	100.00(T)
11.623	11.623 (0.755)	59	22225			0.00- 0.00	111.52
0.000	1.000 (0.000)	31	0			0.00- 0.00	0.00
53 Iodomethane					CAS #: 74-88-4		
12.404	12.404 (0.806)	142	114470	1.00000	1.018	0.00- 0.00	100.00
12.404	12.404 (0.806)	127	49338			0.00- 0.00	43.10
59 Cyclopentene					CAS #: 142-29-0		
12.900	12.900 (0.838)	67	76141	1.00000	0.9981	0.00- 0.00	100.00

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

   59 Cyclopentene (continued)
 12.900  12.900 (0.838)    68     29667                     0.00-   0.00    38.96
 12.900  12.900 (0.838)    53     13565                     0.00-   0.00    17.82
-------------------------------------------------------------------------------
   64 Cyclopentane                                  CAS #: 287-92-3
 13.094  13.094 (0.851)    70     18571 1.00000   0.9434    0.00-   0.00   100.00
 13.067  13.067 (0.849)    55     19025                     0.00-   0.00   102.44
-------------------------------------------------------------------------------
   74 Acrylonitrile                                 CAS #: 107-13-1
 13.643  13.643 (0.886)    53     24749 1.00000    1.078    0.00-   0.00   100.00
 13.643  13.643 (0.886)    52     17855                     0.00-   0.00    72.14
-------------------------------------------------------------------------------
   76 1-Hexene                                      CAS #: 592-41-6
 13.726  13.726 (0.892)    55     19211 1.00000   0.9610    0.00-   0.00   100.00
 13.726  13.726 (0.892)    41     27074                     0.00-   0.00   140.93
 13.726  13.726 (0.892)    84     10876                     0.00-   0.00    56.61
-------------------------------------------------------------------------------
   84 1-Propanol                                    CAS #: 71-23-8
 14.357  14.357 (0.933)    59      5832 1.00000   0.9372    0.00-   0.00   100.00
 14.357  14.357 (0.933)    42      4556                     0.00-   0.00    78.12
 14.385  14.385 (0.935)    41      3518                     0.00-   0.00    60.32
-------------------------------------------------------------------------------
   90 2,2-Dichloropropane                           CAS #: 594-20-7
 15.009  15.009 (0.975)    77     92126 1.00000    1.035    0.00-   0.00   100.00
 15.009  15.009 (0.975)    79     29466                     0.00-   0.00    31.98
 15.009  15.009 (0.975)    97     17258                     0.00-   0.00    18.73
-------------------------------------------------------------------------------
   94 Ethyl Acetate                                 CAS #: 141-78-6
 15.047  15.047 (0.978)    70      7856 1.00000    1.022    0.00-   0.00   100.00
 15.047  15.047 (0.978)    43     54665                     0.00-   0.00   695.84
 15.047  15.047 (0.978)    61     20434                     0.00-   0.00   260.11
-------------------------------------------------------------------------------
   93 Methyl Acrylate                               CAS #: 96-33-3
 15.123  15.123 (0.983)    55     58469 1.00000   0.9881    0.00-   0.00   100.00
 15.123  15.123 (0.983)    85     15014                     0.00-   0.00    25.68
 15.123  15.123 (0.983)    58      5333                     0.00-   0.00     9.12
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.391  15.391 (1.000)   130    137001 5.00000            80.00- 120.00   100.00
 15.391  15.391 (1.000)   128     99124                    52.25- 112.25    72.35
 15.391  15.391 (1.000)    49     97605                    89.81- 149.81    71.24
-------------------------------------------------------------------------------
  107 1,1-Dichloropropene                          CAS #: 563-58-6
 15.885  15.885 (1.032)   110     24149 1.00000   0.9435    0.00-   0.00   100.00
 15.885  15.885 (1.032)    75     63125                     0.00-   0.00   261.40
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE		RATIO
115 Isobutanol					CAS #: 78-83-1			
15.977	15.977 (1.038)	43	27018	1.00000	0.9844	0.00-	0.00	100.00
15.977	15.977 (1.038)	41	22608			0.00-	0.00	83.68
15.977	15.977 (1.038)	55	2523			0.00-	0.00	9.34
* 123 1,4-Difluorobenzene					CAS #: 540-36-3			
16.737	16.737 (1.000)	114	505929	5.00000		80.00-	120.00	100.00
16.737	16.737 (1.000)	88	76981			0.00-	45.20	15.22
124 n-Butanol					CAS #: 71-36-3			
16.882	16.882 (1.009)	56	44924	1.00000	0.9880	0.00-	0.00	100.00
16.906	16.906 (1.010)	41	31736			0.00-	0.00	70.64
16.882	16.882 (1.009)	43	22941			0.00-	0.00	51.07
128 Ethyl acrylate					CAS #: 140-88-5			
17.171	17.171 (1.026)	99	7940	1.00000	1.050	0.00-	0.00	100.00
17.171	17.171 (1.026)	45	6247			0.00-	0.00	78.68
17.171	17.171 (1.026)	55	63631			0.00-	0.00	801.40
131 2-Pentanone					CAS #: 107-87-9			
17.388	17.388 (1.039)	43	77044	1.00000	0.9826	0.00-	0.00	100.00
17.388	17.388 (1.039)	58	7126			0.00-	0.00	9.25
17.388	17.388 (1.039)	86	20265			0.00-	0.00	26.30
134 Methyl Methacrylate					CAS #: 80-62-6			
17.556	17.556 (1.049)	41	41797	1.00000	1.021	0.00-	0.00	100.00
17.556	17.556 (1.049)	69	43916			0.00-	0.00	105.07
17.556	17.556 (1.049)	100	18544			0.00-	0.00	44.37
137 Dibromomethane					CAS #: 74-95-3			
17.797	17.797 (1.063)	174	75013	1.00000	0.9917	0.00-	0.00	100.00
17.797	17.797 (1.063)	93	55210			0.00-	0.00	73.60
17.797	17.797 (1.063)	95	51958			0.00-	0.00	69.27
148 Octane					CAS #: 111-65-9			
19.343	19.343 (1.156)	57	25580	1.00000	1.004	0.00-	0.00	100.00
19.320	19.320 (1.154)	85	35666			0.00-	0.00	139.43
19.320	19.320 (1.154)	43	49233			0.00-	0.00	192.47
157 1,3-Dichloropropane					CAS #: 142-28-9			
20.795	20.795 (0.938)	76	78463	1.00000	1.006	0.00-	0.00	100.00
20.795	20.795 (0.938)	41	38871			0.00-	0.00	49.54
20.795	20.795 (0.938)	78	23073			0.00-	0.00	29.41
159 Butyl Acetate					CAS #: 123-86-4			
20.905	20.905 (0.943)	56	6407	1.00000	0.8420	0.00-	0.00	100.00

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

  159 Butyl Acetate (continued)
 20.905  20.905 (0.943)    73      5262                     0.00-   0.00    82.13
 20.905  20.905 (0.943)    43     16832                     0.00-   0.00   262.71
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                              CAS #: 3114-55-4
 22.177  22.177 (1.000)   117    452153 5.00000            80.00- 120.00   100.00
 22.177  22.177 (1.000)    82    225263                    20.64-  80.64    49.82
-------------------------------------------------------------------------------
  168 1,1,1,2-Tetrachloroethane                     CAS #: 630-20-6
 22.343  22.343 (1.007)   131     86739 1.00000   0.9601   0.00-   0.00   100.00
 22.343  22.343 (1.007)   117     58679                     0.00-   0.00    67.65
 22.343  22.343 (1.007)    95     31643                     0.00-   0.00    36.48
-------------------------------------------------------------------------------
  170 Nonane                                        CAS #: 111-84-2
 22.302  22.302 (1.006)    43     43037 1.00000   0.9507   0.00-   0.00   100.00
 22.302  22.302 (1.006)    57     45683                     0.00-   0.00   106.15
 22.302  22.302 (1.006)    85     21786                     0.00-   0.00    50.62
-------------------------------------------------------------------------------
  173 2-Heptanone                                   CAS #: 110-43-0
 23.214  23.214 (1.047)    58     44969 1.00000   0.9609   0.00-   0.00   100.00
 23.214  23.214 (1.047)    43     66507                     0.00-   0.00   147.90
-------------------------------------------------------------------------------
  176 Cyclohexanone                                 CAS #: 108-94-1
 23.811  23.811 (1.074)    55     37484 1.00000   0.9618   0.00-   0.00   100.00
 23.811  23.811 (1.074)    98     22614                     0.00-   0.00    60.33
 23.811  23.811 (1.074)    42     26172                     0.00-   0.00    69.82
-------------------------------------------------------------------------------
  179 alpha-Pinene                                  CAS #: 80-56-8
 23.497  23.497 (1.060)    93    174814 1.00000   0.9695   0.00-   0.00   100.00
 23.497  23.497 (1.060)   121     25068                     0.00-   0.00    14.34
 23.497  23.497 (1.060)    92     65661                     0.00-   0.00    37.56
-------------------------------------------------------------------------------
  180 Bromobenzene                                  CAS #: 108-86-1
 24.080  24.080 (1.086)   156     90601 1.00000   0.9970   0.00-   0.00   100.00
 24.080  24.080 (1.086)   158     87027                     0.00-   0.00    96.06
 24.080  24.080 (1.086)    77    109509                     0.00-   0.00   120.87
-------------------------------------------------------------------------------
  185 1,2,3-Trichloropropane                        CAS #: 96-18-4
 24.125  24.125 (1.088)   110     36982 1.00000    1.013   0.00-   0.00   100.00
 24.125  24.125 (1.088)    75    123331                     0.00-   0.00   333.49
 24.125  24.125 (1.088)    61     20688                     0.00-   0.00    55.94
-------------------------------------------------------------------------------
  187 Decane                                        CAS #: 124-18-5
 24.170  24.170 (1.090)    57     35879 1.00000   0.9723   0.00-   0.00   100.00
 24.170  24.170 (1.090)    71     17931                     0.00-   0.00    49.98
 24.170  24.170 (1.090)   142      2314                     0.00-   0.00     6.45
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE		RATIO
189 2-Chlorotoluene					CAS #: 95-49-8			
24.282	24.282 (1.095)	126	59313	1.00000	1.017	0.00-	0.00	100.00
24.282	24.282 (1.095)	91	148786			0.00-	0.00	250.85
24.282	24.282 (1.095)	65	13277			0.00-	0.00	22.38
191 4-Chlorotoluene					CAS #: 106-43-4			
24.417	24.417 (1.101)	126	55144	1.00000	1.020	0.00-	0.00	100.00
24.417	24.417 (1.101)	91	142855			0.00-	0.00	259.06
24.417	24.417 (1.101)	63	15434			0.00-	0.00	27.99
195 tert-Butylbenzene					CAS #: 98-06-6			
24.708	24.708 (1.114)	119	150500	1.00000	0.9878	0.00-	0.00	100.00
24.708	24.708 (1.114)	134	37759			0.00-	0.00	25.09
24.686	24.686 (1.113)	91	97079			0.00-	0.00	64.50
197 Pentachloroethane					CAS #: 76-01-7			
24.798	24.798 (1.118)	167	63384	1.00000	1.026	0.00-	0.00	100.00
24.798	24.798 (1.118)	117	52998			0.00-	0.00	83.61
24.798	24.798 (1.118)	169	31606			0.00-	0.00	49.86
199 D-Limonene					CAS #: 5989-27-5			
25.022	25.022 (1.128)	68	54364	1.00000	0.9467	0.00-	0.00	100.00
25.044	25.044 (1.129)	93	138517			0.00-	0.00	254.80
203 sec-Butylbenzene					CAS #: 135-98-8			
24.955	24.955 (1.125)	105	286099	1.00000	0.9953	0.00-	0.00	100.00
24.955	24.955 (1.125)	134	63787			0.00-	0.00	22.30
24.955	24.955 (1.125)	91	45861			0.00-	0.00	16.03
206 bis(2-Chloroethyl) Ether					CAS #: 111-44-4			
25.044	25.044 (1.129)	93	138517	1.00000	0.9700	0.00-	0.00	100.00
25.044	25.044 (1.129)	95	34864			0.00-	0.00	25.17
25.044	25.044 (1.129)	63	61293			0.00-	0.00	44.25
207 p-Cymene					CAS #: 99-87-6			
25.089	25.089 (1.131)	119	174489	1.00000	0.9939	0.00-	0.00	100.00
25.089	25.089 (1.131)	134	50563			0.00-	0.00	28.98
25.089	25.089 (1.131)	91	38095			0.00-	0.00	21.83
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8			
25.269	25.269 (1.139)	120	56034	1.00000	0.9968	0.00-	0.00	100.00
25.269	25.269 (1.139)	105	122416			0.00-	0.00	218.47
25.246	25.246 (1.138)	77	13523			0.00-	0.00	24.13
213 Butylbenzene					CAS #: 104-51-8			
25.538	25.538 (1.152)	134	42339	1.00000	0.9615	0.00-	0.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
213 Butylbenzene (continued)							
25.538	25.538 (1.152)	91	142467			0.00- 0.00	336.49
25.538	25.538 (1.152)	92	74257			0.00- 0.00	175.39
215 Undecane					CAS #: 1120-21-4		
25.515	25.515 (1.151)	57	23461	1.00000	0.8773	0.00- 0.00	100.00
25.515	25.515 (1.151)	43	19467			0.00- 0.00	82.98
25.515	25.515 (1.151)	85	11162			0.00- 0.00	47.58
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
26.546	26.546 (1.197)	157	68752	1.00000	0.9629	0.00- 0.00	100.00
26.546	26.546 (1.197)	75	54169			0.00- 0.00	78.79
26.546	26.546 (1.197)	155	53210			0.00- 0.00	77.39
225 Dodecane					CAS #: 112-40-3		
26.614	26.614 (1.200)	85	7893	1.00000	0.9908	0.00- 0.00	100.00
26.614	26.614 (1.200)	57	17201			0.00- 0.00	217.93
26.614	26.614 (1.200)	43	14647			0.00- 0.00	185.57

QC Flag Legend

T - Target compound detected outside RT window.

Report Date: 10-May-2016 12:11

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e050908.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/09May2016.b/e16l0317d.m
Misc Info: 1.0ppbv (5.0ppbv) Combo

Calibration Date: 09-MAY-2016
Calibration Time: 07:51

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	159373	95624	223122	137001	-14.04
123 1,4-Difluorobenze	624905	374943	874867	505929	-19.04
163 Chlorobenzene-d5	549919	329951	769887	452153	-17.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/09May2016.b/e050908.d

Date : 09-MAY-2016 12:03

Client ID:

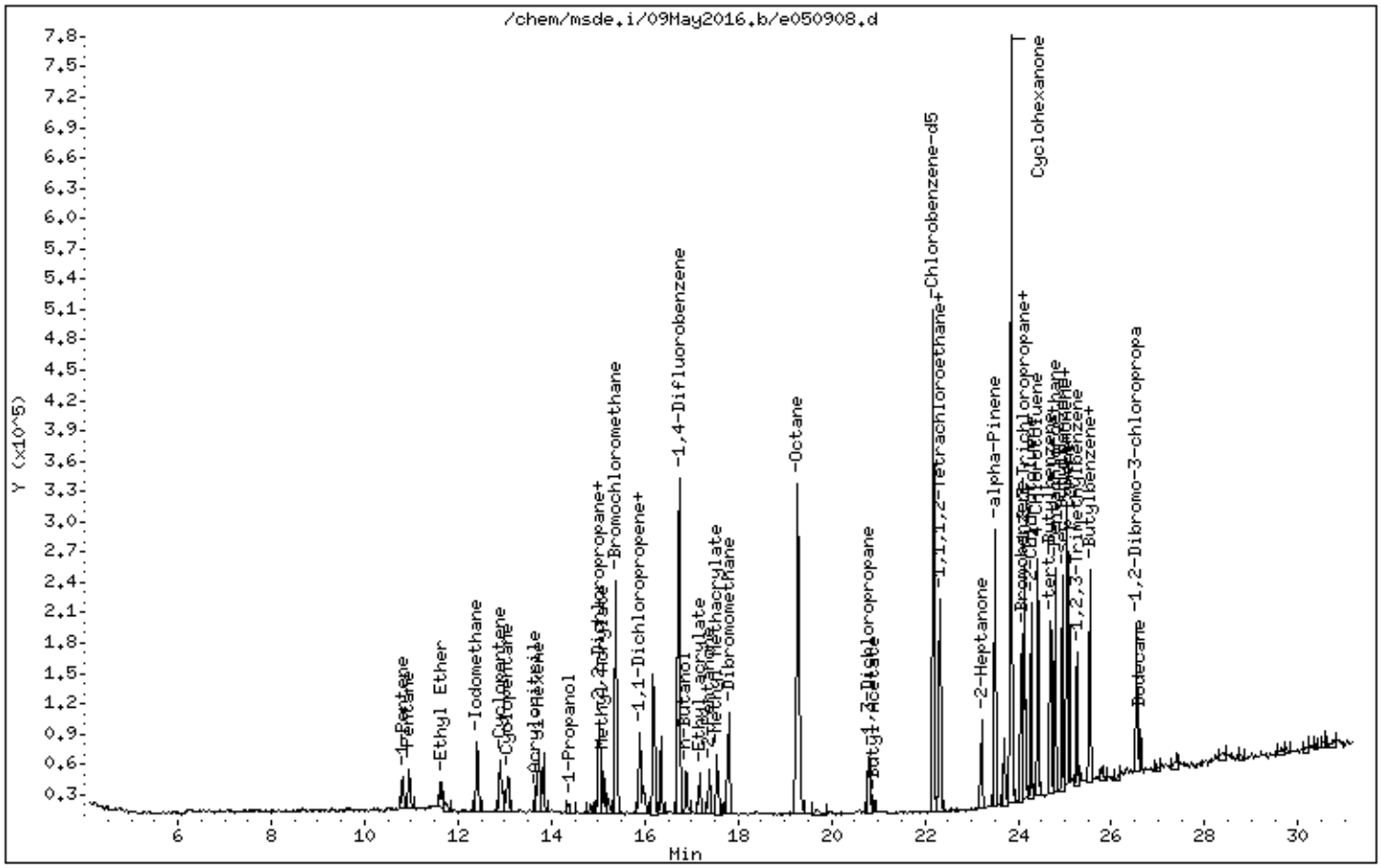
Instrument: msde.i

Sample Info: 50mL# 2789-105

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/30Mar2016.b/e033008.d
Lab Smp Id: ICAL Client Smp ID: Level 8
Inj Date : 30-MAR-2016 15:43
Operator : ef Inst ID: msde.i
Smp Info : 50mL# 2789-45
Misc Info : 1.0ppbv (5.0ppbv) Acrolein
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/30Mar2016.b/e16l0317c.m
Meth Date : 30-Mar-2016 17:13 efinn Quant Type: ISTD
Cal Date : 30-MAR-2016 15:43 Cal File: e033008.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AcroleinICAL.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 Acrolein					CAS #: 107-02-8		
12.233	12.233 (0.785)	56	8998	1.00000	1.038	0.00- 0.00	100.00
12.233	12.233 (0.785)	55	5581			0.00- 0.00	62.02
* 98 Bromochloromethane					CAS #: 74-97-5		
15.580	15.580 (1.000)	130	150258	5.00000		80.00- 120.00	100.00
15.580	15.580 (1.000)	128	116987			52.25- 112.25	77.86
15.580	15.580 (1.000)	49	122713			89.81- 149.81	81.67
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
16.939	16.939 (1.000)	114	587496	5.00000		80.00- 120.00	100.00
16.939	16.939 (1.000)	88	87269			0.00- 45.20	14.85
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.365	22.365 (1.000)	117	532033	5.00000		80.00- 120.00	100.00
22.365	22.365 (1.000)	82	273401			20.64- 80.64	51.39

Report Date: 30-Mar-2016 17:13

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e033008.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/30Mar2016.b/e16l0317c.m
Misc Info: 1.0ppbv (5.0ppbv) Acrolein

Calibration Date: 30-MAR-2016
Calibration Time: 11:07
Client Smp ID: Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	190719	114431	267007	150258	-21.21
123 1,4-Difluorobenze	725285	435171	1015399	587496	-19.00
163 Chlorobenzene-d5	658854	395312	922396	532033	-19.25

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/30Mar2016.b/e033008.d

Date : 30-MAR-2016 15:43

Client ID: Level 8

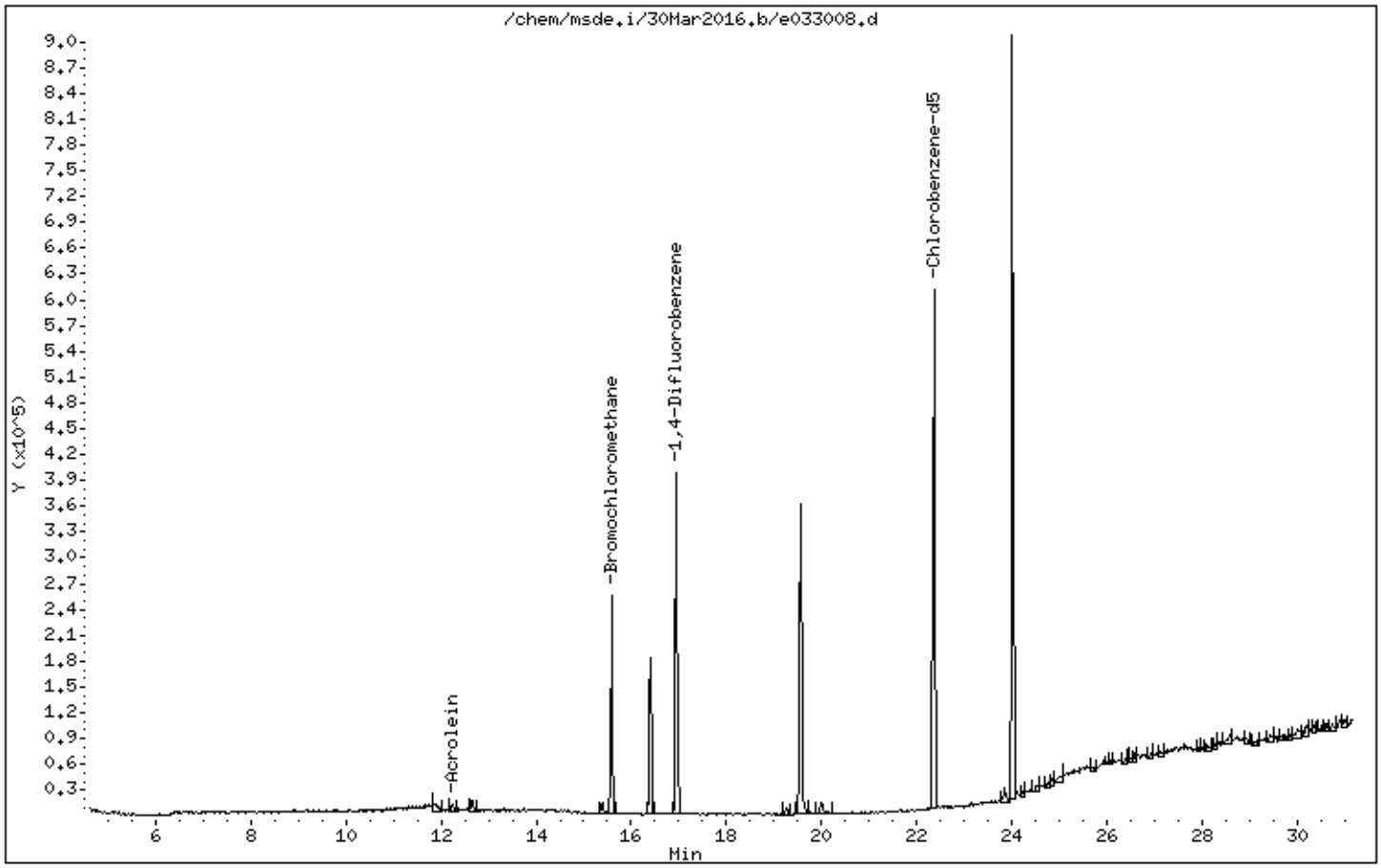
Instrument: msde.i

Sample Info: 50mL# 2789-45

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/25Mar2016.b/e032506.d
Lab Smp Id: ICAL Client Smp ID: Level 8
Inj Date : 25-MAR-2016 13:02
Operator : ef Inst ID: msde.i
Smp Info : 50mL# 2789-4
Misc Info : 1.0ppbv (5.0ppbv) Combo
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/25Mar2016.b/e16l0317b.m
Meth Date : 25-Mar-2016 16:29 efinn Quant Type: ISTD
Cal Date : 25-MAR-2016 13:02 Cal File: e032506.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Combo-AT1ICAL.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
32 Vinyl Bromide					CAS #: 593-60-2		
10.786	10.786 (0.692)	106	34231	1.00000	0.9906	0.00- 0.00	100.00
10.767	10.767 (0.691)	108	35076			0.00- 0.00	102.47
36 1-Pentene					CAS #: 109-67-1		
11.014	11.014 (0.707)	55	27204	1.00000	1.030	0.00- 0.00	100.00
11.014	11.014 (0.707)	42	29664			0.00- 0.00	109.04
34 Pentane					CAS #: 109-66-0		
11.147	11.147 (0.716)	43	49846	1.00000	1.058	0.00- 0.00	100.00
11.166	11.166 (0.717)	57	10473			0.00- 0.00	21.01
11.147	11.147 (0.716)	72	7098			0.00- 0.00	14.24
44 Ethyl Ether					CAS #: 60-29-7		
11.814	11.814 (0.758)	74	17648	1.00000	0.9886	0.00- 0.00	100.00(T)
11.814	11.814 (0.758)	59	19318			0.00- 0.00	109.46
0.000	1.000 (0.000)	31	0			0.00- 0.00	0.00

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

   53 Iodomethane                                   CAS #: 74-88-4
 12.595  12.595 (0.808)   142    120821 1.00000    1.085   0.00-   0.00   100.00
 12.595  12.595 (0.808)   127     53818                    0.00-   0.00    44.54
-------------------------------------------------------------------------------
   63 Acetonitrile                                  CAS #: 75-05-8
 13.185  13.185 (0.846)    41     23400 1.00000    1.063   0.00-   0.00   100.00
 13.185  13.185 (0.846)    40     12685                    0.00-   0.00    54.21
 13.185  13.185 (0.846)    39      4156                    0.00-   0.00    17.76
-------------------------------------------------------------------------------
   64 Cyclopentane                                  CAS #: 287-92-3
 13.261  13.261 (0.851)    70     24289 1.00000    1.069   0.00-   0.00   100.00
 13.280  13.280 (0.852)    55     22661                    0.00-   0.00    93.30
-------------------------------------------------------------------------------
   74 Acrylonitrile                                 CAS #: 107-13-1
 13.838  13.838 (0.888)    53     27250 1.00000    1.127   0.00-   0.00   100.00
 13.838  13.838 (0.888)    52     21534                    0.00-   0.00    79.02
-------------------------------------------------------------------------------
   76 1-Hexene                                      CAS #: 592-41-6
 13.921  13.921 (0.894)    55     22119 1.00000   0.9861   0.00-   0.00   100.00
 13.921  13.921 (0.894)    41     29286                    0.00-   0.00   132.40
 13.921  13.921 (0.894)    84     11785                    0.00-   0.00    53.28
-------------------------------------------------------------------------------
   94 Ethyl Acetate                                 CAS #: 141-78-6
 15.221  15.221 (0.977)    70      7467 1.00000    1.027   0.00-   0.00   100.00
 15.221  15.221 (0.977)    43     59786                    0.00-   0.00   800.67
 15.221  15.221 (0.977)    61     21177                    0.00-   0.00   283.61
-------------------------------------------------------------------------------
   93 Methyl Acrylate                               CAS #: 96-33-3
 15.316  15.316 (0.983)    55     50751 1.00000    1.002   0.00-   0.00   100.00
 15.316  15.316 (0.983)    85     11409                    0.00-   0.00    22.48
 15.316  15.316 (0.983)    58      5295                    0.00-   0.00    10.43
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.580  15.580 (1.000)   130    181202 5.00000           80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    139124                   52.25- 112.25    76.78
 15.580  15.580 (1.000)    49    177164                   89.81- 149.81    97.77
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                          CAS #: 540-36-3
 16.939  16.939 (1.000)   114    685019 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88     97903                    0.00-  45.20    14.29
-------------------------------------------------------------------------------
  128 Ethyl acrylate                                CAS #: 140-88-5
 17.397  17.397 (1.027)    99      4970 1.00000   0.9718   0.00-   0.00   100.00
 17.397  17.397 (1.027)    45      4607                    0.00-   0.00    92.70
 17.397  17.397 (1.027)    55     51744                    0.00-   0.00  1041.13
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE		RATIO
131 2-Pentanone					CAS #: 107-87-9			
17.614	17.614 (1.040)	43	62777	1.00000	0.9761	0.00-	0.00	100.00
17.614	17.614 (1.040)	58	5399			0.00-	0.00	8.60
17.614	17.614 (1.040)	86	15517			0.00-	0.00	24.72
134 Methyl Methacrylate					CAS #: 80-62-6			
17.782	17.782 (1.050)	41	31114	1.00000	0.9697	0.00-	0.00	100.00
17.782	17.782 (1.050)	69	32570			0.00-	0.00	104.68
17.807	17.807 (1.051)	100	11940			0.00-	0.00	38.38
137 Dibromomethane					CAS #: 74-95-3			
18.048	18.048 (1.065)	174	48282	1.00000	0.9946	0.00-	0.00	100.00
18.048	18.048 (1.065)	93	38632			0.00-	0.00	80.01
18.048	18.048 (1.065)	95	36609			0.00-	0.00	75.82
148 Octane					CAS #: 111-65-9			
19.624	19.624 (1.158)	57	35357	1.00000	0.9606	0.00-	0.00	100.00
19.624	19.624 (1.158)	85	50815			0.00-	0.00	143.72
19.624	19.624 (1.158)	43	73240			0.00-	0.00	207.14
* 163 Chlorobenzene-d5					CAS #: 3114-55-4			
22.366	22.366 (1.000)	117	615294	5.00000		80.00-	120.00	100.00
22.366	22.366 (1.000)	82	307594			20.64-	80.64	49.99
170 Nonane					CAS #: 111-84-2			
22.490	22.490 (1.006)	43	66058	1.00000	0.9605	0.00-	0.00	100.00
22.490	22.490 (1.006)	57	70386			0.00-	0.00	106.55
22.490	22.490 (1.006)	85	34061			0.00-	0.00	51.56
184 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6			
24.289	24.289 (1.086)	75	90419	1.00000	0.9677	0.00-	0.00	100.00
24.289	24.289 (1.086)	89	11440			0.00-	0.00	12.65
24.267	24.267 (1.085)	53	13653			0.00-	0.00	15.10
187 Decane					CAS #: 124-18-5			
24.581	24.581 (1.099)	57	62083	1.00000	0.9561	0.00-	0.00	100.00
24.581	24.581 (1.099)	71	510			0.00-	0.00	0.82
24.581	24.581 (1.099)	142	13283			0.00-	0.00	21.40
206 bis(2-Chloroethyl) Ether					CAS #: 111-44-4			
25.186	25.186 (1.126)	93	75283	1.00000	0.9704	0.00-	0.00	100.00
25.209	25.209 (1.127)	95	24854			0.00-	0.00	33.01
25.186	25.186 (1.126)	63	51431			0.00-	0.00	68.32
215 Undecane					CAS #: 1120-21-4			
25.657	25.657 (1.147)	57	27918	1.00000	1.034	0.00-	0.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
215 Undecane (continued)								
25.657	25.657	(1.147)	43	23083			0.00- 0.00	82.68
25.657	25.657	(1.147)	85	10121			0.00- 0.00	36.25
225 Dodecane						CAS #: 112-40-3		
26.800	26.800	(1.198)	85	5154	1.00000	1.344	0.00- 0.00	100.00
26.800	26.800	(1.198)	57	12349			0.00- 0.00	239.60
26.800	26.800	(1.198)	43	9472			0.00- 0.00	183.78

QC Flag Legend

T - Target compound detected outside RT window.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e032506.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/25Mar2016.b/e16l0317b.m
Misc Info: 1.0ppbv (5.0ppbv) Combo

Calibration Date: 25-MAR-2016
Calibration Time: 09:25
Client Smp ID: Level 8
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	196631	117979	275283	181202	-7.85
123 1,4-Difluorobenze	760212	456127	1064297	685019	-9.89
163 Chlorobenzene-d5	680500	408300	952700	615294	-9.58

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/25Mar2016.b/e032506.d

Date : 25-MAR-2016 13:02

Client ID: Level 8

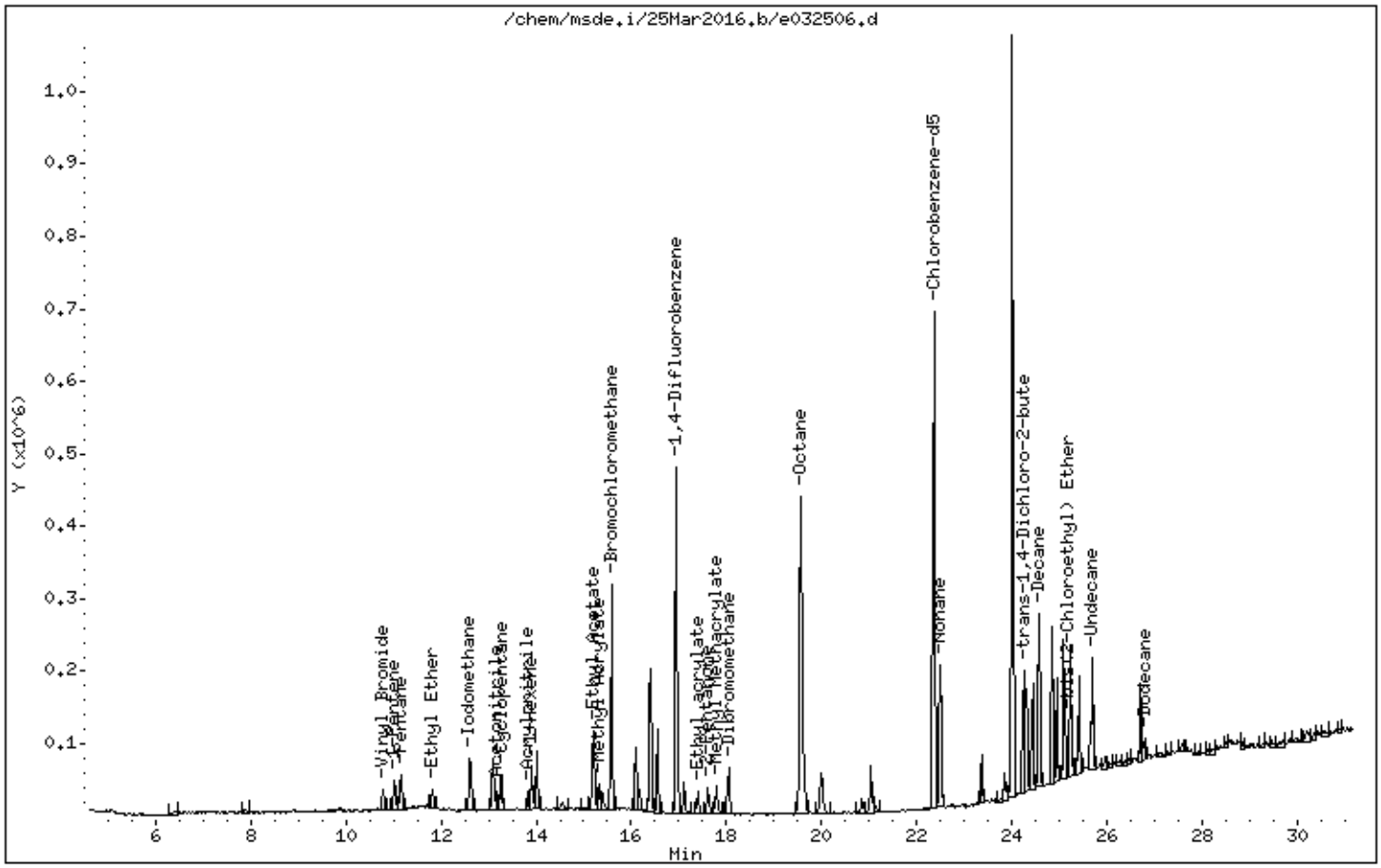
Instrument: msde.i

Sample Info: 50mL# 2789-4

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/22Mar2016.b/e032206.d
Lab Smp Id: ICAL Client Smp ID: Level 8
Inj Date : 22-MAR-2016 13:20
Operator : ef Inst ID: msde.i
Smp Info : 50mL# 2759-238
Misc Info : 1.0ppbv (5.0ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/22Mar2016.b/e16l0317a.m
Meth Date : 19-May-2016 16:49 efinn Quant Type: ISTD
Cal Date : 22-MAR-2016 13:20 Cal File: e032206.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1.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
10 1,1-Difluoroethane					CAS #: 75-37-6		
5.335	5.335 (0.342)	65	8137	1.00000	1.193	0.00- 0.00	100.00(aM)
5.335	5.335 (0.342)	51	11503			0.00- 0.00	141.37
13 Chlorodifluoromethane					CAS #: 75-45-6		
5.962	5.962 (0.383)	51	17658	1.00000	1.005	0.00- 0.00	100.00(Ta)
6.010	6.010 (0.386)	67	3141			0.00- 0.00	17.79
0.000	1.000 (0.000)	85	0			0.00- 0.00	0.00
16 Freon 142b					CAS #: 75-68-3		
7.094	7.094 (0.455)	65	35772	1.00000	1.004	0.00- 0.00	100.00(a)
7.070	7.070 (0.454)	45	7464			0.00- 0.00	20.87
7.094	7.094 (0.455)	81	3022			0.00- 0.00	8.45
37 Dichlorofluoromethane					CAS #: 75-43-4		
11.052	11.052 (0.709)	67	35147	1.00000	0.9446	0.00- 0.00	100.00(a)
11.052	11.052 (0.709)	69	12769			0.00- 0.00	36.33

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

   37 Dichlorofluoromethane (continued)
 11.052  11.052 (0.709)    47      2763                     0.00-   0.00     7.86
-------------------------------------------------------------------------------
   48 Freon 123                                    CAS #: 306-83-2
 12.214  12.214 (0.784)    83     59511 1.00000    1.036   0.00-   0.00   100.00(a)
 12.214  12.214 (0.784)   133     17309                     0.00-   0.00    29.09
 12.214  12.214 (0.784)    85     40384                     0.00-   0.00    67.86
-------------------------------------------------------------------------------
   59 Cyclopentene                                 CAS #: 142-29-0
 13.090  13.090 (0.840)    67     26711 1.00000    1.012   0.00-   0.00   100.00(a)
 13.090  13.090 (0.840)    68      9441                     0.00-   0.00    35.34
 13.090  13.090 (0.840)    53      5602                     0.00-   0.00    20.97
-------------------------------------------------------------------------------
   84 1-Propanol                                   CAS #: 71-23-8
 14.552  14.552 (0.934)    59      8623 1.00000    1.164   0.00-   0.00   100.00(a)
 14.552  14.552 (0.934)    42      4834                     0.00-   0.00    56.06
 14.552  14.552 (0.934)    41      4165                     0.00-   0.00    48.30
-------------------------------------------------------------------------------
   90 2,2-Dichloropropane                          CAS #: 594-20-7
 15.202  15.202 (0.976)    77     47438 1.00000    1.016   0.00-   0.00   100.00(a)
 15.202  15.202 (0.976)    79     16913                     0.00-   0.00    35.65
 15.202  15.202 (0.976)    97      9463                     0.00-   0.00    19.95
-------------------------------------------------------------------------------
*  98 Bromochloromethane                          CAS #: 74-97-5
 15.580  15.580 (1.000)   130    198233 5.00000           80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    152854                   52.25- 112.25    77.11
 15.580  15.580 (1.000)    49    178955                   89.81- 149.81    90.28
-------------------------------------------------------------------------------
  107 1,1-Dichloropropene                         CAS #: 563-58-6
 16.104  16.104 (1.034)   110     12411 1.00000    1.020   0.00-   0.00   100.00(a)
 16.104  16.104 (1.034)    75     32788                     0.00-   0.00   264.18
-------------------------------------------------------------------------------
  115 Isobutanol                                  CAS #: 78-83-1
 16.165  16.165 (1.038)    43     38207 1.00000    1.067   0.00-   0.00   100.00(a)
 16.165  16.165 (1.038)    41     28410                     0.00-   0.00    74.36
 16.196  16.196 (1.040)    55      2497                     0.00-   0.00     6.54
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                         CAS #: 540-36-3
 16.939  16.939 (1.000)   114    740474 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88    112049                    0.00-  45.20    15.13
-------------------------------------------------------------------------------
  124 n-Butanol                                   CAS #: 71-36-3
 17.108  17.108 (1.010)    56     47051 1.00000    1.005   0.00-   0.00   100.00(a)
 17.108  17.108 (1.010)    41     30955                     0.00-   0.00    65.79
 17.108  17.108 (1.010)    43     24026                     0.00-   0.00    51.06
-------------------------------------------------------------------------------
```

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

  157 1,3-Dichloropropane                          CAS #: 142-28-9
 21.046  21.046 (0.941)    76     60171 1.00000    1.071   0.00-   0.00   100.00(a)
 21.046  21.046 (0.941)    41     30484                    0.00-   0.00    50.66
 21.046  21.046 (0.941)    78     19304                    0.00-   0.00    32.08
-------------------------------------------------------------------------------
  159 Butyl Acetate                                CAS #: 123-86-4
 21.128  21.128 (0.945)    56      6540 1.00000   0.9908   0.00-   0.00   100.00(a)
 21.128  21.128 (0.945)    73      5207                    0.00-   0.00    79.62
 21.128  21.128 (0.945)    43     16414                    0.00-   0.00   250.98
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                             CAS #: 3114-55-4
 22.366  22.366 (1.000)   117    660850 5.00000           80.00- 120.00   100.00
 22.366  22.366 (1.000)    82    344952                   20.64-  80.64    52.20
-------------------------------------------------------------------------------
  168 1,1,1,2-Tetrachloroethane                    CAS #: 630-20-6
 22.531  22.531 (1.007)   131     71990 1.00000    1.074   0.00-   0.00   100.00(a)
 22.511  22.511 (1.006)   117     42980                    0.00-   0.00    59.70
 22.511  22.511 (1.006)    95     24658                    0.00-   0.00    34.25
-------------------------------------------------------------------------------
  173 2-Heptanone                                  CAS #: 110-43-0
 23.381  23.381 (1.045)    58     46208 1.00000   0.9509   0.00-   0.00   100.00(a)
 23.381  23.381 (1.045)    43     69338                    0.00-   0.00   150.06
-------------------------------------------------------------------------------
  176 Cyclohexanone                                CAS #: 108-94-1
 23.975  23.975 (1.072)    55     42582 1.00000    1.037   0.00-   0.00   100.00(a)
 23.975  23.975 (1.072)    98     27417                    0.00-   0.00    64.39
 23.975  23.975 (1.072)    42     28034                    0.00-   0.00    65.84
-------------------------------------------------------------------------------
  180 Bromobenzene                                 CAS #: 108-86-1
 24.244  24.244 (1.084)   156     70174 1.00000   0.9690   0.00-   0.00   100.00(a)
 24.244  24.244 (1.084)   158     74273                    0.00-   0.00   105.84
 24.244  24.244 (1.084)    77    101024                    0.00-   0.00   143.96
-------------------------------------------------------------------------------
  185 1,2,3-Trichloropropane                       CAS #: 96-18-4
 24.289  24.289 (1.086)   110     36633 1.00000    1.019   0.00-   0.00   100.00(a)
 24.289  24.289 (1.086)    75     86674                    0.00-   0.00   236.60
 24.289  24.289 (1.086)    61     18471                    0.00-   0.00    50.42
-------------------------------------------------------------------------------
  189 2-Chlorotoluene                              CAS #: 95-49-8
 24.446  24.446 (1.093)   126     50050 1.00000    1.018   0.00-   0.00   100.00(a)
 24.446  24.446 (1.093)    91    138328                    0.00-   0.00   276.38
 24.446  24.446 (1.093)    65     12760                    0.00-   0.00    25.49
-------------------------------------------------------------------------------
  191 4-Chlorotoluene                              CAS #: 106-43-4
 24.581  24.581 (1.099)   126     46360 1.00000   0.9443   0.00-   0.00   100.00(a)
 24.581  24.581 (1.099)    91    132157                    0.00-   0.00   285.07
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
191 4-Chlorotoluene (continued)							
24.581	24.581 (1.099)	63	15550			0.00- 0.00	33.54
195 tert-Butylbenzene					CAS #: 98-06-6		
24.850	24.850 (1.111)	119	151021	1.00000	0.9855	0.00- 0.00	100.00(a)
24.850	24.850 (1.111)	134	38999			0.00- 0.00	25.82
24.850	24.850 (1.111)	91	100897			0.00- 0.00	66.81
197 Pentachloroethane					CAS #: 76-01-7		
24.962	24.962 (1.116)	167	56490	1.00000	1.028	0.00- 0.00	100.00(a)
24.962	24.962 (1.116)	117	47810			0.00- 0.00	84.63
24.962	24.962 (1.116)	169	24500			0.00- 0.00	43.37
203 sec-Butylbenzene					CAS #: 135-98-8		
25.096	25.096 (1.122)	105	205025	1.00000	0.9959	0.00- 0.00	100.00(a)
25.096	25.096 (1.122)	134	47645			0.00- 0.00	23.24
25.096	25.096 (1.122)	91	34791			0.00- 0.00	16.97
207 p-Cymene					CAS #: 99-87-6		
25.253	25.253 (1.129)	119	161408	1.00000	0.9946	0.00- 0.00	100.00(a)
25.253	25.253 (1.129)	134	40830			0.00- 0.00	25.30
25.253	25.253 (1.129)	91	37187			0.00- 0.00	23.04
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.410	25.410 (1.136)	120	49828	1.00000	0.9923	0.00- 0.00	100.00(a)
25.410	25.410 (1.136)	105	114292			0.00- 0.00	229.37
25.410	25.410 (1.136)	77	14590			0.00- 0.00	29.28
213 Butylbenzene					CAS #: 104-51-8		
25.702	25.702 (1.149)	134	36405	1.00000	1.001	0.00- 0.00	100.00(a)
25.702	25.702 (1.149)	91	124473			0.00- 0.00	341.91
25.702	25.702 (1.149)	92	66394			0.00- 0.00	182.38
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
26.711	26.711 (1.194)	157	65071	1.00000	0.9958	0.00- 0.00	100.00(a)
26.711	26.711 (1.194)	75	56103			0.00- 0.00	86.22
26.711	26.711 (1.194)	155	48816			0.00- 0.00	75.02

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e032206.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/22Mar2016.b/e16l0317a.m
Misc Info: 1.0ppbv (5.0ppbv)

Calibration Date: 22-MAR-2016
Calibration Time: 09:49
Client Smp ID: Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	190421	114253	266589	198233	4.10
123 1,4-Difluorobenze	736283	441770	1030796	740474	0.57
163 Chlorobenzene-d5	650623	390374	910872	660850	1.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/22Mar2016.b/e032206.d

Date : 22-MAR-2016 13:20

Client ID: Level 8

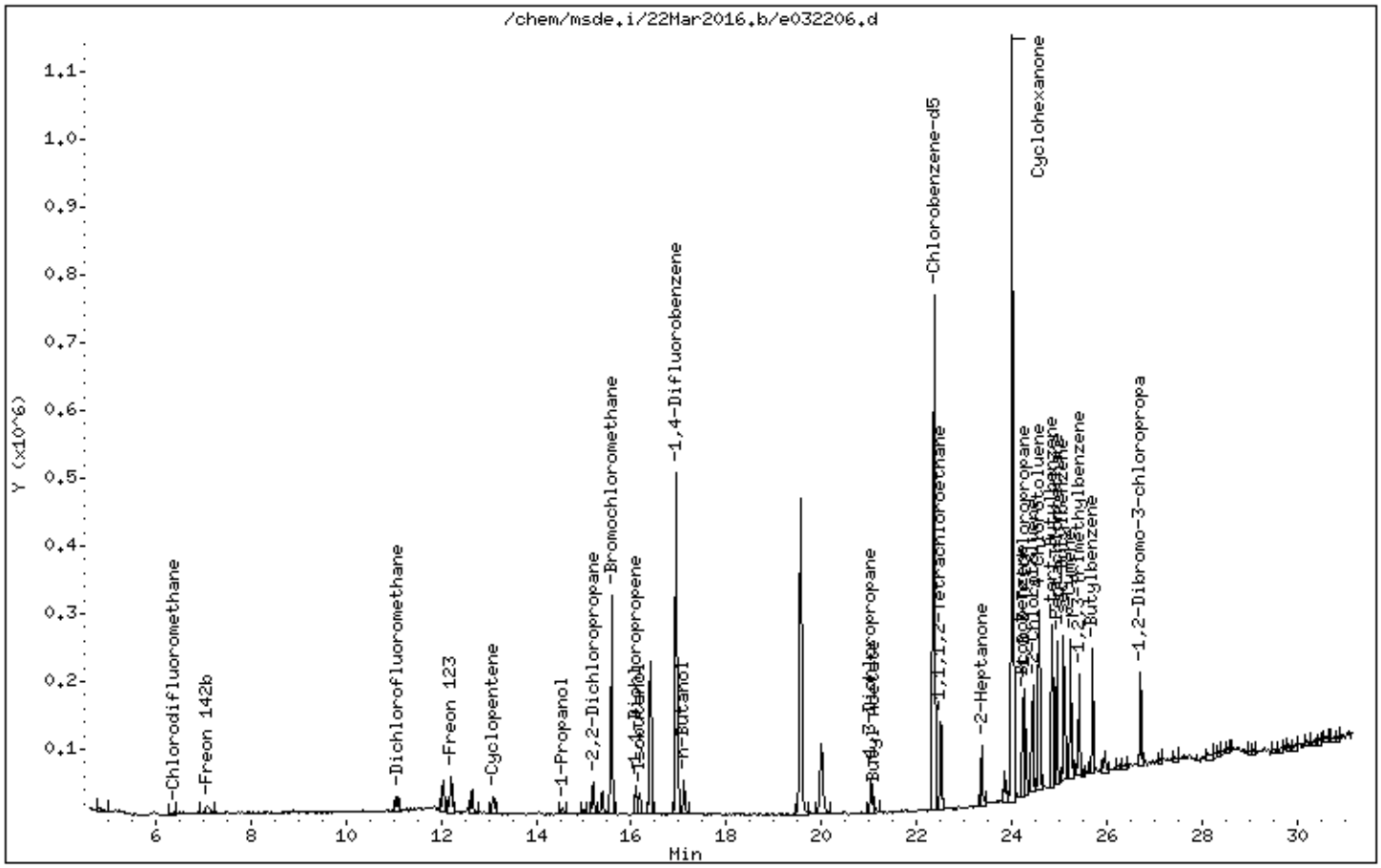
Instrument: msde.i

Sample Info: 50mL# 2759-238

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/17Mar2016.b/e031709.d
Lab Smp Id: ICAL Client Smp ID: Level 8
Inj Date : 17-MAR-2016 16:31
Operator : ef Inst ID: msde.i
Smp Info : 250mL# 2789-14
Misc Info : 1.0ppbv (1.0ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/17Mar2016.b/e16l0317a.m
Meth Date : 23-Mar-2016 08:52 efinn Quant Type: ISTD
Cal Date : 17-MAR-2016 16:31 Cal File: e031709.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
9 Propylene					CAS #: 115-07-1		
5.046	5.046 (0.324)	41	20338	1.00000	1.011	80.00- 120.00	100.00(M)
5.046	5.046 (0.324)	42	13342			38.73- 98.73	65.60
5.070	5.070 (0.325)	39	17798			55.81- 115.81	87.51
11 Freon 12					CAS #: 75-71-8		
5.479	5.479 (0.352)	85	123962	1.00000	0.9513	80.00- 120.00	100.00
5.503	5.503 (0.353)	87	42722			2.00- 62.00	34.46
15 Freon 114					CAS #: 76-14-2		
6.853	6.853 (0.440)	135	90300	1.00000	0.9468	80.00- 120.00	100.00
6.877	6.877 (0.441)	137	30025			1.31- 61.31	33.25
6.853	6.853 (0.440)	85	111106			93.88- 153.88	123.04
17 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.462)	50	25721	1.00000	1.040	80.00- 120.00	100.00
7.191	7.191 (0.462)	52	8292			5.50- 65.50	32.24

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
23 Butane					CAS #: 106-97-8		
7.889	7.889 (0.506)	58	6123	1.00000	0.9561	80.00- 120.00	100.00
7.889	7.889 (0.506)	43	40649			588.57- 648.57	663.87
25 Vinyl Chloride					CAS #: 75-01-4		
8.028	8.028 (0.515)	62	32024	1.00000	0.9206	80.00- 120.00	100.00
8.010	8.010 (0.514)	64	11699			3.14- 63.14	36.53
26 1,3-Butadiene					CAS #: 106-99-0		
8.271	8.271 (0.531)	54	23717	1.00000	1.014	80.00- 120.00	100.00
8.271	8.271 (0.531)	39	23782			65.21- 125.21	100.27
29 Bromomethane					CAS #: 74-83-9		
9.729	9.729 (0.624)	94	36917	1.00000	0.9726	80.00- 120.00	100.00
9.729	9.729 (0.624)	96	35018			64.16- 124.16	94.86
30 Chloroethane					CAS #: 75-00-3		
10.195	10.195 (0.654)	64	15878	1.00000	0.9662	80.00- 120.00	100.00
10.195	10.195 (0.654)	49	4550			0.00- 54.91	28.66
10.195	10.195 (0.654)	66	5756			3.62- 63.62	36.25
31 Isopentane					CAS #: 78-78-4		
10.329	10.329 (0.663)	57	23093	1.00000	0.9693	80.00- 120.00	100.00
10.329	10.329 (0.663)	43	28853			82.69- 142.69	124.94
10.329	10.329 (0.663)	42	23212			68.65- 128.65	100.52
35 Freon 11					CAS #: 75-69-4		
10.957	10.957 (0.703)	101	133441	1.00000	0.9510	80.00- 120.00	100.00
10.957	10.957 (0.703)	103	92213			37.17- 97.17	69.10
42 Ethanol					CAS #: 64-17-5		
11.852	11.852 (0.761)	45	11327	1.00000	1.114	80.00- 120.00	100.00
11.871	11.871 (0.762)	46	3839			6.61- 66.61	33.89
11.852	11.852 (0.761)	43	3307			0.00- 54.66	29.20
49 Freon 113					CAS #: 76-13-1		
12.271	12.271 (0.788)	151	94908	1.00000	0.9026	80.00- 120.00	100.00
12.271	12.271 (0.788)	153	60142			33.64- 93.64	63.37
12.271	12.271 (0.788)	101	107297			80.40- 140.40	113.05
50 1,1-Dichloroethene					CAS #: 75-35-4		
12.290	12.290 (0.789)	98	29102	1.00000	0.9925	80.00- 120.00	100.00
12.290	12.290 (0.789)	61	66684			204.89- 264.89	229.14
12.290	12.290 (0.789)	96	47589			127.69- 187.69	163.52
52 Acetone					CAS #: 67-64-1		
12.556	12.556 (0.806)	58	19259	1.00000	1.123	80.00- 120.00	100.00

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

   52 Acetone (continued)
 12.556  12.556 (0.806)    43     63835                   321.47- 381.47   331.46
-------------------------------------------------------------------------------
   56 Carbon Disulfide                                CAS #: 75-15-0
 12.652  12.652 (0.812)    76    139395 1.00000    1.067  80.00- 120.00   100.00
-------------------------------------------------------------------------------
   57 2-Propanol                                      CAS #: 67-63-0
 12.899  12.899 (0.828)    45     51379 1.00000   0.9795  80.00- 120.00   100.00
 12.899  12.899 (0.828)    43     14423                    0.00-  54.09    28.07
 12.899  12.899 (0.828)    59      2573                    0.00-  34.43     5.01
-------------------------------------------------------------------------------
   58 3-Chloropropene                                 CAS #: 107-05-1
 13.071  13.071 (0.839)    76     20251 1.00000    1.037  80.00- 120.00   100.00
 13.071  13.071 (0.839)    41     36374                   163.76- 223.76   179.62
-------------------------------------------------------------------------------
   66 Methylene Chloride                              CAS #: 75-09-2
 13.357  13.357 (0.857)    84     39392 1.00000   0.9588  80.00- 120.00   100.00
 13.357  13.357 (0.857)    49     34842                   63.99- 123.99    88.45
 13.357  13.357 (0.857)    51     10391                    0.29-  60.29    26.38
-------------------------------------------------------------------------------
   71 tert-Butyl alcohol                              CAS #: 75-65-0
 13.564  13.564 (0.871)    59    106533 1.00000    1.110  80.00- 120.00   100.00
 13.564  13.564 (0.871)    41     21306                    0.00-  51.66    20.00
 13.564  13.564 (0.871)    57     11985                    0.00-  43.50    11.25
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                         CAS #: 1634-04-4
 13.674  13.674 (0.878)    73    123434 1.00000   0.9395  80.00- 120.00   100.00
 13.674  13.674 (0.878)    57     24030                    0.00-  48.26    19.47
 13.674  13.674 (0.878)    41     21014                    0.00-  45.58    17.02
-------------------------------------------------------------------------------
   73 trans-1,2-Dichloroethene                        CAS #: 156-60-5
 13.729  13.729 (0.881)    98     28840 1.00000   0.9683  80.00- 120.00   100.00
 13.729  13.729 (0.881)    61     59190                   155.28- 215.28   205.24
 13.729  13.729 (0.881)    96     46262                   126.18- 186.18   160.41
-------------------------------------------------------------------------------
   78 Hexane                                          CAS #: 110-54-3
 14.031  14.031 (0.901)    57     47662 1.00000   0.9300  80.00- 120.00   100.00
 14.031  14.031 (0.901)    43     28083                   21.48-  81.48    58.92
 14.031  14.031 (0.901)    86     10481                    0.00-  51.51    21.99
-------------------------------------------------------------------------------
   83 Isopropyl ether                                 CAS #: 108-20-3
 14.360  14.360 (0.922)    45     87779 1.00000   0.9390  80.00- 120.00   100.00
 14.360  14.360 (0.922)    87     35408                    9.88-  69.88    40.34
 14.360  14.360 (0.922)    59     13950                    0.00-  42.70    15.89
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                              CAS #: 75-34-3
 14.442  14.442 (0.927)    63     84769 1.00000    1.088  80.00- 120.00   100.00
```

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

   82 1,1-Dichloroethane (continued)
 14.415  14.415 (0.925)    65     24054                     1.78-  61.78    28.38
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                CAS #: 108-05-4
 14.442  14.442 (0.927)    86     12367 1.00000    1.020  80.00- 120.00   100.00
 14.442  14.442 (0.927)    42      7391                   44.70- 104.70    59.76
 14.442  14.442 (0.927)    43     79809                  757.33- 817.33   645.34
-------------------------------------------------------------------------------
   88 Ethyl-tert-butyl ether                       CAS #: 637-92-3
 14.859  14.859 (0.954)    59    110403 1.00000   0.9253  80.00- 120.00   100.00
 14.859  14.859 (0.954)    87     61337                   19.74-  79.74    55.56
 14.859  14.859 (0.954)    41     19959                    0.00-  46.34    18.08
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                       CAS #: 156-59-2
 15.240  15.240 (0.978)    98     32126 1.00000   0.9861  80.00- 120.00   100.00
 15.240  15.240 (0.978)    61     56103                  145.90- 205.90   174.63
 15.240  15.240 (0.978)    96     51158                  125.53- 185.53   159.24
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
 15.240  15.240 (0.978)    72     20144 1.00000   0.9753  80.00- 120.00   100.00
 15.240  15.240 (0.978)    43     62190                  262.26- 322.26   308.73
 15.240  15.240 (0.978)    57      5604                    0.00-  55.71    27.82
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                              CAS #: 109-99-9
 15.580  15.580 (1.000)    42     37701 1.00000   0.9947  80.00- 120.00   100.00
 15.580  15.580 (1.000)    71     18083                   26.85-  86.85    47.96
 15.580  15.580 (1.000)    72     19224                   32.22-  92.22    50.99
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.580  15.580 (1.000)   130    154931 5.00000           80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    116562                   52.25- 112.25    75.23
 15.580  15.580 (1.000)    49    125478                   89.81- 149.81    80.99
-------------------------------------------------------------------------------
  100 Chloroform                                   CAS #: 67-66-3
 15.641  15.641 (1.004)    83    106660 1.00000   0.9535  80.00- 120.00   100.00
 15.641  15.641 (1.004)    85     67295                   33.97-  93.97    63.09
-------------------------------------------------------------------------------
  102 Cyclohexane                                  CAS #: 110-82-7
 15.888  15.888 (1.020)    84     53540 1.00000   0.9223  80.00- 120.00   100.00
 15.888  15.888 (1.020)    56     47579                   58.69- 118.69    88.87
 15.888  15.888 (1.020)    41     24908                   18.98-  78.98    46.52
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                        CAS #: 71-55-6
 15.888  15.888 (1.020)    97    128619 1.00000   0.9885  80.00- 120.00   100.00
 15.888  15.888 (1.020)    99     79551                   34.21-  94.21    61.85
-------------------------------------------------------------------------------
```

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

  106 Carbon Tetrachloride                          CAS #: 56-23-5
 16.073  16.073 (1.032)   119    113250 1.00000   0.8887  80.00- 120.00   100.00
 16.073  16.073 (1.032)   117    121916                   74.09- 134.09   107.65
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                        CAS #: 540-84-1
 16.313  16.313 (1.047)    56     65469 1.00000    1.009  80.00- 120.00   100.00
 16.313  16.313 (1.047)    57    207985                  306.64- 366.64   317.68
 16.313  16.313 (1.047)    41     62002                   64.14- 124.14    94.70
-------------------------------------------------------------------------------
  116 Benzene                                       CAS #: 71-43-2
 16.409  16.409 (0.967)    78    130252 1.00000   0.9374  80.00- 120.00   100.00
 16.409  16.409 (0.967)    77     30203                    0.00-  53.97    23.19
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                         CAS #: 17060-07-0
 16.409  16.409 (1.053)    65    219703 5.00000    4.940  80.00- 120.00   100.00
 16.409  16.409 (1.053)    67    108510                   21.16-  81.16    49.39
-------------------------------------------------------------------------------
  119 tert-Amyl methyl ether                        CAS #: 994-05-8
 16.433  16.433 (0.969)    87     30608 1.00000   0.8579  80.00- 120.00   100.00
 16.433  16.433 (0.969)    73    126721                  338.86- 398.86   414.01
 16.433  16.433 (0.969)    55     30725                   44.52- 104.52   100.38
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                            CAS #: 107-06-2
 16.530  16.530 (0.974)    62     68355 1.00000   0.9438  80.00- 120.00   100.00
 16.530  16.530 (0.974)    64     22075                    1.03-  61.03    32.29
-------------------------------------------------------------------------------
  121 Heptane                                       CAS #: 142-82-5
 16.554  16.554 (0.976)    57     29002 1.00000   0.8806  80.00- 120.00   100.00
 16.554  16.554 (0.976)   100     16643                   28.67-  88.67    57.39
 16.554  16.554 (0.976)    43     50340                  128.92- 188.92   173.57
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                           CAS #: 540-36-3
 16.963  16.963 (1.000)   114    579840 5.00000           80.00- 120.00   100.00
 16.963  16.963 (1.000)    88     88565                    0.00-  45.20    15.27
-------------------------------------------------------------------------------
  125 Trichloroethene                               CAS #: 79-01-6
 17.373  17.373 (1.024)   130     71898 1.00000   0.9976  80.00- 120.00   100.00
 17.373  17.373 (1.024)    95     64802                   63.99- 123.99    90.13
 17.373  17.373 (1.024)    97     43440                   29.21-  89.21    60.42
-------------------------------------------------------------------------------
  127 Methylcyclohexane                             CAS #: 108-87-2
 17.590  17.590 (1.037)    83     71385 1.00000   0.9228  80.00- 120.00   100.00
 17.590  17.590 (1.037)    55     44467                   31.29-  91.29    62.29
 17.590  17.590 (1.037)    56     15246                    0.00-  48.78    21.36
-------------------------------------------------------------------------------
  132 1,2-Dichloropropane                           CAS #: 78-87-5
 17.806  17.806 (1.050)    63     43737 1.00000   0.9776  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
132 1,2-Dichloropropane (continued)							
17.806	17.806 (1.050)	62	27385			34.19- 94.19	62.61
17.806	17.806 (1.050)	41	25718			27.38- 87.38	58.80
136 1,4-Dioxane					CAS #: 123-91-1		
17.951	17.951 (1.058)	88	33115	1.00000	0.9883	80.00- 120.00	100.00
17.927	17.927 (1.057)	58	16515			25.03- 85.03	49.87
17.951	17.951 (1.058)	57	5891			0.00- 50.67	17.79
138 Bromodichloromethane					CAS #: 75-27-4		
18.240	18.240 (1.075)	83	119457	1.00000	1.036	80.00- 120.00	100.00
18.240	18.240 (1.075)	85	69436			35.15- 95.15	58.13
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.086	19.086 (1.125)	75	81499	1.00000	0.9485	80.00- 120.00	100.00
19.086	19.086 (1.125)	77	24780			0.45- 60.45	30.41
19.086	19.086 (1.125)	39	33956			13.69- 73.69	41.66
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.265	19.265 (1.136)	43	64877	1.00000	0.9048	80.00- 120.00	100.00
19.265	19.265 (1.136)	58	29815			15.64- 75.64	45.96
19.287	19.287 (1.137)	85	17724			0.00- 56.71	27.32
$ 146 Toluene-d8					CAS #: 2037-26-5		
19.556	19.556 (1.153)	98	563004	5.00000	4.944	80.00- 120.00	100.00
19.556	19.556 (1.153)	70	59643			0.00- 40.11	10.59
19.556	19.556 (1.153)	100	378027			37.58- 97.58	67.14
147 Toluene					CAS #: 108-88-3		
19.713	19.713 (1.162)	91	155013	1.00000	0.9366	80.00- 120.00	100.00
19.713	19.713 (1.162)	92	89615			28.92- 88.92	57.81
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.304	20.304 (0.908)	75	78830	1.00000	0.9537	80.00- 120.00	100.00
20.276	20.276 (0.907)	77	25642			0.55- 60.55	32.53
20.276	20.276 (0.907)	39	29716			8.25- 68.25	37.70
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.688	20.688 (0.925)	97	58272	1.00000	0.9056	80.00- 120.00	100.00
20.688	20.688 (0.925)	99	36859			32.91- 92.91	63.25
20.688	20.688 (0.925)	83	44783			47.93- 107.93	76.85
156 Tetrachloroethene					CAS #: 127-18-4		
20.853	20.853 (0.932)	166	95646	1.00000	0.9647	80.00- 120.00	100.00
20.853	20.853 (0.932)	129	63327			42.31- 102.31	66.21
20.853	20.853 (0.932)	131	65804			40.11- 100.11	68.80

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

  158 2-Hexanone                                   CAS #: 591-78-6
 21.018  21.018 (0.940)    58     40708 1.00000   0.9831  80.00- 120.00   100.00
 21.018  21.018 (0.940)    43     60419                  140.44- 200.44   148.42
 21.018  21.018 (0.940)   100     10329                    0.00-  59.62    25.37
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
 21.430  21.430 (0.958)   129    128951 1.00000   0.9872  80.00- 120.00   100.00
 21.430  21.430 (0.958)   127     99259                   46.82- 106.82    76.97
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
 21.677  21.677 (0.969)   107     94774 1.00000   0.9598  80.00- 120.00   100.00
 21.677  21.677 (0.969)   109     89626                   65.45- 125.45    94.57
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                             CAS #: 3114-55-4
 22.366  22.366 (1.000)   117    533830 5.00000           80.00- 120.00   100.00
 22.366  22.366 (1.000)    82    269261                   20.64-  80.64    50.44
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
 22.407  22.407 (1.002)   112    136158 1.00000   0.9427  80.00- 120.00   100.00
 22.407  22.407 (1.002)   114     42571                    2.42-  62.42    31.27
 22.407  22.407 (1.002)    77     84474                   23.54-  83.54    62.04
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
 22.490  22.490 (1.006)   106     59937 1.00000   0.8521  80.00- 120.00   100.00
 22.490  22.490 (1.006)    91    205187                  282.51- 342.51   342.34
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
 22.656  22.656 (1.013)   106     76095 1.00000   0.9312  80.00- 120.00   100.00
 22.656  22.656 (1.013)    91    160203                  166.46- 226.46   210.53
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
 23.257  23.257 (1.040)   106     74419 1.00000   0.9929  80.00- 120.00   100.00
 23.257  23.257 (1.040)    91    151716                  184.01- 244.01   203.87
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
 23.298  23.298 (1.042)   104    117684 1.00000   0.9279  80.00- 120.00   100.00
 23.278  23.278 (1.041)    78     61581                   20.27-  80.27    52.33
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
 23.639  23.639 (1.057)   173    120659 1.00000   0.9323  80.00- 120.00   100.00
 23.639  23.639 (1.057)   171     59405                   20.88-  80.88    49.23
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
 23.728  23.728 (1.061)   105    241543 1.00000   0.9478  80.00- 120.00   100.00
 23.728  23.728 (1.061)   120     65106                    0.00-  57.47    26.95
-------------------------------------------------------------------------------
```

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

$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 24.020  24.020 (1.074)   174    362042 5.00000    4.943  80.00- 120.00   100.00
 24.020  24.020 (1.074)    95    393463                   77.42- 137.42   108.68
 24.020  24.020 (1.074)   176    364911                   65.38- 125.38   100.79
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 24.199  24.199 (1.082)    83    108704 1.00000   0.9160  80.00- 120.00   100.00
 24.199  24.199 (1.082)    85     72697                   35.73-  95.73    66.88
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
 24.267  24.267 (1.085)    91    255572 1.00000   0.9522  80.00- 120.00   100.00
 24.267  24.267 (1.085)   120     63801                    0.00-  55.24    24.96
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 24.401  24.401 (1.091)   105    208565 1.00000   0.9168  80.00- 120.00   100.00
 24.401  24.401 (1.091)   120     66737                    1.08-  61.08    32.00
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.469  24.469 (1.094)   105    175451 1.00000   0.9931  80.00- 120.00   100.00
 24.469  24.469 (1.094)   120     84907                   18.44-  78.44    48.39
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.917  24.917 (1.114)   105    135148 1.00000   0.8830  80.00- 120.00   100.00
 24.917  24.917 (1.114)   120     61348                   16.20-  76.20    45.39
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 25.321  25.321 (1.132)   146    126965 1.00000   0.8784  80.00- 120.00   100.00
 25.321  25.321 (1.132)   148     83886                   35.51-  95.51    66.07
 25.321  25.321 (1.132)   111     51029                    9.35-  69.35    40.19
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 25.433  25.433 (1.137)   146    125259 1.00000   0.9241  80.00- 120.00   100.00
 25.433  25.433 (1.137)   148     87956                   32.61-  92.61    70.22
 25.433  25.433 (1.137)   111     46165                    6.90-  66.90    36.86
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 25.567  25.567 (1.143)    91    161004 1.00000   0.9440  80.00- 120.00   100.00
 25.567  25.567 (1.143)   126     35963                    0.00-  51.82    22.34
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.859  25.859 (1.156)   146    116751 1.00000   0.9416  80.00- 120.00   100.00
 25.859  25.859 (1.156)   148     77727                   33.69-  93.69    66.58
 25.859  25.859 (1.156)   111     46460                    8.96-  68.96    39.79
-------------------------------------------------------------------------------
  226 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 27.607  27.607 (1.234)   180     55249 1.00000   0.9827  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
226 1,2,4-Trichlorobenzene (continued)							
27.607	27.607 (1.234)	182	52161			66.05- 126.05	94.41
227 Hexachlorobutadiene					CAS #: 87-68-3		
27.697	27.697 (1.238)	225	80496	1.00000	1.053	80.00- 120.00	100.00
27.697	27.697 (1.238)	223	47848			33.78- 93.78	59.44
228 Naphthalene					CAS #: 91-20-3		
27.921	27.921 (1.248)	128	8634	0.10000	0.1052	80.00- 120.00	100.00
27.921	27.921 (1.248)	127	4254			0.00- 46.39	49.27

QC Flag Legend

M - Compound response manually integrated.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e031709.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/17Mar2016.b/e16l0317a.m
Misc Info: 1.0ppbv (1.0ppbv)

Calibration Date: 17-MAR-2016
Calibration Time: 17:24
Client Smp ID: Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	164946	98968	230924	154931	-6.07
123 1,4-Difluorobenze	626935	376161	877709	579840	-7.51
163 Chlorobenzene-d5	567678	340607	794749	533830	-5.96

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.96	0.14
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/17Mar2016.b/e031709.d

Date : 17-MAR-2016 16:31

Client ID: Level 8

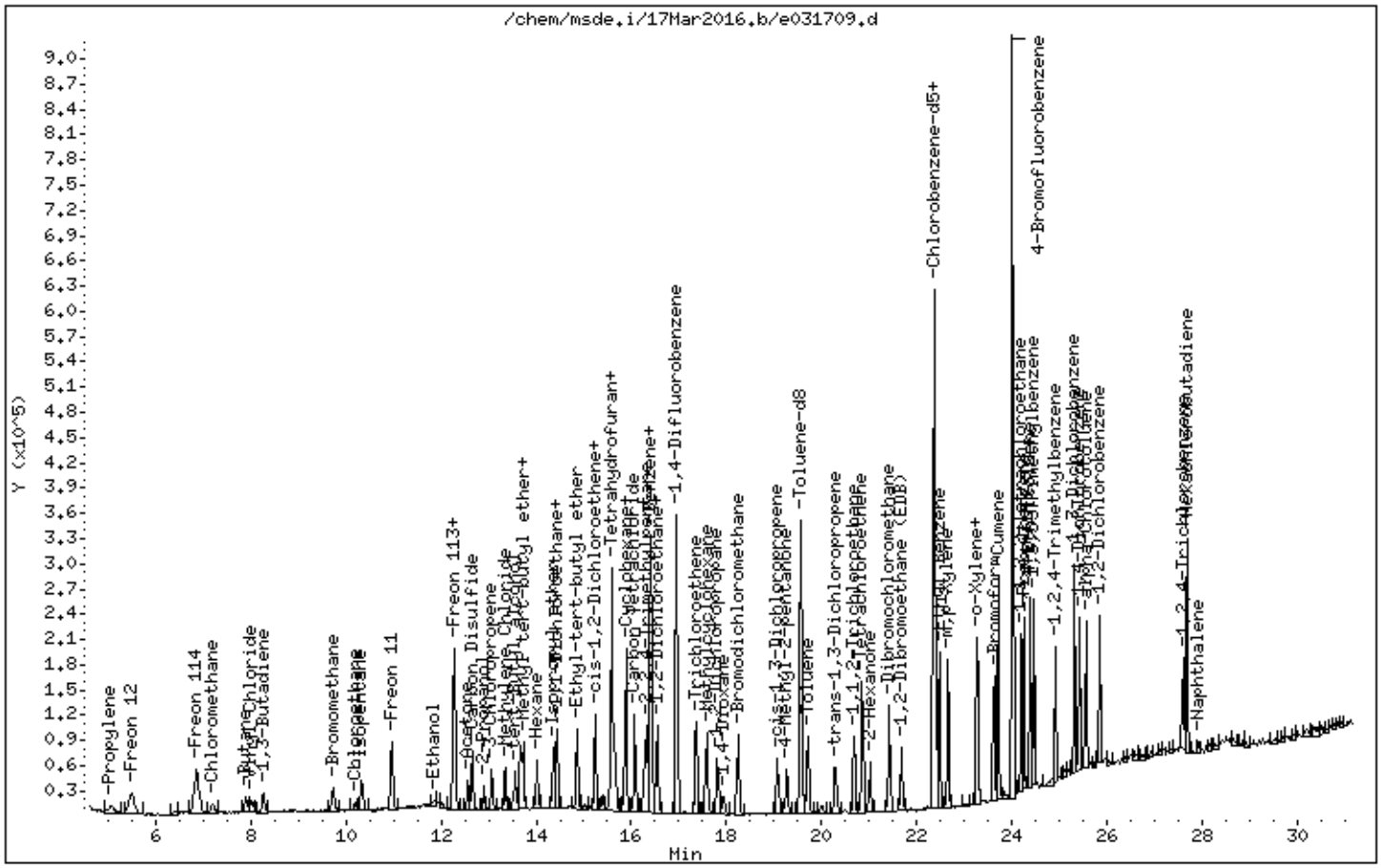
Instrument: msde.i

Sample Info: 250mL# 2789-14

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/24May2016.b/e052407.d
Lab Smp Id: ICAL Level 9
Inj Date : 24-MAY-2016 11:00
Operator : ef Inst ID: msde.i
Smp Info : 100mL# 2789-129
Misc Info : 2.0ppbv (5.0ppbv) AT-1
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/24May2016.b/e16l0317f.m
Meth Date : 24-May-2016 14:10 atoyama Quant Type: ISTD
Cal Date : 24-MAY-2016 11:00 Cal File: e052407.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FreonICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
7 Freon 134a					CAS #: 811-97-2		
4.642	4.642 (0.302)	83	51260	2.00000	2.022	0.00- 0.00	100.00(T)
4.666	4.666 (0.303)	69	15557			0.00- 0.00	30.35
0.000	1.000 (0.000)	0	0			0.00- 0.00	0.00
10 1,1-Difluoroethane					CAS #: 75-37-6		
5.076	5.076 (0.330)	65	21350	2.00000	2.050	0.00- 0.00	100.00
5.076	5.076 (0.330)	51	30096			0.00- 0.00	140.96
13 Chlorodifluoromethane					CAS #: 75-45-6		
5.751	5.751 (0.374)	51	52809	2.00000	1.857	0.00- 0.00	100.00(a)
5.751	5.751 (0.374)	67	13373			0.00- 0.00	25.32
5.726	5.726 (0.372)	85	942			0.00- 0.00	1.78
16 Freon 142b					CAS #: 75-68-3		
6.859	6.859 (0.446)	65	105387	2.00000	1.850	0.00- 0.00	100.00(a)
6.835	6.835 (0.444)	45	21041			0.00- 0.00	19.97
6.835	6.835 (0.444)	81	6350			0.00- 0.00	6.03
37 Dichlorofluoromethane					CAS #: 75-43-4		
10.861	10.861 (0.706)	67	123765	2.00000	1.971	0.00- 0.00	100.00(a)

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

   37 Dichlorofluoromethane (continued)
 10.861  10.861 (0.706)    69     39770                     0.00-   0.00    32.13
 10.881  10.881 (0.707)    47     10976                     0.00-   0.00     8.87
-------------------------------------------------------------------------------
   48 Freon 123                                    CAS #: 306-83-2
 12.023  12.023 (0.781)    83    138564 2.00000    1.904   0.00-   0.00   100.00(a)
 12.023  12.023 (0.781)   133     40313                     0.00-   0.00    29.09
 12.023  12.023 (0.781)    85     93571                     0.00-   0.00    67.53
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.391  15.391 (1.000)   130    128678 5.00000           80.00- 120.00   100.00
 15.391  15.391 (1.000)   128     99421                   52.25- 112.25    77.26
 15.391  15.391 (1.000)    49     92453                   89.81- 149.81    71.85
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                          CAS #: 540-36-3
 16.737  16.737 (1.000)   114    465780 5.00000           80.00- 120.00   100.00
 16.737  16.737 (1.000)    88     67202                    0.00-  45.20    14.43
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                             CAS #: 3114-55-4
 22.177  22.177 (1.000)   117    417615 5.00000           80.00- 120.00   100.00
 22.177  22.177 (1.000)    82    207540                   20.64-  80.64    49.70
-------------------------------------------------------------------------------
```

QC Flag Legend

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

Report Date: 24-May-2016 14:10

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e052407.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/24May2016.b/e16l0317f.m
Misc Info: 2.0ppbv (5.0ppbv) AT-1

Calibration Date: 24-MAY-2016
Calibration Time: 07:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	155366	93220	217512	128678	-17.18
123 1,4-Difluorobenze	569598	341759	797437	465780	-18.23
163 Chlorobenzene-d5	506881	304129	709633	417615	-17.61

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/24May2016.b/e052407.d

Date : 24-MAY-2016 11:00

Client ID:

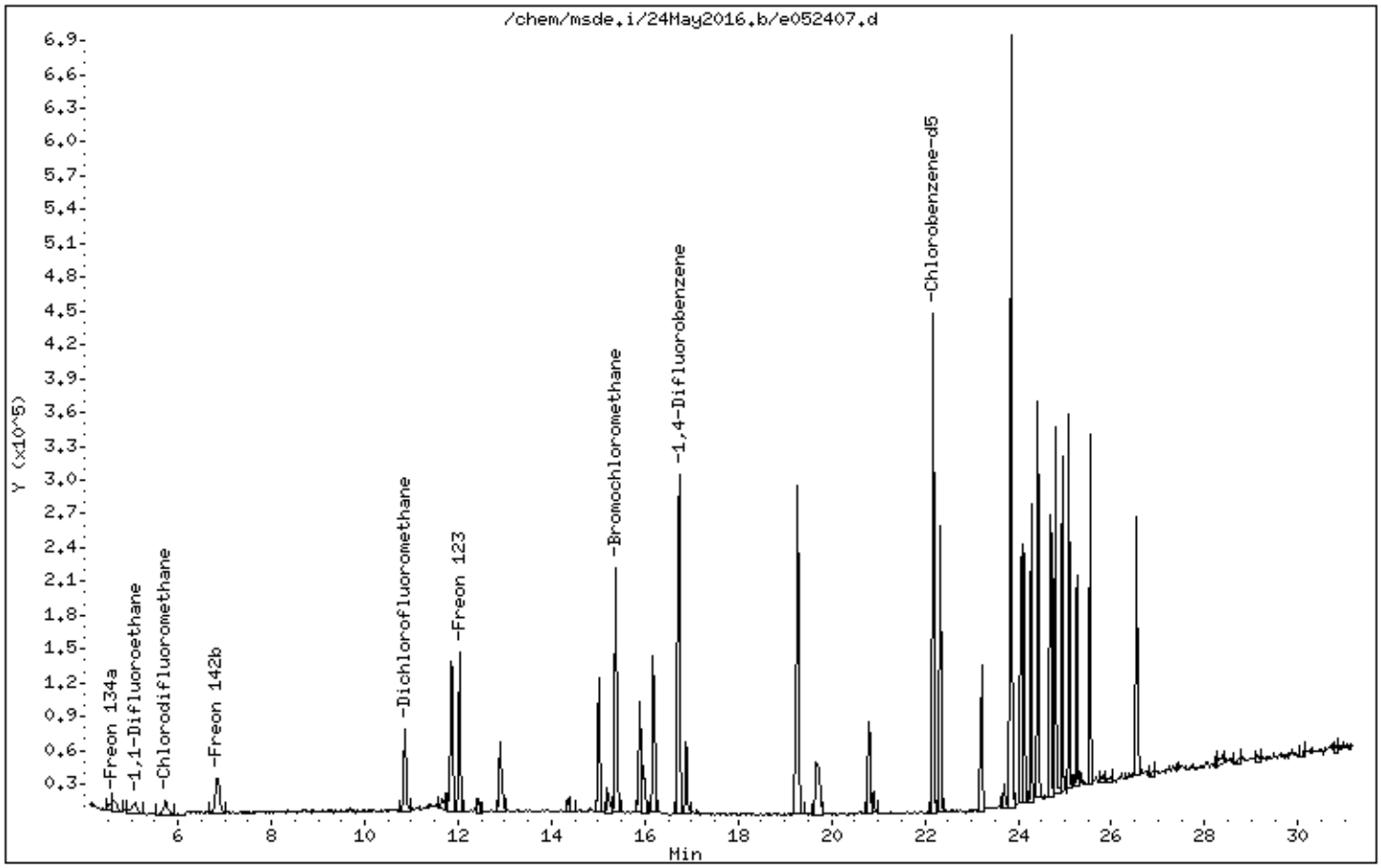
Instrument: msde.i

Sample Info: 100mL# 2789-129

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/09May2016.b/e050909.d
Lab Smp Id: ICAL Level 9
Inj Date : 09-MAY-2016 12:56
Operator : ef Inst ID: msde.i
Smp Info : 100mL# 2789-105
Misc Info : 2.0ppbv (5.0ppbv) Combo
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/09May2016.b/e16l0317d.m
Meth Date : 09-May-2016 17:07 efinn Quant Type: ISTD
Cal Date : 09-MAY-2016 12:56 Cal File: e050909.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ComboICAL-VB.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
36 1-Pentene					CAS #: 109-67-1		
10.823	10.823 (0.703)	55	44155	2.00000	2.012	0.00- 0.00	100.00
10.823	10.823 (0.703)	42	49234			0.00- 0.00	111.50
34 Pentane					CAS #: 109-66-0		
10.957	10.957 (0.712)	43	75303	2.00000	1.957	0.00- 0.00	100.00
10.976	10.976 (0.713)	57	15946			0.00- 0.00	21.18
10.976	10.976 (0.713)	72	13856			0.00- 0.00	18.40
44 Ethyl Ether					CAS #: 60-29-7		
11.642	11.642 (0.756)	74	35269	2.00000	1.977	0.00- 0.00	100.00(T)
11.642	11.642 (0.756)	59	40099			0.00- 0.00	113.69
0.000	1.000 (0.000)	31	0			0.00- 0.00	0.00
53 Iodomethane					CAS #: 74-88-4		
12.404	12.404 (0.806)	142	217204	2.00000	1.962	0.00- 0.00	100.00
12.404	12.404 (0.806)	127	95158			0.00- 0.00	43.81
59 Cyclopentene					CAS #: 142-29-0		
12.900	12.900 (0.838)	67	149928	2.00000	1.997	0.00- 0.00	100.00

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

   59 Cyclopentene (continued)
 12.900  12.900 (0.838)    68     60081                    0.00-   0.00    40.07
 12.900  12.900 (0.838)    53     25394                    0.00-   0.00    16.94
-------------------------------------------------------------------------------
   64 Cyclopentane                                 CAS #: 287-92-3
 13.094  13.094 (0.851)    70     36951 2.00000    1.907   0.00-   0.00   100.00
 13.094  13.094 (0.851)    55     37500                    0.00-   0.00   101.49
-------------------------------------------------------------------------------
   74 Acrylonitrile                                CAS #: 107-13-1
 13.671  13.671 (0.888)    53     45289 2.00000    2.004   0.00-   0.00   100.00
 13.671  13.671 (0.888)    52     39496                    0.00-   0.00    87.21
-------------------------------------------------------------------------------
   76 1-Hexene                                     CAS #: 592-41-6
 13.726  13.726 (0.892)    55     35669 2.00000    1.813   0.00-   0.00   100.00
 13.726  13.726 (0.892)    41     52283                    0.00-   0.00   146.58
 13.726  13.726 (0.892)    84     20782                    0.00-   0.00    58.26
-------------------------------------------------------------------------------
   84 1-Propanol                                   CAS #: 71-23-8
 14.384  14.384 (0.935)    59     13472 2.00000    2.200   0.00-   0.00   100.00
 14.384  14.384 (0.935)    42     10865                    0.00-   0.00    80.65
 14.384  14.384 (0.935)    41      7058                    0.00-   0.00    52.39
-------------------------------------------------------------------------------
   90 2,2-Dichloropropane                          CAS #: 594-20-7
 15.009  15.009 (0.975)    77    173543 2.00000    1.981   0.00-   0.00   100.00
 15.009  15.009 (0.975)    79     54934                    0.00-   0.00    31.65
 15.009  15.009 (0.975)    97     35682                    0.00-   0.00    20.56
-------------------------------------------------------------------------------
   94 Ethyl Acetate                                CAS #: 141-78-6
 15.047  15.047 (0.978)    70     13817 2.00000    1.827   0.00-   0.00   100.00
 15.047  15.047 (0.978)    43    111338                    0.00-   0.00   805.80
 15.009  15.009 (0.975)    61     40577                    0.00-   0.00   293.67
-------------------------------------------------------------------------------
   93 Methyl Acrylate                              CAS #: 96-33-3
 15.123  15.123 (0.983)    55    115271 2.00000    1.979   0.00-   0.00   100.00
 15.123  15.123 (0.983)    85     26580                    0.00-   0.00    23.06
 15.123  15.123 (0.983)    58     11953                    0.00-   0.00    10.37
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.391  15.391 (1.000)   130    134839 5.00000           80.00- 120.00   100.00
 15.391  15.391 (1.000)   128    100760                   52.25- 112.25    74.73
 15.391  15.391 (1.000)    49    100603                   89.81- 149.81    74.61
-------------------------------------------------------------------------------
  107 1,1-Dichloropropene                          CAS #: 563-58-6
 15.884  15.884 (1.032)   110     48393 2.00000    1.921   0.00-   0.00   100.00
 15.884  15.884 (1.032)    75    127294                    0.00-   0.00   263.04
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
115 Isobutanol					CAS #: 78-83-1		
15.977	15.977 (1.038)	43	48728	2.00000	1.804	0.00- 0.00	100.00
15.977	15.977 (1.038)	41	40102			0.00- 0.00	82.30
15.977	15.977 (1.038)	55	6440			0.00- 0.00	13.22
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
16.737	16.737 (1.000)	114	505390	5.00000		80.00- 120.00	100.00
16.737	16.737 (1.000)	88	73831			0.00- 45.20	14.61
124 n-Butanol					CAS #: 71-36-3		
16.906	16.906 (1.010)	56	90537	2.00000	1.993	0.00- 0.00	100.00
16.906	16.906 (1.010)	41	60876			0.00- 0.00	67.24
16.906	16.906 (1.010)	43	43853			0.00- 0.00	48.44
128 Ethyl acrylate					CAS #: 140-88-5		
17.171	17.171 (1.026)	99	14420	2.00000	1.909	0.00- 0.00	100.00
17.171	17.171 (1.026)	45	11997			0.00- 0.00	83.20
17.171	17.171 (1.026)	55	125578			0.00- 0.00	870.86
131 2-Pentanone					CAS #: 107-87-9		
17.388	17.388 (1.039)	43	154363	2.00000	1.971	0.00- 0.00	100.00
17.388	17.388 (1.039)	58	13873			0.00- 0.00	8.99
17.388	17.388 (1.039)	86	42107			0.00- 0.00	27.28
134 Methyl Methacrylate					CAS #: 80-62-6		
17.556	17.556 (1.049)	41	79565	2.00000	1.946	0.00- 0.00	100.00
17.556	17.556 (1.049)	69	84435			0.00- 0.00	106.12
17.556	17.556 (1.049)	100	35735			0.00- 0.00	44.91
137 Dibromomethane					CAS #: 74-95-3		
17.797	17.797 (1.063)	174	150567	2.00000	1.993	0.00- 0.00	100.00
17.797	17.797 (1.063)	93	116537			0.00- 0.00	77.40
17.797	17.797 (1.063)	95	94774			0.00- 0.00	62.94
148 Octane					CAS #: 111-65-9		
19.320	19.320 (1.154)	57	49597	2.00000	1.950	0.00- 0.00	100.00
19.320	19.320 (1.154)	85	71636			0.00- 0.00	144.44
19.320	19.320 (1.154)	43	100375			0.00- 0.00	202.38
157 1,3-Dichloropropane					CAS #: 142-28-9		
20.795	20.795 (0.938)	76	151538	2.00000	1.957	0.00- 0.00	100.00
20.795	20.795 (0.938)	41	75482			0.00- 0.00	49.81
20.795	20.795 (0.938)	78	47871			0.00- 0.00	31.59
159 Butyl Acetate					CAS #: 123-86-4		
20.905	20.905 (0.943)	56	15186	2.00000	2.009	0.00- 0.00	100.00

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

  159 Butyl Acetate (continued)
 20.905  20.905 (0.943)    73      9086                     0.00-   0.00    59.83
 20.905  20.905 (0.943)    43     33215                     0.00-   0.00   218.72
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                              CAS #: 3114-55-4
 22.177  22.177 (1.000)   117    449145 5.00000           80.00- 120.00   100.00
 22.177  22.177 (1.000)    82    224111                   20.64-  80.64    49.90
-------------------------------------------------------------------------------
  168 1,1,1,2-Tetrachloroethane                     CAS #: 630-20-6
 22.343  22.343 (1.007)   131    175712 2.00000    1.958   0.00-   0.00   100.00
 22.343  22.343 (1.007)   117    115399                     0.00-   0.00    65.68
 22.343  22.343 (1.007)    95     63594                     0.00-   0.00    36.19
-------------------------------------------------------------------------------
  170 Nonane                                        CAS #: 111-84-2
 22.301  22.301 (1.006)    43     88843 2.00000    1.976   0.00-   0.00   100.00
 22.301  22.301 (1.006)    57     93518                     0.00-   0.00   105.26
 22.301  22.301 (1.006)    85     47485                     0.00-   0.00    53.45
-------------------------------------------------------------------------------
  173 2-Heptanone                                   CAS #: 110-43-0
 23.214  23.214 (1.047)    58     84941 2.00000    1.827   0.00-   0.00   100.00
 23.214  23.214 (1.047)    43    128319                     0.00-   0.00   151.07
-------------------------------------------------------------------------------
  176 Cyclohexanone                                 CAS #: 108-94-1
 23.811  23.811 (1.074)    55     80423 2.00000    2.077   0.00-   0.00   100.00
 23.811  23.811 (1.074)    98     46566                     0.00-   0.00    57.90
 23.811  23.811 (1.074)    42     52747                     0.00-   0.00    65.59
-------------------------------------------------------------------------------
  179 alpha-Pinene                                  CAS #: 80-56-8
 23.497  23.497 (1.060)    93    355215 2.00000    1.983   0.00-   0.00   100.00
 23.519  23.519 (1.061)   121     49518                     0.00-   0.00    13.94
 23.497  23.497 (1.060)    92    139303                     0.00-   0.00    39.22
-------------------------------------------------------------------------------
  180 Bromobenzene                                  CAS #: 108-86-1
 24.080  24.080 (1.086)   156    177301 2.00000    1.964   0.00-   0.00   100.00
 24.080  24.080 (1.086)   158    166842                     0.00-   0.00    94.10
 24.080  24.080 (1.086)    77    216115                     0.00-   0.00   121.89
-------------------------------------------------------------------------------
  185 1,2,3-Trichloropropane                        CAS #: 96-18-4
 24.125  24.125 (1.088)   110     71416 2.00000    1.970   0.00-   0.00   100.00
 24.125  24.125 (1.088)    75    235348                     0.00-   0.00   329.55
 24.125  24.125 (1.088)    61     38992                     0.00-   0.00    54.60
-------------------------------------------------------------------------------
  187 Decane                                        CAS #: 124-18-5
 24.170  24.170 (1.090)    57     70803 2.00000    1.932   0.00-   0.00   100.00
 24.170  24.170 (1.090)    71     36499                     0.00-   0.00    51.55
 24.170  24.170 (1.090)   142      6512                     0.00-   0.00     9.20
-------------------------------------------------------------------------------
```

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

  189 2-Chlorotoluene                               CAS #: 95-49-8
 24.282  24.282 (1.095)   126    112257 2.00000    1.938   0.00-   0.00   100.00
 24.282  24.282 (1.095)    91    285954                    0.00-   0.00   254.73
 24.282  24.282 (1.095)    65     25510                    0.00-   0.00    22.72
-------------------------------------------------------------------------------
  191 4-Chlorotoluene                               CAS #: 106-43-4
 24.416  24.416 (1.101)   126    107061 2.00000    1.994   0.00-   0.00   100.00
 24.416  24.416 (1.101)    91    280278                    0.00-   0.00   261.79
 24.416  24.416 (1.101)    63     28872                    0.00-   0.00    26.97
-------------------------------------------------------------------------------
  195 tert-Butylbenzene                             CAS #: 98-06-6
 24.708  24.708 (1.114)   119    296810 2.00000    1.961   0.00-   0.00   100.00
 24.708  24.708 (1.114)   134     75959                    0.00-   0.00    25.59
 24.686  24.686 (1.113)    91    180906                    0.00-   0.00    60.95
-------------------------------------------------------------------------------
  197 Pentachloroethane                             CAS #: 76-01-7
 24.798  24.798 (1.118)   167    118441 2.00000    1.931   0.00-   0.00   100.00
 24.798  24.798 (1.118)   117     98264                    0.00-   0.00    82.96
 24.798  24.798 (1.118)   169     56842                    0.00-   0.00    47.99
-------------------------------------------------------------------------------
  199 D-Limonene                                    CAS #: 5989-27-5
 25.044  25.044 (1.129)    68    113761 2.00000    1.994   0.00-   0.00   100.00
 25.044  25.044 (1.129)    93    287239                    0.00-   0.00   252.49
-------------------------------------------------------------------------------
  203 sec-Butylbenzene                              CAS #: 135-98-8
 24.955  24.955 (1.125)   105    554471 2.00000    1.942   0.00-   0.00   100.00
 24.955  24.955 (1.125)   134    128050                    0.00-   0.00    23.09
 24.955  24.955 (1.125)    91     83896                    0.00-   0.00    15.13
-------------------------------------------------------------------------------
  206 bis(2-Chloroethyl) Ether                      CAS #: 111-44-4
 25.044  25.044 (1.129)    93    284572 2.00000    2.006   0.00-   0.00   100.00
 25.044  25.044 (1.129)    95     71974                    0.00-   0.00    25.29
 25.044  25.044 (1.129)    63    118520                    0.00-   0.00    41.65
-------------------------------------------------------------------------------
  207 p-Cymene                                      CAS #: 99-87-6
 25.089  25.089 (1.131)   119    349043 2.00000    2.002   0.00-   0.00   100.00
 25.089  25.089 (1.131)   134     94428                    0.00-   0.00    27.05
 25.089  25.089 (1.131)    91     77864                    0.00-   0.00    22.31
-------------------------------------------------------------------------------
  210 1,2,3-Trimethylbenzene                        CAS #: 526-73-8
 25.269  25.269 (1.139)   120    107064 2.00000    1.917   0.00-   0.00   100.00
 25.269  25.269 (1.139)   105    235393                    0.00-   0.00   219.86
 25.269  25.269 (1.139)    77     28963                    0.00-   0.00    27.05
-------------------------------------------------------------------------------
  213 Butylbenzene                                  CAS #: 104-51-8
 25.538  25.538 (1.152)   134     85703 2.00000    1.959   0.00-   0.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
213 Butylbenzene (continued)							
25.538	25.538 (1.152)	91	281898			0.00- 0.00	328.92
25.538	25.538 (1.152)	92	155134			0.00- 0.00	181.01
215 Undecane					CAS #: 1120-21-4		
25.515	25.515 (1.151)	57	55678	2.00000	2.096	0.00- 0.00	100.00
25.515	25.515 (1.151)	43	40323			0.00- 0.00	72.42
25.515	25.515 (1.151)	85	21370			0.00- 0.00	38.38
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
26.546	26.546 (1.197)	157	139859	2.00000	1.972	0.00- 0.00	100.00
26.546	26.546 (1.197)	75	107812			0.00- 0.00	77.09
26.546	26.546 (1.197)	155	107493			0.00- 0.00	76.86
225 Dodecane					CAS #: 112-40-3		
26.614	26.614 (1.200)	85	15827	2.00000	2.000	0.00- 0.00	100.00
26.614	26.614 (1.200)	57	32555			0.00- 0.00	205.69
26.614	26.614 (1.200)	43	23331			0.00- 0.00	147.41

QC Flag Legend

T - Target compound detected outside RT window.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e050909.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/09May2016.b/e16l0317d.m
Misc Info: 2.0ppbv (5.0ppbv) Combo

Calibration Date: 09-MAY-2016
Calibration Time: 07:51

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	159373	95624	223122	134839	-15.39
123 1,4-Difluorobenze	624905	374943	874867	505390	-19.13
163 Chlorobenzene-d5	549919	329951	769887	449145	-18.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/09May2016.b/e050909.d

Date : 09-MAY-2016 12:56

Client ID:

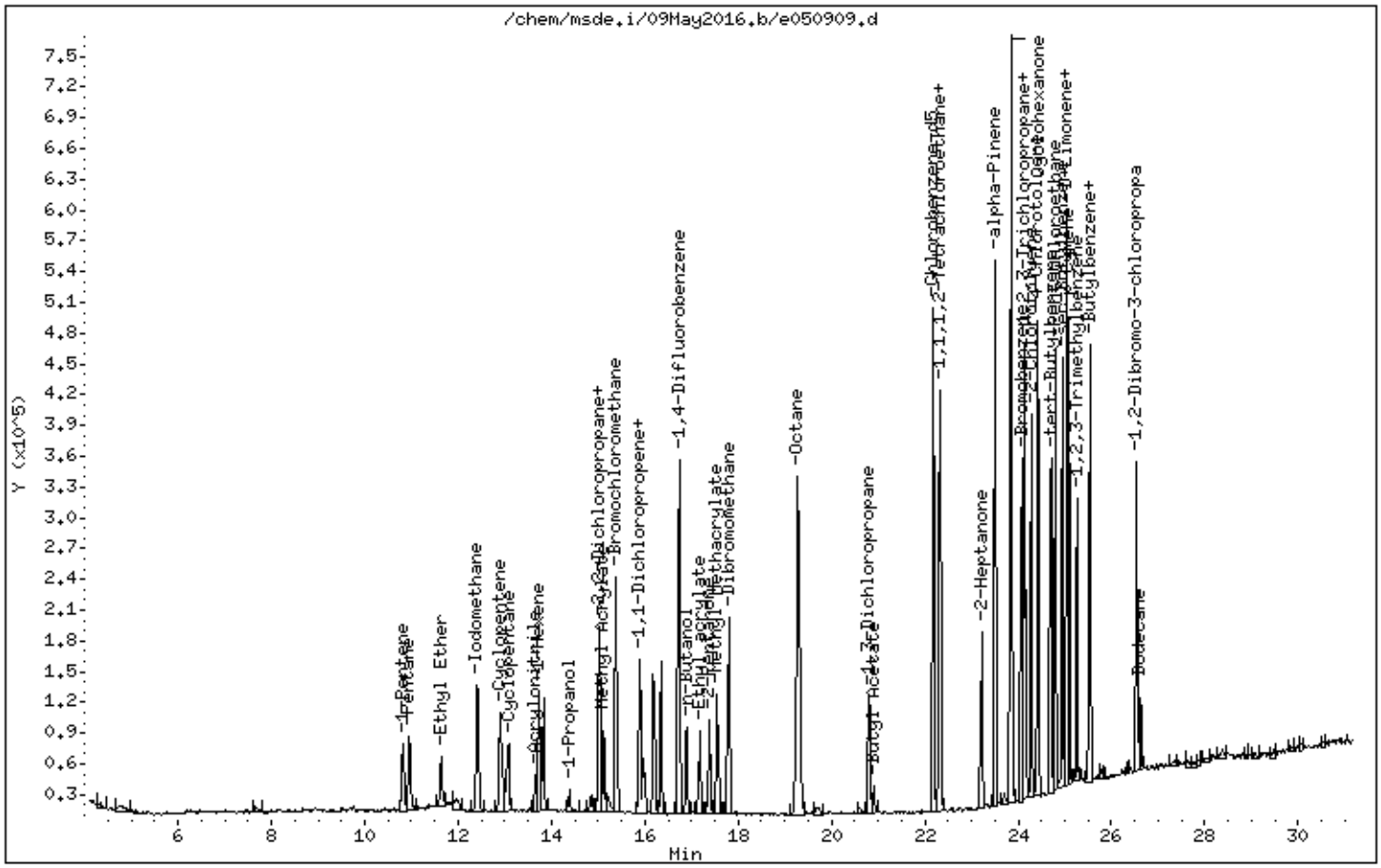
Instrument: msde.i

Sample Info: 100mL# 2789-105

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/22Mar2016.b/e032207.d
Lab Smp Id: ICAL Client Smp ID: Level 9
Inj Date : 22-MAR-2016 14:04
Operator : ef Inst ID: msde.i
Smp Info : 100mL# 2759-238
Misc Info : 2.0ppbv (5.0ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/22Mar2016.b/e16l0317a.m
Meth Date : 24-Mar-2016 08:33 efinn Quant Type: ISTD
Cal Date : 22-MAR-2016 14:04 Cal File: e032207.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1.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
7 Freon 134a					CAS #: 811-97-2		
4.877	4.877 (0.313)	83	31585	2.00000	2.036	0.00- 0.00	100.00(T)
4.877	4.877 (0.313)	69	22043			0.00- 0.00	69.79
0.000	1.000 (0.000)	0	0			0.00- 0.00	0.00
10 1,1-Difluoroethane					CAS #: 75-37-6		
5.335	5.335 (0.342)	65	11996	2.00000	1.832	0.00- 0.00	100.00(a)
5.335	5.335 (0.342)	51	12959			0.00- 0.00	108.03
13 Chlorodifluoromethane					CAS #: 75-45-6		
5.986	5.986 (0.384)	51	36044	2.00000	2.137	0.00- 0.00	100.00(T)
5.962	5.962 (0.383)	67	9647			0.00- 0.00	26.76
0.000	1.000 (0.000)	85	0			0.00- 0.00	0.00
16 Freon 142b					CAS #: 75-68-3		
7.094	7.094 (0.455)	65	69656	2.00000	2.036	0.00- 0.00	100.00
7.119	7.119 (0.457)	45	12279			0.00- 0.00	17.63

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

   16 Freon 142b (continued)
  7.094   7.094 (0.455)    81      4659                     0.00-   0.00     6.69
-------------------------------------------------------------------------------
   37 Dichlorofluoromethane                        CAS #: 75-43-4
 11.071  11.071 (0.711)    67     68909 2.00000    1.928   0.00-   0.00   100.00(a)
 11.071  11.071 (0.711)    69     21878                     0.00-   0.00    31.75
 11.052  11.052 (0.709)    47      5558                     0.00-   0.00     8.07
-------------------------------------------------------------------------------
   48 Freon 123                                    CAS #: 306-83-2
 12.214  12.214 (0.784)    83    106156 2.00000    1.924   0.00-   0.00   100.00(a)
 12.214  12.214 (0.784)   133     33706                     0.00-   0.00    31.75
 12.214  12.214 (0.784)    85     77789                     0.00-   0.00    73.28
-------------------------------------------------------------------------------
   59 Cyclopentene                                 CAS #: 142-29-0
 13.090  13.090 (0.840)    67     49814 2.00000    1.964   0.00-   0.00   100.00(a)
 13.090  13.090 (0.840)    68     19653                     0.00-   0.00    39.45
 13.090  13.090 (0.840)    53      9293                     0.00-   0.00    18.66
-------------------------------------------------------------------------------
   84 1-Propanol                                   CAS #: 71-23-8
 14.552  14.552 (0.934)    59     14584 2.00000    2.050   0.00-   0.00   100.00
 14.552  14.552 (0.934)    42     10318                     0.00-   0.00    70.75
 14.552  14.552 (0.934)    41      7182                     0.00-   0.00    49.25
-------------------------------------------------------------------------------
   90 2,2-Dichloropropane                          CAS #: 594-20-7
 15.202  15.202 (0.976)    77     89068 2.00000    1.987   0.00-   0.00   100.00(a)
 15.202  15.202 (0.976)    79     27358                     0.00-   0.00    30.72
 15.202  15.202 (0.976)    97     17442                     0.00-   0.00    19.58
-------------------------------------------------------------------------------
*  98 Bromochloromethane                          CAS #: 74-97-5
 15.580  15.580 (1.000)   130    190394 5.00000           80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    145857                   52.25- 112.25    76.61
 15.580  15.580 (1.000)    49    152277                   89.81- 149.81    79.98
-------------------------------------------------------------------------------
  107 1,1-Dichloropropene                         CAS #: 563-58-6
 16.104  16.104 (1.034)   110     22294 2.00000    1.908   0.00-   0.00   100.00(a)
 16.104  16.104 (1.034)    75     63010                     0.00-   0.00   282.63
-------------------------------------------------------------------------------
  115 Isobutanol                                  CAS #: 78-83-1
 16.165  16.165 (1.038)    43     68320 2.00000    1.987   0.00-   0.00   100.00(a)
 16.165  16.165 (1.038)    41     56724                     0.00-   0.00    83.03
 16.165  16.165 (1.038)    55      5804                     0.00-   0.00     8.50
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                         CAS #: 540-36-3
 16.939  16.939 (1.000)   114    738230 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88    109699                    0.00-  45.20    14.86
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
124 n-Butanol					CAS #: 71-36-3		
17.108	17.108 (1.010)	56	94613	2.00000	2.028	0.00- 0.00	100.00
17.108	17.108 (1.010)	41	65538			0.00- 0.00	69.27
17.108	17.108 (1.010)	43	48040			0.00- 0.00	50.78
157 1,3-Dichloropropane					CAS #: 142-28-9		
21.046	21.046 (0.941)	76	113453	2.00000	2.002	0.00- 0.00	100.00
21.046	21.046 (0.941)	41	56999			0.00- 0.00	50.24
21.046	21.046 (0.941)	78	35480			0.00- 0.00	31.27
159 Butyl Acetate					CAS #: 123-86-4		
21.128	21.128 (0.945)	56	13576	2.00000	2.039	0.00- 0.00	100.00
21.128	21.128 (0.945)	73	9146			0.00- 0.00	67.37
21.128	21.128 (0.945)	43	31587			0.00- 0.00	232.67
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.366	22.366 (1.000)	117	666705	5.00000		80.00- 120.00	100.00
22.366	22.366 (1.000)	82	342676			20.64- 80.64	51.40
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.511	22.511 (1.006)	131	134523	2.00000	1.989	0.00- 0.00	100.00(a)
22.511	22.511 (1.006)	117	84564			0.00- 0.00	62.86
22.511	22.511 (1.006)	95	49192			0.00- 0.00	36.57
173 2-Heptanone					CAS #: 110-43-0		
23.381	23.381 (1.045)	58	99803	2.00000	2.036	0.00- 0.00	100.00
23.381	23.381 (1.045)	43	140510			0.00- 0.00	140.79
176 Cyclohexanone					CAS #: 108-94-1		
23.975	23.975 (1.072)	55	81342	2.00000	1.964	0.00- 0.00	100.00(a)
23.975	23.975 (1.072)	98	50627			0.00- 0.00	62.24
23.975	23.975 (1.072)	42	56628			0.00- 0.00	69.62
180 Bromobenzene					CAS #: 108-86-1		
24.244	24.244 (1.084)	156	145985	2.00000	1.998	0.00- 0.00	100.00(a)
24.244	24.244 (1.084)	158	142440			0.00- 0.00	97.57
24.244	24.244 (1.084)	77	203644			0.00- 0.00	139.50
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
24.289	24.289 (1.086)	110	71103	2.00000	1.961	0.00- 0.00	100.00(a)
24.289	24.289 (1.086)	75	177204			0.00- 0.00	249.22
24.289	24.289 (1.086)	61	38011			0.00- 0.00	53.46
189 2-Chlorotoluene					CAS #: 95-49-8		
24.446	24.446 (1.093)	126	100135	2.00000	2.018	0.00- 0.00	100.00
24.446	24.446 (1.093)	91	266854			0.00- 0.00	266.49

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

  189 2-Chlorotoluene (continued)
 24.446  24.446 (1.093)    65     25474                     0.00-   0.00    25.44
-------------------------------------------------------------------------------
  191 4-Chlorotoluene                                CAS #: 106-43-4
 24.581  24.581 (1.099)   126     92984 2.00000    1.877   0.00-   0.00   100.00(a)
 24.581  24.581 (1.099)    91    264780                     0.00-   0.00   284.76
 24.581  24.581 (1.099)    63     31473                     0.00-   0.00    33.85
-------------------------------------------------------------------------------
  195 tert-Butylbenzene                              CAS #: 98-06-6
 24.850  24.850 (1.111)   119    303773 2.00000    1.965   0.00-   0.00   100.00(a)
 24.850  24.850 (1.111)   134     84004                     0.00-   0.00    27.65
 24.850  24.850 (1.111)    91    199201                     0.00-   0.00    65.58
-------------------------------------------------------------------------------
  197 Pentachloroethane                              CAS #: 76-01-7
 24.962  24.962 (1.116)   167    109630 2.00000    1.978   0.00-   0.00   100.00(a)
 24.962  24.962 (1.116)   117     94396                     0.00-   0.00    86.10
 24.962  24.962 (1.116)   169     51170                     0.00-   0.00    46.68
-------------------------------------------------------------------------------
  203 sec-Butylbenzene                               CAS #: 135-98-8
 25.096  25.096 (1.122)   105    409512 2.00000    1.972   0.00-   0.00   100.00(a)
 25.096  25.096 (1.122)   134     85420                     0.00-   0.00    20.86
 25.096  25.096 (1.122)    91     67954                     0.00-   0.00    16.59
-------------------------------------------------------------------------------
  207 p-Cymene                                       CAS #: 99-87-6
 25.253  25.253 (1.129)   119    330548 2.00000    2.019   0.00-   0.00   100.00
 25.253  25.253 (1.129)   134     88426                     0.00-   0.00    26.75
 25.253  25.253 (1.129)    91     76723                     0.00-   0.00    23.21
-------------------------------------------------------------------------------
  210 1,2,3-Trimethylbenzene                         CAS #: 526-73-8
 25.410  25.410 (1.136)   120    105242 2.00000    2.077   0.00-   0.00   100.00
 25.410  25.410 (1.136)   105    243997                     0.00-   0.00   231.84
 25.410  25.410 (1.136)    77     26041                     0.00-   0.00    24.74
-------------------------------------------------------------------------------
  213 Butylbenzene                                   CAS #: 104-51-8
 25.702  25.702 (1.149)   134     67079 2.00000    1.828   0.00-   0.00   100.00(a)
 25.702  25.702 (1.149)    91    250061                     0.00-   0.00   372.79
 25.702  25.702 (1.149)    92    137576                     0.00-   0.00   205.10
-------------------------------------------------------------------------------
  221 1,2-Dibromo-3-chloropropane                    CAS #: 96-12-8
 26.711  26.711 (1.194)   157    129351 2.00000    1.962   0.00-   0.00   100.00(a)
 26.711  26.711 (1.194)    75    105234                     0.00-   0.00    81.36
 26.711  26.711 (1.194)   155     97450                     0.00-   0.00    75.34
-------------------------------------------------------------------------------
```

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e032207.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/22Mar2016.b/e16l0317a.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 22-MAR-2016
Calibration Time: 09:49
Client Smp ID: Level 9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	190421	114253	266589	190394	-0.01
123 1,4-Difluorobenze	736283	441770	1030796	738230	0.26
163 Chlorobenzene-d5	650623	390374	910872	666705	2.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/22Mar2016.b/e032207.d

Date : 22-MAR-2016 14:04

Client ID: Level 9

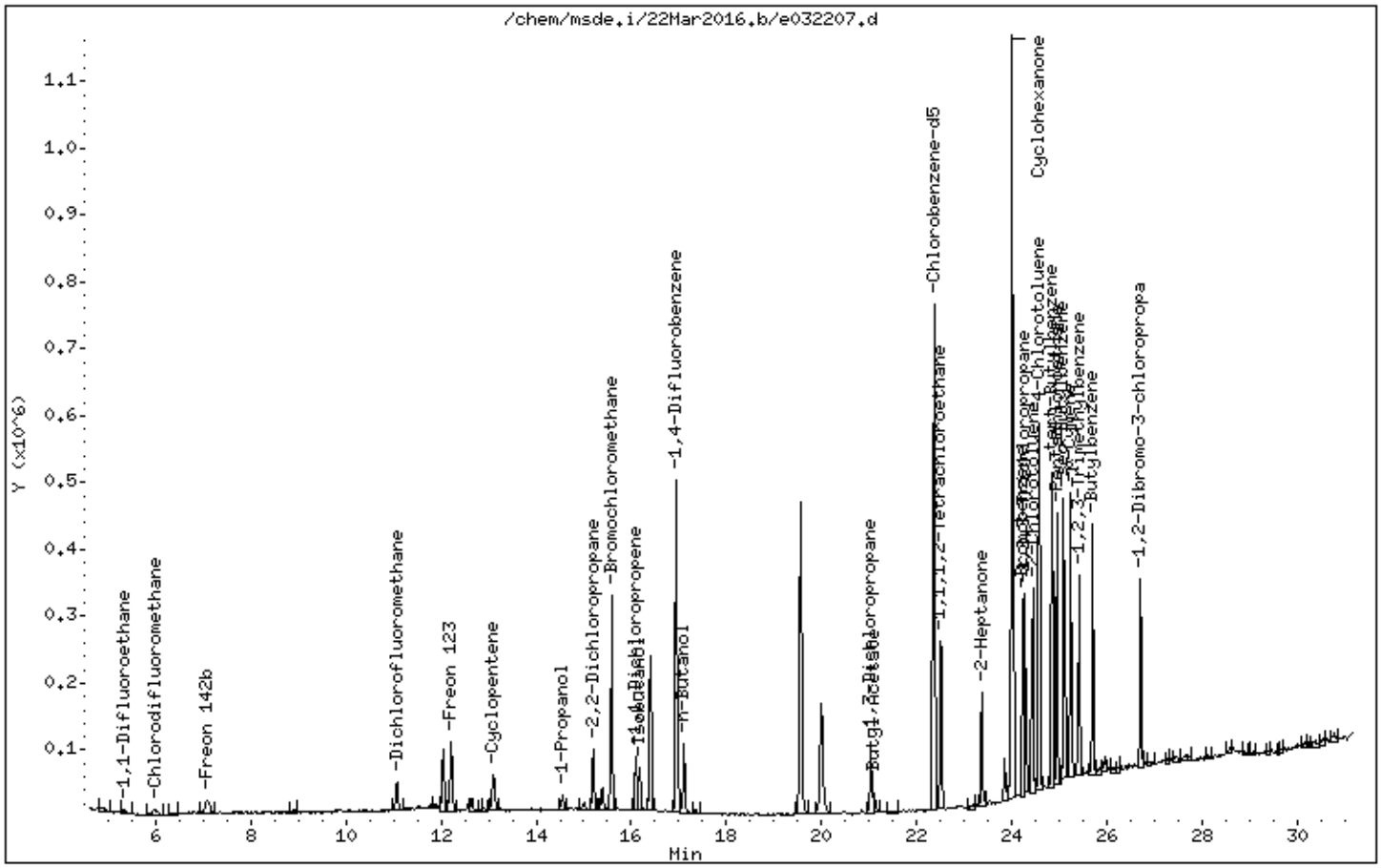
Instrument: msde.i

Sample Info: 100mL# 2759-238

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/24May2016.b/e052408.d
Lab Smp Id: ICAL Level 11
Inj Date : 24-MAY-2016 11:47
Operator : ef Inst ID: msde.i
Smp Info : 200mL# 2789-129
Misc Info : 4.0ppbv (5.0ppbv) AT-1
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/24May2016.b/e16l0317f.m
Meth Date : 24-May-2016 14:10 atoyama Quant Type: ISTD
Cal Date : 24-MAY-2016 11:47 Cal File: e052408.d
Als bottle: 1 Calibration Sample, Level: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FreonICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
7 Freon 134a					CAS #: 811-97-2		
4.642	4.642 (0.302)	83	94694	4.00000	3.780	0.00- 0.00	100.00(T)
4.618	4.618 (0.300)	69	69003			0.00- 0.00	72.87
0.000	1.000 (0.000)	0	0			0.00- 0.00	0.00
10 1,1-Difluoroethane					CAS #: 75-37-6		
5.100	5.100 (0.331)	65	41223	4.00000	4.006	0.00- 0.00	100.00
5.076	5.076 (0.330)	51	62483			0.00- 0.00	151.57
13 Chlorodifluoromethane					CAS #: 75-45-6		
5.751	5.751 (0.374)	51	108545	4.00000	3.863	0.00- 0.00	100.00
5.727	5.727 (0.372)	67	26068			0.00- 0.00	24.02
5.775	5.775 (0.375)	85	2984			0.00- 0.00	2.75
16 Freon 142b					CAS #: 75-68-3		
6.859	6.859 (0.446)	65	214121	4.00000	3.805	0.00- 0.00	100.00
6.859	6.859 (0.446)	45	39114			0.00- 0.00	18.27
6.835	6.835 (0.444)	81	12836			0.00- 0.00	5.99
37 Dichlorofluoromethane					CAS #: 75-43-4		
10.862	10.862 (0.706)	67	232488	4.00000	3.747	0.00- 0.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
37 Dichlorofluoromethane (continued)							
10.862	10.862 (0.706)	69	78534			0.00- 0.00	33.78
10.862	10.862 (0.706)	47	18980			0.00- 0.00	8.16
48 Freon 123					CAS #: 306-83-2		
12.023	12.023 (0.781)	83	272302	4.00000	3.787	0.00- 0.00	100.00
12.023	12.023 (0.781)	133	77295			0.00- 0.00	28.39
12.023	12.023 (0.781)	85	184435			0.00- 0.00	67.73
* 98 Bromochloromethane					CAS #: 74-97-5		
15.391	15.391 (1.000)	130	127140	5.00000		80.00- 120.00	100.00
15.391	15.391 (1.000)	128	95665			52.25- 112.25	75.24
15.391	15.391 (1.000)	49	89168			89.81- 149.81	70.13
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
16.737	16.737 (1.000)	114	461704	5.00000		80.00- 120.00	100.00
16.737	16.737 (1.000)	88	69936			0.00- 45.20	15.15
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.177	22.177 (1.000)	117	421699	5.00000		80.00- 120.00	100.00
22.177	22.177 (1.000)	82	205094			20.64- 80.64	48.64

QC Flag Legend

T - Target compound detected outside RT window.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e052408.d
Lab Smp Id: ICAL Level 11
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/24May2016.b/e16l0317f.m
Misc Info: 4.0ppbv (5.0ppbv) AT-1

Calibration Date: 24-MAY-2016
Calibration Time: 07:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	155366	93220	217512	127140	-18.17
123 1,4-Difluorobenze	569598	341759	797437	461704	-18.94
163 Chlorobenzene-d5	506881	304129	709633	421699	-16.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/24May2016.b/e052408.d

Date : 24-MAY-2016 11:47

Client ID:

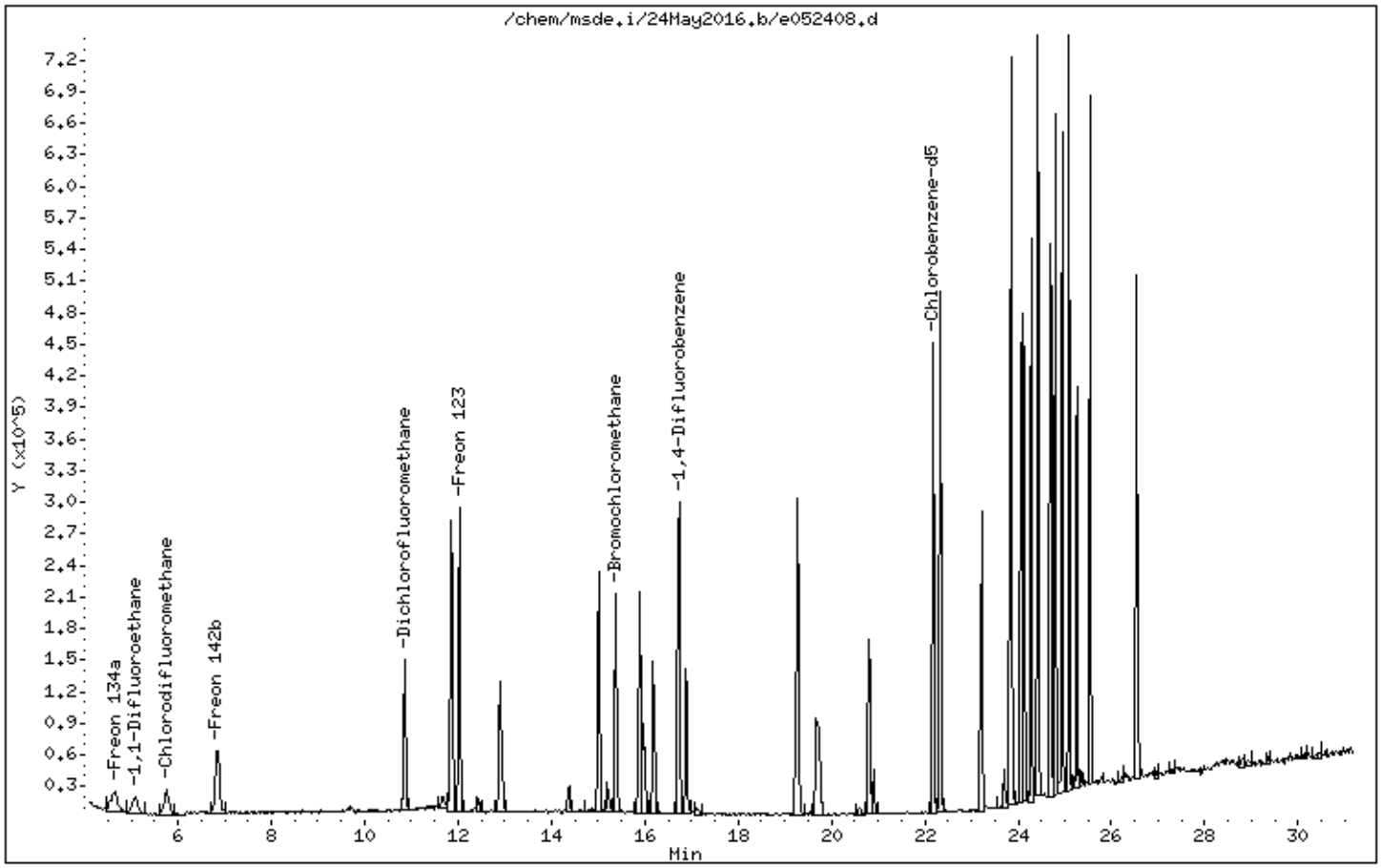
Instrument: msde.i

Sample Info: 200mL# 2789-129

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/09May2016.b/e050912.d
Lab Smp Id: ICAL Level 11
Inj Date : 09-MAY-2016 14:40
Operator : ef Inst ID: msde.i
Smp Info : 200mL# 2789-105
Misc Info : 4.0ppbv (5.0ppbv) Combo
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/09May2016.b/e16l0317d.m
Meth Date : 09-May-2016 17:07 efinn Quant Type: ISTD
Cal Date : 09-MAY-2016 14:40 Cal File: e050912.d
Als bottle: 1 Calibration Sample, Level: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ComboICAL-VB.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
36 1-Pentene					CAS #: 109-67-1		
10.823	10.823 (0.703)	55	85769	4.00000	3.993	0.00- 0.00	100.00
10.823	10.823 (0.703)	42	94821			0.00- 0.00	110.55
34 Pentane					CAS #: 109-66-0		
10.957	10.957 (0.712)	43	139952	4.00000	3.717	0.00- 0.00	100.00
10.957	10.957 (0.712)	57	28872			0.00- 0.00	20.63
10.957	10.957 (0.712)	72	23827			0.00- 0.00	17.03
44 Ethyl Ether					CAS #: 60-29-7		
11.642	11.642 (0.756)	74	67461	4.00000	3.865	0.00- 0.00	100.00(T)
11.642	11.642 (0.756)	59	78888			0.00- 0.00	116.94
0.000	1.000 (0.000)	31	0			0.00- 0.00	0.00
53 Iodomethane					CAS #: 74-88-4		
12.404	12.404 (0.806)	142	424719	4.00000	3.922	0.00- 0.00	100.00
12.404	12.404 (0.806)	127	183387			0.00- 0.00	43.18
59 Cyclopentene					CAS #: 142-29-0		
12.900	12.900 (0.838)	67	286638	4.00000	3.902	0.00- 0.00	100.00

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

   59 Cyclopentene (continued)
 12.900  12.900 (0.838)    68    109408                     0.00-   0.00    38.17
 12.900  12.900 (0.838)    53     50685                     0.00-   0.00    17.68
-------------------------------------------------------------------------------
   64 Cyclopentane                                  CAS #: 287-92-3
 13.067  13.067 (0.849)    70     73313 4.00000    3.867   0.00-   0.00   100.00
 13.094  13.094 (0.851)    55     74068                     0.00-   0.00   101.03
-------------------------------------------------------------------------------
   74 Acrylonitrile                                 CAS #: 107-13-1
 13.671  13.671 (0.888)    53     82684 4.00000    3.740   0.00-   0.00   100.00
 13.671  13.671 (0.888)    52     71587                     0.00-   0.00    86.58
-------------------------------------------------------------------------------
   76 1-Hexene                                      CAS #: 592-41-6
 13.725  13.725 (0.892)    55     76900 4.00000    3.995   0.00-   0.00   100.00
 13.725  13.725 (0.892)    41    104509                     0.00-   0.00   135.90
 13.725  13.725 (0.892)    84     40285                     0.00-   0.00    52.39
-------------------------------------------------------------------------------
   84 1-Propanol                                    CAS #: 71-23-8
 14.384  14.384 (0.935)    59     27008 4.00000    4.507   0.00-   0.00   100.00
 14.384  14.384 (0.935)    42     16493                     0.00-   0.00    61.07
 14.384  14.384 (0.935)    41     12459                     0.00-   0.00    46.13
-------------------------------------------------------------------------------
   90 2,2-Dichloropropane                           CAS #: 594-20-7
 15.008  15.008 (0.975)    77    337264 4.00000    3.934   0.00-   0.00   100.00
 15.008  15.008 (0.975)    79    109782                     0.00-   0.00    32.55
 15.008  15.008 (0.975)    97     65363                     0.00-   0.00    19.38
-------------------------------------------------------------------------------
   94 Ethyl Acetate                                 CAS #: 141-78-6
 15.047  15.047 (0.978)    70     29978 4.00000    4.052   0.00-   0.00   100.00
 15.047  15.047 (0.978)    43    211701                     0.00-   0.00   706.19
 15.028  15.028 (0.976)    61     77533                     0.00-   0.00   258.63
-------------------------------------------------------------------------------
   93 Methyl Acrylate                               CAS #: 96-33-3
 15.123  15.123 (0.983)    55    229395 4.00000    4.026   0.00-   0.00   100.00
 15.123  15.123 (0.983)    85     52413                     0.00-   0.00    22.85
 15.123  15.123 (0.983)    58     23465                     0.00-   0.00    10.23
-------------------------------------------------------------------------------
*  98 Bromochloromethane                            CAS #: 74-97-5
 15.391  15.391 (1.000)   130    131935 5.00000            80.00- 120.00   100.00
 15.391  15.391 (1.000)   128    109410                    52.25- 112.25    82.93
 15.391  15.391 (1.000)    49    101456                    89.81- 149.81    76.90
-------------------------------------------------------------------------------
  107 1,1-Dichloropropene                           CAS #: 563-58-6
 15.884  15.884 (1.032)   110     98328 4.00000    3.989   0.00-   0.00   100.00
 15.884  15.884 (1.032)    75    241474                     0.00-   0.00   245.58
-------------------------------------------------------------------------------
```

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

  115 Isobutanol                                     CAS #: 78-83-1
 15.977  15.977 (1.038)    43    102466 4.00000    3.877   0.00-   0.00   100.00
 15.977  15.977 (1.038)    41     72870                    0.00-   0.00    71.12
 15.977  15.977 (1.038)    55     10083                    0.00-   0.00     9.84
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                            CAS #: 540-36-3
 16.737  16.737 (1.000)   114    498931 5.00000           80.00- 120.00   100.00
 16.737  16.737 (1.000)    88     74272                    0.00-  45.20    14.89
-------------------------------------------------------------------------------
  124 n-Butanol                                      CAS #: 71-36-3
 16.906  16.906 (1.010)    56    178359 4.00000    3.978   0.00-   0.00   100.00
 16.882  16.882 (1.009)    41    119247                    0.00-   0.00    66.86
 16.906  16.906 (1.010)    43     85789                    0.00-   0.00    48.10
-------------------------------------------------------------------------------
  128 Ethyl acrylate                                 CAS #: 140-88-5
 17.171  17.171 (1.026)    99     27399 4.00000    3.674   0.00-   0.00   100.00
 17.171  17.171 (1.026)    45     21159                    0.00-   0.00    77.23
 17.171  17.171 (1.026)    55    263623                    0.00-   0.00   962.16
-------------------------------------------------------------------------------
  131 2-Pentanone                                    CAS #: 107-87-9
 17.388  17.388 (1.039)    43    305778 4.00000    3.955   0.00-   0.00   100.00
 17.388  17.388 (1.039)    58     28662                    0.00-   0.00     9.37
 17.388  17.388 (1.039)    86     86392                    0.00-   0.00    28.25
-------------------------------------------------------------------------------
  134 Methyl Methacrylate                            CAS #: 80-62-6
 17.556  17.556 (1.049)    41    161290 4.00000    3.997   0.00-   0.00   100.00
 17.556  17.556 (1.049)    69    168968                    0.00-   0.00   104.76
 17.556  17.556 (1.049)   100     77403                    0.00-   0.00    47.99
-------------------------------------------------------------------------------
  137 Dibromomethane                                 CAS #: 74-95-3
 17.797  17.797 (1.063)   174    292057 4.00000    3.915   0.00-   0.00   100.00
 17.797  17.797 (1.063)    93    230119                    0.00-   0.00    78.79
 17.797  17.797 (1.063)    95    190186                    0.00-   0.00    65.12
-------------------------------------------------------------------------------
  148 Octane                                         CAS #: 111-65-9
 19.320  19.320 (1.154)    57     99295 4.00000    3.954   0.00-   0.00   100.00
 19.343  19.343 (1.156)    85    151015                    0.00-   0.00   152.09
 19.320  19.320 (1.154)    43    195995                    0.00-   0.00   197.39
-------------------------------------------------------------------------------
  157 1,3-Dichloropropane                            CAS #: 142-28-9
 20.795  20.795 (0.938)    76    297999 4.00000    3.739   0.00-   0.00   100.00
 20.795  20.795 (0.938)    41    144752                    0.00-   0.00    48.57
 20.795  20.795 (0.938)    78     95333                    0.00-   0.00    31.99
-------------------------------------------------------------------------------
  159 Butyl Acetate                                  CAS #: 123-86-4
 20.905  20.905 (0.943)    56     31556 4.00000    4.057   0.00-   0.00   100.00
```

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

  159 Butyl Acetate (continued)
 20.905  20.905 (0.943)    73     16178                     0.00-   0.00    51.27
 20.905  20.905 (0.943)    43     66521                     0.00-   0.00   210.80
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                                CAS #: 3114-55-4
 22.177  22.177 (1.000)   117    462236 5.00000           80.00- 120.00   100.00
 22.177  22.177 (1.000)    82    226153                   20.64-  80.64    48.93
-------------------------------------------------------------------------------
  168 1,1,1,2-Tetrachloroethane                       CAS #: 630-20-6
 22.343  22.343 (1.007)   131    339206 4.00000    3.673   0.00-   0.00   100.00
 22.343  22.343 (1.007)   117    209648                     0.00-   0.00    61.81
 22.343  22.343 (1.007)    95    119676                     0.00-   0.00    35.28
-------------------------------------------------------------------------------
  170 Nonane                                          CAS #: 111-84-2
 22.301  22.301 (1.006)    43    182841 4.00000    3.951   0.00-   0.00   100.00
 22.301  22.301 (1.006)    57    193399                     0.00-   0.00   105.77
 22.301  22.301 (1.006)    85    100515                     0.00-   0.00    54.97
-------------------------------------------------------------------------------
  173 2-Heptanone                                     CAS #: 110-43-0
 23.214  23.214 (1.047)    58    188977 4.00000    3.950   0.00-   0.00   100.00
 23.214  23.214 (1.047)    43    261149                     0.00-   0.00   138.19
-------------------------------------------------------------------------------
  176 Cyclohexanone                                   CAS #: 108-94-1
 23.811  23.811 (1.074)    55    152788 4.00000    3.835   0.00-   0.00   100.00
 23.811  23.811 (1.074)    98     93542                     0.00-   0.00    61.22
 23.811  23.811 (1.074)    42    104028                     0.00-   0.00    68.09
-------------------------------------------------------------------------------
  179 alpha-Pinene                                    CAS #: 80-56-8
 23.497  23.497 (1.060)    93    732214 4.00000    3.972   0.00-   0.00   100.00
 23.497  23.497 (1.060)   121    101404                     0.00-   0.00    13.85
 23.497  23.497 (1.060)    92    271778                     0.00-   0.00    37.12
-------------------------------------------------------------------------------
  180 Bromobenzene                                    CAS #: 108-86-1
 24.080  24.080 (1.086)   156    342465 4.00000    3.686   0.00-   0.00   100.00
 24.080  24.080 (1.086)   158    324468                     0.00-   0.00    94.74
 24.080  24.080 (1.086)    77    425499                     0.00-   0.00   124.25
-------------------------------------------------------------------------------
  185 1,2,3-Trichloropropane                          CAS #: 96-18-4
 24.125  24.125 (1.088)   110    134853 4.00000    3.615   0.00-   0.00   100.00
 24.125  24.125 (1.088)    75    481314                     0.00-   0.00   356.92
 24.125  24.125 (1.088)    61     79517                     0.00-   0.00    58.97
-------------------------------------------------------------------------------
  187 Decane                                          CAS #: 124-18-5
 24.170  24.170 (1.090)    57    147525 4.00000    3.911   0.00-   0.00   100.00
 24.170  24.170 (1.090)    71     73493                     0.00-   0.00    49.82
 24.170  24.170 (1.090)   142     12347                     0.00-   0.00     8.37
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE		RATIO
189 2-Chlorotoluene					CAS #: 95-49-8			
24.282	24.282 (1.095)	126	217090	4.00000	3.642	0.00-	0.00	100.00
24.282	24.282 (1.095)	91	579657			0.00-	0.00	267.01
24.282	24.282 (1.095)	65	50969			0.00-	0.00	23.48
191 4-Chlorotoluene					CAS #: 106-43-4			
24.416	24.416 (1.101)	126	210305	4.00000	3.806	0.00-	0.00	100.00
24.416	24.416 (1.101)	91	554757			0.00-	0.00	263.79
24.416	24.416 (1.101)	63	61752			0.00-	0.00	29.36
195 tert-Butylbenzene					CAS #: 98-06-6			
24.708	24.708 (1.114)	119	599692	4.00000	3.850	0.00-	0.00	100.00
24.708	24.708 (1.114)	134	149254			0.00-	0.00	24.89
24.686	24.686 (1.113)	91	374514			0.00-	0.00	62.45
197 Pentachloroethane					CAS #: 76-01-7			
24.798	24.798 (1.118)	167	233936	4.00000	3.706	0.00-	0.00	100.00
24.798	24.798 (1.118)	117	200591			0.00-	0.00	85.75
24.798	24.798 (1.118)	169	117023			0.00-	0.00	50.02
199 D-Limonene					CAS #: 5989-27-5			
25.044	25.044 (1.129)	68	231405	4.00000	3.942	0.00-	0.00	100.00
25.044	25.044 (1.129)	93	572422			0.00-	0.00	247.37
203 sec-Butylbenzene					CAS #: 135-98-8			
24.955	24.955 (1.125)	105	1115161	4.00000	3.795	0.00-	0.00	100.00
24.955	24.955 (1.125)	134	237948			0.00-	0.00	21.34
24.955	24.955 (1.125)	91	181166			0.00-	0.00	16.25
206 bis(2-Chloroethyl) Ether					CAS #: 111-44-4			
25.044	25.044 (1.129)	93	572422	4.00000	3.921	0.00-	0.00	100.00
25.044	25.044 (1.129)	95	144011			0.00-	0.00	25.16
25.044	25.044 (1.129)	63	241021			0.00-	0.00	42.11
207 p-Cymene					CAS #: 99-87-6			
25.089	25.089 (1.131)	119	702100	4.00000	3.912	0.00-	0.00	100.00
25.089	25.089 (1.131)	134	196095			0.00-	0.00	27.93
25.089	25.089 (1.131)	91	151295			0.00-	0.00	21.55
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8			
25.268	25.268 (1.139)	120	219310	4.00000	3.816	0.00-	0.00	100.00
25.268	25.268 (1.139)	105	498808			0.00-	0.00	227.44
25.268	25.268 (1.139)	77	54582			0.00-	0.00	24.89
213 Butylbenzene					CAS #: 104-51-8			
25.537	25.537 (1.152)	134	172231	4.00000	3.826	0.00-	0.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
213 Butylbenzene (continued)							
25.537	25.537 (1.152)	91	555920			0.00- 0.00	322.78
25.537	25.537 (1.152)	92	304567			0.00- 0.00	176.84
215 Undecane					CAS #: 1120-21-4		
25.515	25.515 (1.151)	57	108515	4.00000	3.969	0.00- 0.00	100.00
25.515	25.515 (1.151)	43	79728			0.00- 0.00	73.47
25.515	25.515 (1.151)	85	41724			0.00- 0.00	38.45
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
26.546	26.546 (1.197)	157	290043	4.00000	3.973	0.00- 0.00	100.00
26.546	26.546 (1.197)	75	213389			0.00- 0.00	73.57
26.546	26.546 (1.197)	155	228972			0.00- 0.00	78.94
225 Dodecane					CAS #: 112-40-3		
26.614	26.614 (1.200)	85	26386	4.00000	3.240	0.00- 0.00	100.00
26.614	26.614 (1.200)	57	61867			0.00- 0.00	234.47
26.614	26.614 (1.200)	43	46595			0.00- 0.00	176.59

QC Flag Legend

T - Target compound detected outside RT window.

Report Date: 09-May-2016 17:07

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e050912.d
Lab Smp Id: ICAL Level 11
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/09May2016.b/e16l0317d.m
Misc Info: 4.0ppbv (5.0ppbv) Combo

Calibration Date: 09-MAY-2016
Calibration Time: 07:51

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	159373	95624	223122	131935	-17.22
123 1,4-Difluorobenze	624905	374943	874867	498931	-20.16
163 Chlorobenzene-d5	549919	329951	769887	462236	-15.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/09May2016.b/e050912.d

Date : 09-MAY-2016 14:40

Client ID:

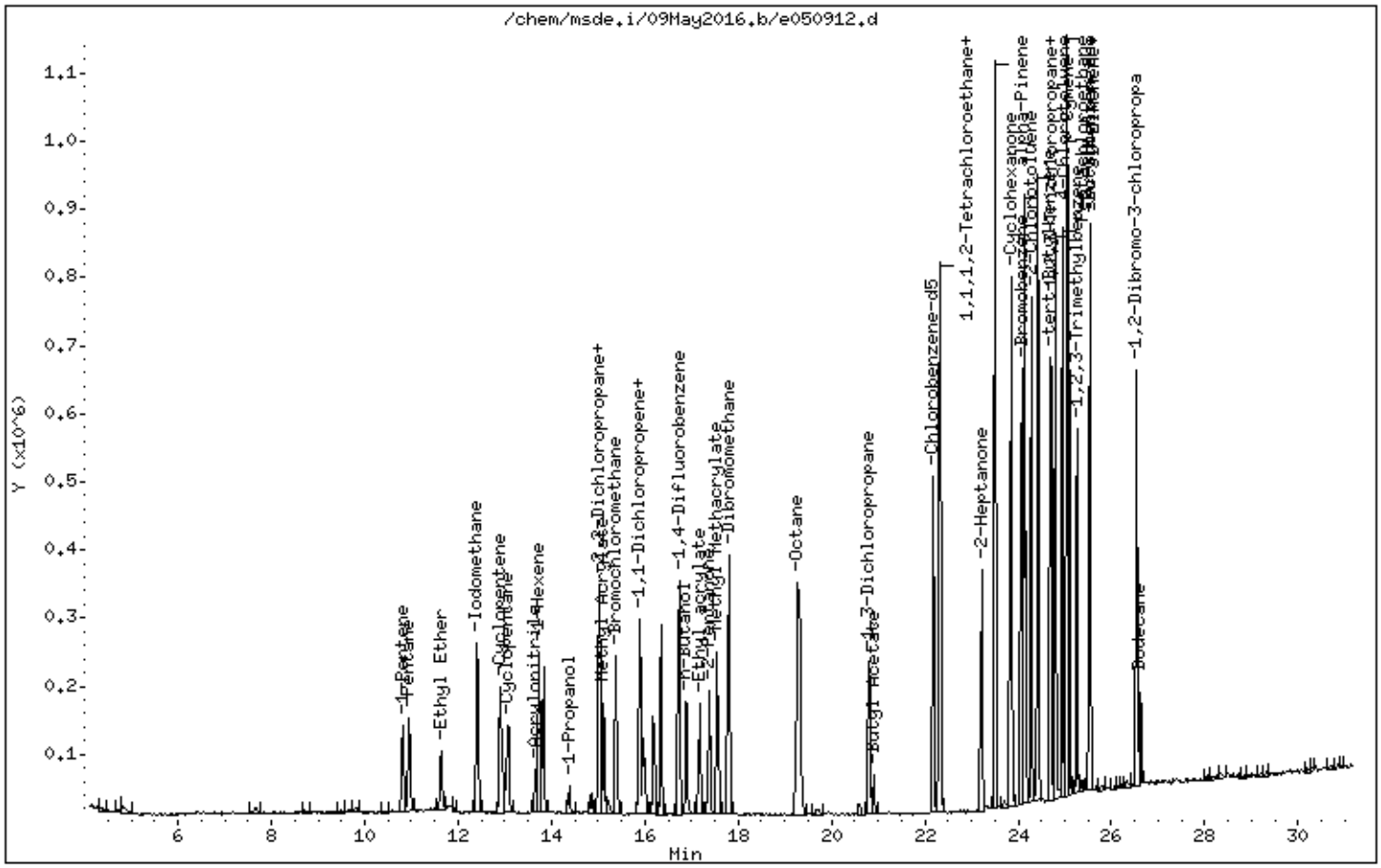
Instrument: msde.i

Sample Info: 200mL# 2789-105

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/22Mar2016.b/e032208.d
Lab Smp Id: ICAL Client Smp ID: Level 11
Inj Date : 22-MAR-2016 14:50
Operator : ef Inst ID: msde.i
Smp Info : 200mL# 2759-238
Misc Info : 4.0ppbv (5.0ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/22Mar2016.b/e16l0317a.m
Meth Date : 24-Mar-2016 08:33 efinn Quant Type: ISTD
Cal Date : 22-MAR-2016 14:50 Cal File: e032208.d
Als bottle: 1 Calibration Sample, Level: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1.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
7 Freon 134a					CAS #: 811-97-2		
4.901	4.901 (0.315)	83	64415	4.00000	4.136	0.00- 0.00	100.00(T)
4.877	4.877 (0.313)	69	42738			0.00- 0.00	66.35
0.000	1.000 (0.000)	0	0			0.00- 0.00	0.00
10 1,1-Difluoroethane					CAS #: 75-37-6		
5.311	5.311 (0.341)	65	24527	4.00000	3.731	0.00- 0.00	100.00(M)
5.335	5.335 (0.342)	51	39253			0.00- 0.00	160.04
13 Chlorodifluoromethane					CAS #: 75-45-6		
5.985	5.985 (0.384)	51	61508	4.00000	3.632	0.00- 0.00	100.00
5.985	5.985 (0.384)	67	15428			0.00- 0.00	25.08
6.010	6.010 (0.386)	85	400			0.00- 0.00	0.65
16 Freon 142b					CAS #: 75-68-3		
7.094	7.094 (0.455)	65	133474	4.00000	3.886	0.00- 0.00	100.00
7.094	7.094 (0.455)	45	24980			0.00- 0.00	18.72

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

   16 Freon 142b (continued)
  7.094   7.094 (0.455)    81      4108                     0.00-   0.00     3.08
-------------------------------------------------------------------------------
   37 Dichlorofluoromethane                        CAS #: 75-43-4
 11.052  11.052 (0.709)    67    142244 4.00000    3.965   0.00-   0.00   100.00
 11.052  11.052 (0.709)    69     46014                     0.00-   0.00    32.35
 11.071  11.071 (0.711)    47     12311                     0.00-   0.00     8.65
-------------------------------------------------------------------------------
   48 Freon 123                                    CAS #: 306-83-2
 12.213  12.213 (0.784)    83    219473 4.00000    3.962   0.00-   0.00   100.00
 12.213  12.213 (0.784)   133     61438                     0.00-   0.00    27.99
 12.213  12.213 (0.784)    85    143239                     0.00-   0.00    65.26
-------------------------------------------------------------------------------
   59 Cyclopentene                                 CAS #: 142-29-0
 13.090  13.090 (0.840)    67     99475 4.00000    3.908   0.00-   0.00   100.00
 13.090  13.090 (0.840)    68     39449                     0.00-   0.00    39.66
 13.090  13.090 (0.840)    53     16129                     0.00-   0.00    16.21
-------------------------------------------------------------------------------
   84 1-Propanol                                   CAS #: 71-23-8
 14.552  14.552 (0.934)    59     28623 4.00000    4.008   0.00-   0.00   100.00
 14.552  14.552 (0.934)    42     19608                     0.00-   0.00    68.50
 14.552  14.552 (0.934)    41     14656                     0.00-   0.00    51.20
-------------------------------------------------------------------------------
   90 2,2-Dichloropropane                          CAS #: 594-20-7
 15.201  15.201 (0.976)    77    181456 4.00000    4.033   0.00-   0.00   100.00
 15.201  15.201 (0.976)    79     60230                     0.00-   0.00    33.19
 15.201  15.201 (0.976)    97     34322                     0.00-   0.00    18.91
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.580  15.580 (1.000)   130    191124 5.00000           80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    144663                   52.25- 112.25    75.69
 15.580  15.580 (1.000)    49    146074                   89.81- 149.81    76.43
-------------------------------------------------------------------------------
  107 1,1-Dichloropropene                          CAS #: 563-58-6
 16.104  16.104 (1.034)   110     47520 4.00000    4.050   0.00-   0.00   100.00
 16.104  16.104 (1.034)    75    127721                     0.00-   0.00   268.77
-------------------------------------------------------------------------------
  115 Isobutanol                                  CAS #: 78-83-1
 16.165  16.165 (1.038)    43    127154 4.00000    3.684   0.00-   0.00   100.00
 16.165  16.165 (1.038)    41    107486                     0.00-   0.00    84.53
 16.165  16.165 (1.038)    55     11637                     0.00-   0.00     9.15
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                         CAS #: 540-36-3
 16.939  16.939 (1.000)   114    725281 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88    111156                     0.00-  45.20    15.33
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
124 n-Butanol					CAS #: 71-36-3		
17.108	17.108 (1.010)	56	186975	4.00000	4.079	0.00- 0.00	100.00
17.108	17.108 (1.010)	41	130038			0.00- 0.00	69.55
17.108	17.108 (1.010)	43	96387			0.00- 0.00	51.55
157 1,3-Dichloropropane					CAS #: 142-28-9		
21.045	21.045 (0.941)	76	216199	4.00000	3.815	0.00- 0.00	100.00
21.045	21.045 (0.941)	41	116829			0.00- 0.00	54.04
21.045	21.045 (0.941)	78	70038			0.00- 0.00	32.40
159 Butyl Acetate					CAS #: 123-86-4		
21.128	21.128 (0.945)	56	27235	4.00000	4.090	0.00- 0.00	100.00
21.128	21.128 (0.945)	73	15848			0.00- 0.00	58.19
21.128	21.128 (0.945)	43	69733			0.00- 0.00	256.04
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.365	22.365 (1.000)	117	666778	5.00000		80.00- 120.00	100.00
22.365	22.365 (1.000)	82	341279			20.64- 80.64	51.18
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.511	22.511 (1.006)	131	261803	4.00000	3.870	0.00- 0.00	100.00
22.511	22.511 (1.006)	117	159310			0.00- 0.00	60.85
22.511	22.511 (1.006)	95	94154			0.00- 0.00	35.96
173 2-Heptanone					CAS #: 110-43-0		
23.381	23.381 (1.045)	58	203635	4.00000	4.153	0.00- 0.00	100.00
23.381	23.381 (1.045)	43	295232			0.00- 0.00	144.98
176 Cyclohexanone					CAS #: 108-94-1		
23.975	23.975 (1.072)	55	160626	4.00000	3.878	0.00- 0.00	100.00
23.975	23.975 (1.072)	98	100472			0.00- 0.00	62.55
23.975	23.975 (1.072)	42	110884			0.00- 0.00	69.03
180 Bromobenzene					CAS #: 108-86-1		
24.244	24.244 (1.084)	156	288523	4.00000	3.949	0.00- 0.00	100.00
24.244	24.244 (1.084)	158	285551			0.00- 0.00	98.97
24.244	24.244 (1.084)	77	389429			0.00- 0.00	134.97
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
24.289	24.289 (1.086)	110	141453	4.00000	3.901	0.00- 0.00	100.00
24.289	24.289 (1.086)	75	346764			0.00- 0.00	245.14
24.289	24.289 (1.086)	61	77861			0.00- 0.00	55.04
189 2-Chlorotoluene					CAS #: 95-49-8		
24.446	24.446 (1.093)	126	194264	4.00000	3.915	0.00- 0.00	100.00
24.446	24.446 (1.093)	91	535104			0.00- 0.00	275.45

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

  189 2-Chlorotoluene (continued)
 24.446  24.446 (1.093)    65     50024                     0.00-   0.00    25.75
-------------------------------------------------------------------------------
  191 4-Chlorotoluene                                CAS #: 106-43-4
 24.581  24.581 (1.099)   126    203069 4.00000    4.099   0.00-   0.00   100.00
 24.581  24.581 (1.099)    91    528670                    0.00-   0.00   260.34
 24.581  24.581 (1.099)    63     64545                    0.00-   0.00    31.78
-------------------------------------------------------------------------------
  195 tert-Butylbenzene                              CAS #: 98-06-6
 24.850  24.850 (1.111)   119    628236 4.00000    4.063   0.00-   0.00   100.00
 24.850  24.850 (1.111)   134    153839                    0.00-   0.00    24.49
 24.850  24.850 (1.111)    91    399509                    0.00-   0.00    63.59
-------------------------------------------------------------------------------
  197 Pentachloroethane                              CAS #: 76-01-7
 24.962  24.962 (1.116)   167    216639 4.00000    3.908   0.00-   0.00   100.00
 24.962  24.962 (1.116)   117    189644                    0.00-   0.00    87.54
 24.962  24.962 (1.116)   169    101031                    0.00-   0.00    46.64
-------------------------------------------------------------------------------
  203 sec-Butylbenzene                               CAS #: 135-98-8
 25.096  25.096 (1.122)   105    839863 4.00000    4.043   0.00-   0.00   100.00
 25.096  25.096 (1.122)   134    181803                    0.00-   0.00    21.65
 25.096  25.096 (1.122)    91    132621                    0.00-   0.00    15.79
-------------------------------------------------------------------------------
  207 p-Cymene                                       CAS #: 99-87-6
 25.253  25.253 (1.129)   119    670380 4.00000    4.094   0.00-   0.00   100.00
 25.253  25.253 (1.129)   134    179334                    0.00-   0.00    26.75
 25.253  25.253 (1.129)    91    157500                    0.00-   0.00    23.49
-------------------------------------------------------------------------------
  210 1,2,3-Trimethylbenzene                         CAS #: 526-73-8
 25.410  25.410 (1.136)   120    203351 4.00000    4.014   0.00-   0.00   100.00
 25.410  25.410 (1.136)   105    491198                    0.00-   0.00   241.55
 25.410  25.410 (1.136)    77     59935                    0.00-   0.00    29.47
-------------------------------------------------------------------------------
  213 Butylbenzene                                   CAS #: 104-51-8
 25.702  25.702 (1.149)   134    149220 4.00000    4.066   0.00-   0.00   100.00
 25.702  25.702 (1.149)    91    520481                    0.00-   0.00   348.80
 25.702  25.702 (1.149)    92    276215                    0.00-   0.00   185.11
-------------------------------------------------------------------------------
  221 1,2-Dibromo-3-chloropropane                    CAS #: 96-12-8
 26.710  26.710 (1.194)   157    265624 4.00000    4.029   0.00-   0.00   100.00
 26.710  26.710 (1.194)    75    219272                    0.00-   0.00    82.55
 26.710  26.710 (1.194)   155    207135                    0.00-   0.00    77.98
-------------------------------------------------------------------------------
```

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e032208.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/22Mar2016.b/e16l0317a.m
Misc Info: 4.0ppbv (5.0ppbv)

Calibration Date: 22-MAR-2016
Calibration Time: 09:49
Client Smp ID: Level 11
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	190421	114253	266589	191124	0.37
123 1,4-Difluorobenze	736283	441770	1030796	725281	-1.49
163 Chlorobenzene-d5	650623	390374	910872	666778	2.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/22Mar2016.b/e032208.d

Date : 22-MAR-2016 14:50

Client ID: Level 11

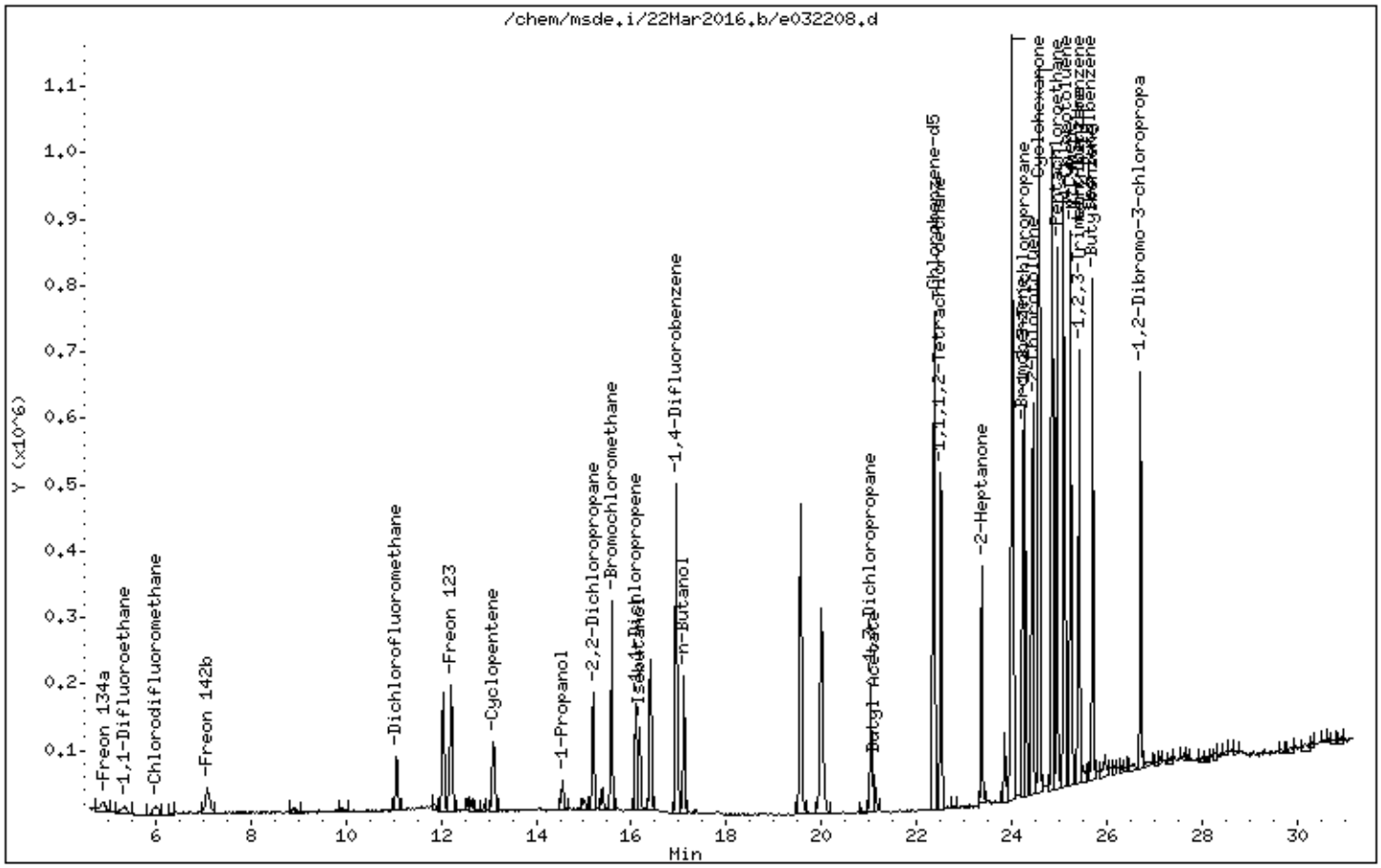
Instrument: msde.i

Sample Info: 200mL# 2759-238

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/24May2016.b/e052409.d
Lab Smp Id: ICAL Level 12
Inj Date : 24-MAY-2016 13:20
Operator : ef Inst ID: msde.i
Smp Info : 250mL# 2789-129
Misc Info : 5.0ppbv (5.0ppbv) AT-1
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/24May2016.b/e16l0317f.m
Meth Date : 24-May-2016 14:10 atoyama Quant Type: ISTD
Cal Date : 24-MAY-2016 13:20 Cal File: e052409.d
Als bottle: 1 Calibration Sample, Level: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FreonICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
7 Freon 134a					CAS #: 811-97-2		
4.642	4.642 (0.302)	83	123461	5.00000	5.221	0.00- 0.00	100.00(T)
4.666	4.666 (0.303)	69	82637			0.00- 0.00	66.93
0.000	1.000 (0.000)	0	0			0.00- 0.00	0.00
10 1,1-Difluoroethane					CAS #: 75-37-6		
5.076	5.076 (0.330)	65	48830	5.00000	5.027	0.00- 0.00	100.00
5.076	5.076 (0.330)	51	78761			0.00- 0.00	161.30
13 Chlorodifluoromethane					CAS #: 75-45-6		
5.751	5.751 (0.374)	51	131422	5.00000	4.956	0.00- 0.00	100.00
5.751	5.751 (0.374)	67	31247			0.00- 0.00	23.78
5.751	5.751 (0.374)	85	2713			0.00- 0.00	2.06
16 Freon 142b					CAS #: 75-68-3		
6.835	6.835 (0.444)	65	267711	5.00000	5.040	0.00- 0.00	100.00
6.835	6.835 (0.444)	45	47207			0.00- 0.00	17.63
6.835	6.835 (0.444)	81	14446			0.00- 0.00	5.40
37 Dichlorofluoromethane					CAS #: 75-43-4		
10.862	10.862 (0.706)	67	298439	5.00000	5.096	0.00- 0.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
37 Dichlorofluoromethane (continued)							
10.862	10.862 (0.706)	69	98280			0.00- 0.00	32.93
10.862	10.862 (0.706)	47	25641			0.00- 0.00	8.59
48 Freon 123					CAS #: 306-83-2		
12.024	12.024 (0.781)	83	338233	5.00000	4.984	0.00- 0.00	100.00
12.024	12.024 (0.781)	133	96660			0.00- 0.00	28.58
12.024	12.024 (0.781)	85	222640			0.00- 0.00	65.82
* 98 Bromochloromethane					CAS #: 74-97-5		
15.391	15.391 (1.000)	130	120000	5.00000		80.00- 120.00	100.00
15.391	15.391 (1.000)	128	97398			52.25- 112.25	81.16
15.391	15.391 (1.000)	49	87352			89.81- 149.81	72.79
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
16.737	16.737 (1.000)	114	464441	5.00000		80.00- 120.00	100.00
16.713	16.713 (1.000)	88	71257			0.00- 45.20	15.34
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.177	22.177 (1.000)	117	413516	5.00000		80.00- 120.00	100.00
22.177	22.177 (1.000)	82	208347			20.64- 80.64	50.38

QC Flag Legend

T - Target compound detected outside RT window.

Report Date: 24-May-2016 14:10

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e052409.d
Lab Smp Id: ICAL Level 12
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/24May2016.b/e16l0317f.m
Misc Info: 5.0ppbv (5.0ppbv) AT-1

Calibration Date: 24-MAY-2016
Calibration Time: 07:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	155366	93220	217512	120000	-22.76
123 1,4-Difluorobenze	569598	341759	797437	464441	-18.46
163 Chlorobenzene-d5	506881	304129	709633	413516	-18.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/24May2016.b/e052409.d

Date : 24-MAY-2016 13:20

Client ID:

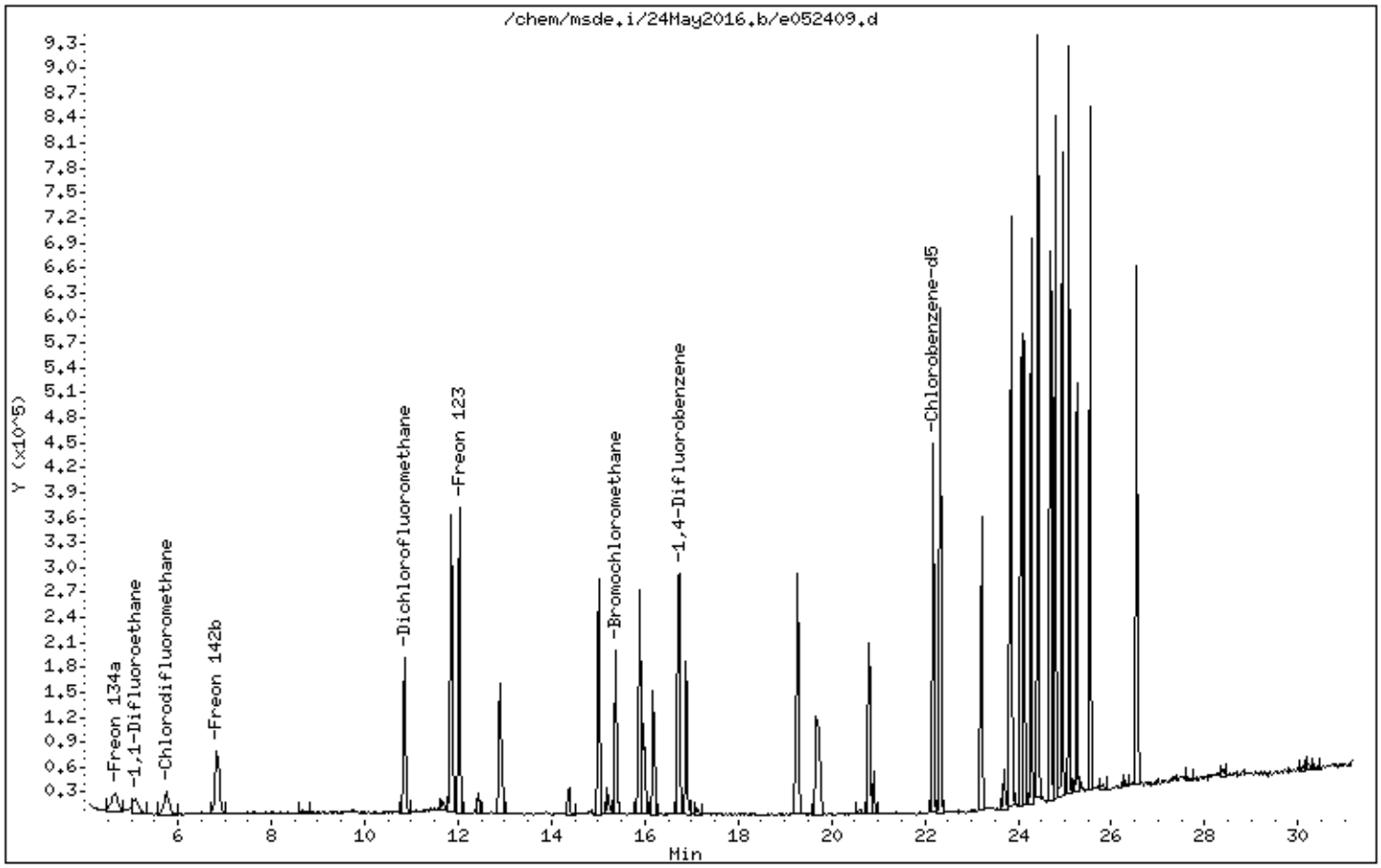
Instrument: msde.i

Sample Info: 250mL# 2789-129

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/19May2016.b/e051909.d
Lab Smp Id: ICAL Level 12
Inj Date : 19-MAY-2016 15:27
Operator : ef Inst ID: msde.i
Smp Info : 250mL# 2789-151
Misc Info : 5.0ppbv (5.0ppbv) Acetonitrile
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/19May2016.b/e16l0317e.m
Meth Date : 19-May-2016 17:13 efinn Quant Type: ISTD
Cal Date : 19-MAY-2016 15:27 Cal File: e051909.d
Als bottle: 1 Calibration Sample, Level: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AcetonitrileCrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
63 Acetonitrile					CAS #: 75-05-8		
13.012	13.012 (0.845)	41	72556	5.00000	4.206	0.00- 0.00	100.00
13.012	13.012 (0.845)	40	47349			0.00- 0.00	65.26
13.012	13.012 (0.845)	39	18788			0.00- 0.00	25.89
* 98 Bromochloromethane					CAS #: 74-97-5		
15.391	15.391 (1.000)	130	117940	5.00000		80.00- 120.00	100.00
15.391	15.391 (1.000)	128	91245			52.25- 112.25	77.37
15.391	15.391 (1.000)	49	84055			89.81- 149.81	71.27
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
16.737	16.737 (1.000)	114	410158	5.00000		80.00- 120.00	100.00
16.737	16.737 (1.000)	88	61505			0.00- 45.20	15.00
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.177	22.177 (1.000)	117	391385	5.00000		80.00- 120.00	100.00
22.177	22.177 (1.000)	82	188881			20.64- 80.64	48.26

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e051909.d
Lab Smp Id: ICAL Level 12
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/19May2016.b/e16l0317e.m
Misc Info: 5.0ppbv (5.0ppbv) Acetonitrile

Calibration Date: 19-MAY-2016
Calibration Time: 09:53

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	151740	91044	212436	117940	-22.27
123 1,4-Difluorobenze	581412	348847	813977	410158	-29.45
163 Chlorobenzene-d5	508099	304859	711339	391385	-22.97

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/19May2016.b/e051909.d

Date : 19-MAY-2016 15:27

Client ID:

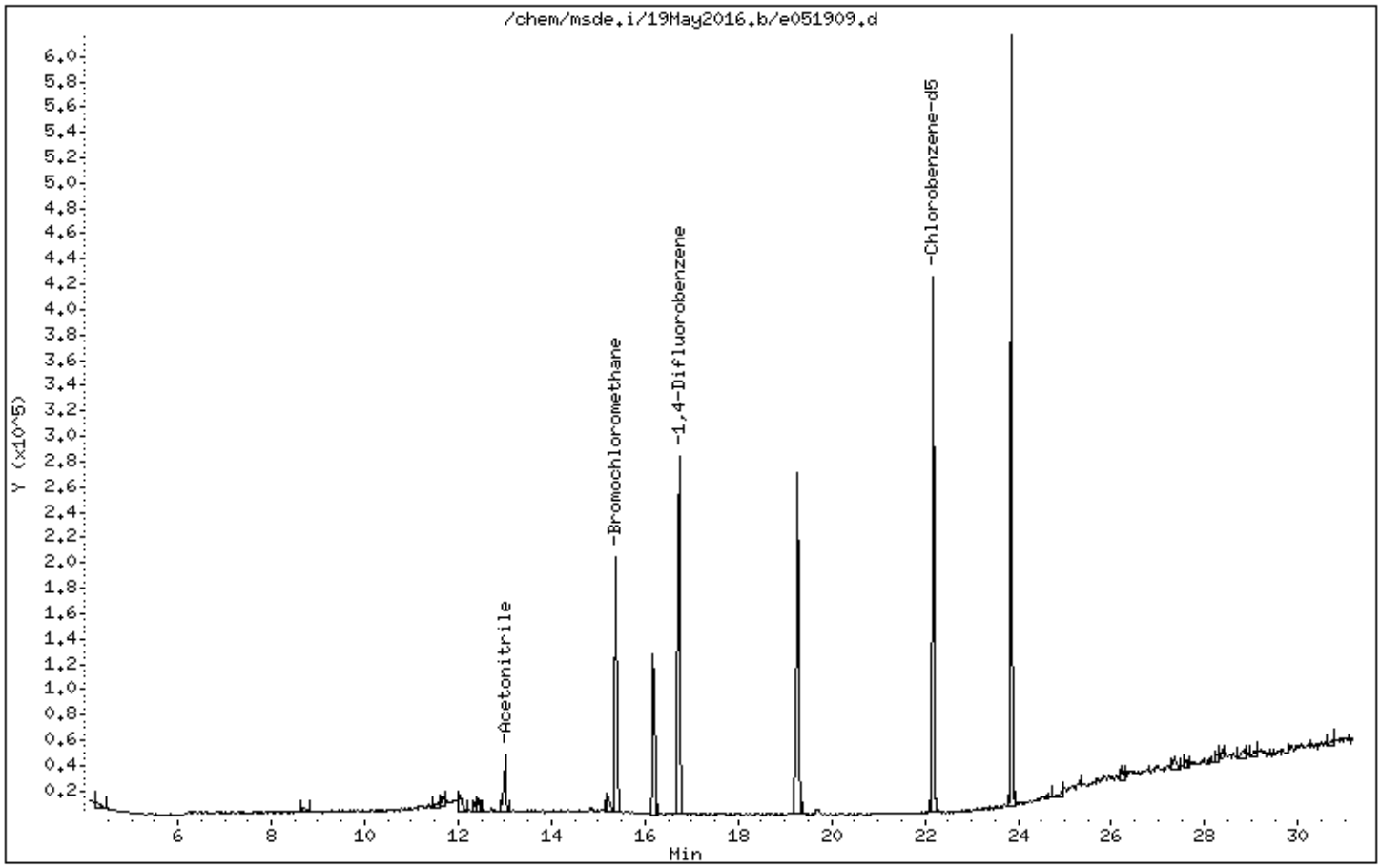
Instrument: msde.i

Sample Info: 250mL# 2789-151

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/09May2016.b/e050913.d
Lab Smp Id: ICAL Level 12
Inj Date : 09-MAY-2016 15:22
Operator : ef Inst ID: msde.i
Smp Info : 250mL# 2789-105
Misc Info : 5.0ppbv (5.0ppbv) Combo
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/09May2016.b/e16l0317d.m
Meth Date : 09-May-2016 17:07 efinn Quant Type: ISTD
Cal Date : 09-MAY-2016 15:22 Cal File: e050913.d
Als bottle: 1 Calibration Sample, Level: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ComboICAL-VB.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
36 1-Pentene					CAS #: 109-67-1		
10.823	10.823 (0.703)	55	104815	5.00000	4.559	0.00- 0.00	100.00
10.823	10.823 (0.703)	42	117179			0.00- 0.00	111.80
34 Pentane					CAS #: 109-66-0		
10.957	10.957 (0.712)	43	177965	5.00000	4.416	0.00- 0.00	100.00
10.957	10.957 (0.712)	57	35433			0.00- 0.00	19.91
10.957	10.957 (0.712)	72	31409			0.00- 0.00	17.65
44 Ethyl Ether					CAS #: 60-29-7		
11.642	11.642 (0.756)	74	82578	5.00000	4.420	0.00- 0.00	100.00(T)
11.642	11.642 (0.756)	59	101312			0.00- 0.00	122.69
0.000	1.000 (0.000)	31	0			0.00- 0.00	0.00
53 Iodomethane					CAS #: 74-88-4		
12.404	12.404 (0.806)	142	520445	5.00000	4.489	0.00- 0.00	100.00
12.404	12.404 (0.806)	127	229967			0.00- 0.00	44.19
59 Cyclopentene					CAS #: 142-29-0		
12.900	12.900 (0.838)	67	351624	5.00000	4.471	0.00- 0.00	100.00

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

   59 Cyclopentene (continued)
 12.900  12.900 (0.838)    68    142894                     0.00-   0.00    40.64
 12.900  12.900 (0.838)    53     60079                     0.00-   0.00    17.09
-------------------------------------------------------------------------------
   64 Cyclopentane                                  CAS #: 287-92-3
 13.094  13.094 (0.851)    70     95762 5.00000    4.719   0.00-   0.00   100.00
 13.094  13.094 (0.851)    55     94819                     0.00-   0.00    99.02
-------------------------------------------------------------------------------
   74 Acrylonitrile                                 CAS #: 107-13-1
 13.671  13.671 (0.888)    53    101642 5.00000    4.295   0.00-   0.00   100.00
 13.671  13.671 (0.888)    52     90282                     0.00-   0.00    88.82
-------------------------------------------------------------------------------
   76 1-Hexene                                      CAS #: 592-41-6
 13.725  13.725 (0.892)    55     97904 5.00000    4.751   0.00-   0.00   100.00
 13.725  13.725 (0.892)    41    131563                     0.00-   0.00   134.38
 13.725  13.725 (0.892)    84     51287                     0.00-   0.00    52.38
-------------------------------------------------------------------------------
   84 1-Propanol                                    CAS #: 71-23-8
 14.384  14.384 (0.935)    59     33139 5.00000    5.166   0.00-   0.00   100.00
 14.384  14.384 (0.935)    42     21160                     0.00-   0.00    63.85
 14.384  14.384 (0.935)    41     16264                     0.00-   0.00    49.08
-------------------------------------------------------------------------------
   90 2,2-Dichloropropane                           CAS #: 594-20-7
 15.008  15.008 (0.975)    77    412190 5.00000    4.491   0.00-   0.00   100.00
 15.008  15.008 (0.975)    79    132403                     0.00-   0.00    32.12
 15.008  15.008 (0.975)    97     82991                     0.00-   0.00    20.13
-------------------------------------------------------------------------------
   94 Ethyl Acetate                                 CAS #: 141-78-6
 15.047  15.047 (0.978)    70     39276 5.00000    4.959   0.00-   0.00   100.00
 15.047  15.047 (0.978)    43    258689                     0.00-   0.00   658.64
 15.027  15.027 (0.976)    61     95818                     0.00-   0.00   243.96
-------------------------------------------------------------------------------
   93 Methyl Acrylate                               CAS #: 96-33-3
 15.123  15.123 (0.983)    55    291698 5.00000    4.782   0.00-   0.00   100.00
 15.123  15.123 (0.983)    85     67528                     0.00-   0.00    23.15
 15.123  15.123 (0.983)    58     31537                     0.00-   0.00    10.81
-------------------------------------------------------------------------------
*  98 Bromochloromethane                            CAS #: 74-97-5
 15.391  15.391 (1.000)   130    141233 5.00000            80.00- 120.00   100.00
 15.391  15.391 (1.000)   128    107297                    52.25- 112.25    75.97
 15.391  15.391 (1.000)    49     96602                    89.81- 149.81    68.40
-------------------------------------------------------------------------------
  107 1,1-Dichloropropene                           CAS #: 563-58-6
 15.884  15.884 (1.032)   110    124288 5.00000    4.710   0.00-   0.00   100.00
 15.884  15.884 (1.032)    75    303680                     0.00-   0.00   244.34
-------------------------------------------------------------------------------
```

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

  115 Isobutanol                                     CAS #: 78-83-1
 15.977  15.977 (1.038)    43    117397 5.00000    4.149   0.00-   0.00   100.00
 15.977  15.977 (1.038)    41     89075                    0.00-   0.00    75.88
 15.977  15.977 (1.038)    55     12299                    0.00-   0.00    10.48
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                            CAS #: 540-36-3
 16.737  16.737 (1.000)   114    516954 5.00000           80.00- 120.00   100.00
 16.737  16.737 (1.000)    88     74578                    0.00-  45.20    14.43
-------------------------------------------------------------------------------
  124 n-Butanol                                      CAS #: 71-36-3
 16.906  16.906 (1.010)    56    227746 5.00000    4.902   0.00-   0.00   100.00
 16.906  16.906 (1.010)    41    142283                    0.00-   0.00    62.47
 16.906  16.906 (1.010)    43    113242                    0.00-   0.00    49.72
-------------------------------------------------------------------------------
  128 Ethyl acrylate                                 CAS #: 140-88-5
 17.171  17.171 (1.026)    99     36442 5.00000    4.716   0.00-   0.00   100.00
 17.171  17.171 (1.026)    45     27079                    0.00-   0.00    74.31
 17.171  17.171 (1.026)    55    333900                    0.00-   0.00   916.25
-------------------------------------------------------------------------------
  131 2-Pentanone                                    CAS #: 107-87-9
 17.388  17.388 (1.039)    43    384846 5.00000    4.804   0.00-   0.00   100.00
 17.388  17.388 (1.039)    58     34497                    0.00-   0.00     8.96
 17.388  17.388 (1.039)    86    112337                    0.00-   0.00    29.19
-------------------------------------------------------------------------------
  134 Methyl Methacrylate                            CAS #: 80-62-6
 17.556  17.556 (1.049)    41    209575 5.00000    5.012   0.00-   0.00   100.00
 17.556  17.556 (1.049)    69    222689                    0.00-   0.00   106.26
 17.556  17.556 (1.049)   100     92187                    0.00-   0.00    43.99
-------------------------------------------------------------------------------
  137 Dibromomethane                                 CAS #: 74-95-3
 17.797  17.797 (1.063)   174    364590 5.00000    4.717   0.00-   0.00   100.00
 17.797  17.797 (1.063)    93    293369                    0.00-   0.00    80.47
 17.797  17.797 (1.063)    95    237140                    0.00-   0.00    65.04
-------------------------------------------------------------------------------
  148 Octane                                         CAS #: 111-65-9
 19.320  19.320 (1.154)    57    118134 5.00000    4.540   0.00-   0.00   100.00
 19.343  19.343 (1.156)    85    184953                    0.00-   0.00   156.56
 19.320  19.320 (1.154)    43    251518                    0.00-   0.00   212.91
-------------------------------------------------------------------------------
  157 1,3-Dichloropropane                            CAS #: 142-28-9
 20.795  20.795 (0.938)    76    375846 5.00000    4.745   0.00-   0.00   100.00
 20.795  20.795 (0.938)    41    173887                    0.00-   0.00    46.27
 20.795  20.795 (0.938)    78    123066                    0.00-   0.00    32.74
-------------------------------------------------------------------------------
  159 Butyl Acetate                                  CAS #: 123-86-4
 20.905  20.905 (0.943)    56     38685 5.00000    5.004   0.00-   0.00   100.00
```

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

  159 Butyl Acetate (continued)
 20.905  20.905 (0.943)    73     22544                     0.00-   0.00    58.28
 20.905  20.905 (0.943)    43     86345                     0.00-   0.00   223.20
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                                CAS #: 3114-55-4
 22.177  22.177 (1.000)   117    459398 5.00000           80.00- 120.00   100.00
 22.177  22.177 (1.000)    82    229098                   20.64-  80.64    49.87
-------------------------------------------------------------------------------
  168 1,1,1,2-Tetrachloroethane                       CAS #: 630-20-6
 22.343  22.343 (1.007)   131    422612 5.00000    4.604   0.00-   0.00   100.00
 22.343  22.343 (1.007)   117    262589                    0.00-   0.00    62.13
 22.343  22.343 (1.007)    95    146906                    0.00-   0.00    34.76
-------------------------------------------------------------------------------
  170 Nonane                                          CAS #: 111-84-2
 22.301  22.301 (1.006)    43    223074 5.00000    4.850   0.00-   0.00   100.00
 22.301  22.301 (1.006)    57    244925                    0.00-   0.00   109.80
 22.301  22.301 (1.006)    85    131111                    0.00-   0.00    58.77
-------------------------------------------------------------------------------
  173 2-Heptanone                                     CAS #: 110-43-0
 23.214  23.214 (1.047)    58    240763 5.00000    5.063   0.00-   0.00   100.00
 23.214  23.214 (1.047)    43    332802                    0.00-   0.00   138.23
-------------------------------------------------------------------------------
  176 Cyclohexanone                                   CAS #: 108-94-1
 23.811  23.811 (1.074)    55    193362 5.00000    4.883   0.00-   0.00   100.00
 23.811  23.811 (1.074)    98    127898                    0.00-   0.00    66.14
 23.811  23.811 (1.074)    42    130941                    0.00-   0.00    67.72
-------------------------------------------------------------------------------
  179 alpha-Pinene                                    CAS #: 80-56-8
 23.497  23.497 (1.060)    93    914983 5.00000    4.994   0.00-   0.00   100.00
 23.497  23.497 (1.060)   121    127713                    0.00-   0.00    13.96
 23.497  23.497 (1.060)    92    346938                    0.00-   0.00    37.92
-------------------------------------------------------------------------------
  180 Bromobenzene                                    CAS #: 108-86-1
 24.080  24.080 (1.086)   156    428983 5.00000    4.646   0.00-   0.00   100.00
 24.080  24.080 (1.086)   158    415965                    0.00-   0.00    96.97
 24.080  24.080 (1.086)    77    539987                    0.00-   0.00   125.88
-------------------------------------------------------------------------------
  185 1,2,3-Trichloropropane                          CAS #: 96-18-4
 24.125  24.125 (1.088)   110    173114 5.00000    4.669   0.00-   0.00   100.00
 24.125  24.125 (1.088)    75    600820                    0.00-   0.00   347.07
 24.125  24.125 (1.088)    61     98695                    0.00-   0.00    57.01
-------------------------------------------------------------------------------
  187 Decane                                          CAS #: 124-18-5
 24.170  24.170 (1.090)    57    186950 5.00000    4.986   0.00-   0.00   100.00
 24.170  24.170 (1.090)    71     88283                    0.00-   0.00    47.22
 24.170  24.170 (1.090)   142     15722                    0.00-   0.00     8.41
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE		RATIO
189 2-Chlorotoluene					CAS #: 95-49-8			
24.282	24.282 (1.095)	126	281945	5.00000	4.759	0.00-	0.00	100.00
24.282	24.282 (1.095)	91	719140			0.00-	0.00	255.06
24.282	24.282 (1.095)	65	65619			0.00-	0.00	23.27
191 4-Chlorotoluene					CAS #: 106-43-4			
24.416	24.416 (1.101)	126	272081	5.00000	4.954	0.00-	0.00	100.00
24.416	24.416 (1.101)	91	689927			0.00-	0.00	253.57
24.416	24.416 (1.101)	63	76087			0.00-	0.00	27.96
195 tert-Butylbenzene					CAS #: 98-06-6			
24.708	24.708 (1.114)	119	738274	5.00000	4.769	0.00-	0.00	100.00
24.708	24.708 (1.114)	134	183985			0.00-	0.00	24.92
24.685	24.685 (1.113)	91	450568			0.00-	0.00	61.03
197 Pentachloroethane					CAS #: 76-01-7			
24.798	24.798 (1.118)	167	295036	5.00000	4.702	0.00-	0.00	100.00
24.798	24.798 (1.118)	117	248392			0.00-	0.00	84.19
24.798	24.798 (1.118)	169	141621			0.00-	0.00	48.00
199 D-Limonene					CAS #: 5989-27-5			
25.022	25.022 (1.128)	68	285111	5.00000	4.886	0.00-	0.00	100.00
25.044	25.044 (1.129)	93	715556			0.00-	0.00	250.97
203 sec-Butylbenzene					CAS #: 135-98-8			
24.955	24.955 (1.125)	105	1401398	5.00000	4.798	0.00-	0.00	100.00
24.955	24.955 (1.125)	134	298944			0.00-	0.00	21.33
24.955	24.955 (1.125)	91	222975			0.00-	0.00	15.91
206 bis(2-Chloroethyl) Ether					CAS #: 111-44-4			
25.044	25.044 (1.129)	93	715556	5.00000	4.932	0.00-	0.00	100.00
25.044	25.044 (1.129)	95	178714			0.00-	0.00	24.98
25.044	25.044 (1.129)	63	300880			0.00-	0.00	42.05
207 p-Cymene					CAS #: 99-87-6			
25.089	25.089 (1.131)	119	871738	5.00000	4.887	0.00-	0.00	100.00
25.089	25.089 (1.131)	134	237134			0.00-	0.00	27.20
25.089	25.089 (1.131)	91	187210			0.00-	0.00	21.48
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8			
25.268	25.268 (1.139)	120	270764	5.00000	4.741	0.00-	0.00	100.00
25.268	25.268 (1.139)	105	606155			0.00-	0.00	223.87
25.268	25.268 (1.139)	77	70976			0.00-	0.00	26.21
213 Butylbenzene					CAS #: 104-51-8			
25.537	25.537 (1.152)	134	213210	5.00000	4.765	0.00-	0.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
213 Butylbenzene (continued)							
25.537	25.537 (1.152)	91	695292			0.00- 0.00	326.11
25.537	25.537 (1.152)	92	375302			0.00- 0.00	176.02
215 Undecane					CAS #: 1120-21-4		
25.515	25.515 (1.151)	57	137800	5.00000	5.072	0.00- 0.00	100.00
25.515	25.515 (1.151)	43	101333			0.00- 0.00	73.54
25.515	25.515 (1.151)	85	48053			0.00- 0.00	34.87
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
26.546	26.546 (1.197)	157	368839	5.00000	5.084	0.00- 0.00	100.00
26.546	26.546 (1.197)	75	264815			0.00- 0.00	71.80
26.546	26.546 (1.197)	155	280375			0.00- 0.00	76.02
225 Dodecane					CAS #: 112-40-3		
26.613	26.613 (1.200)	85	37527	5.00000	4.636	0.00- 0.00	100.00
26.613	26.613 (1.200)	57	81283			0.00- 0.00	216.60
26.613	26.613 (1.200)	43	59217			0.00- 0.00	157.80

QC Flag Legend

T - Target compound detected outside RT window.

Report Date: 09-May-2016 17:07

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e050913.d
Lab Smp Id: ICAL Level 12
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/09May2016.b/e16l0317d.m
Misc Info: 5.0ppbv (5.0ppbv) Combo

Calibration Date: 09-MAY-2016
Calibration Time: 07:51

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	159373	95624	223122	141233	-11.38
123 1,4-Difluorobenze	624905	374943	874867	516954	-17.27
163 Chlorobenzene-d5	549919	329951	769887	459398	-16.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/09May2016.b/e050913.d

Date : 09-MAY-2016 15:22

Client ID:

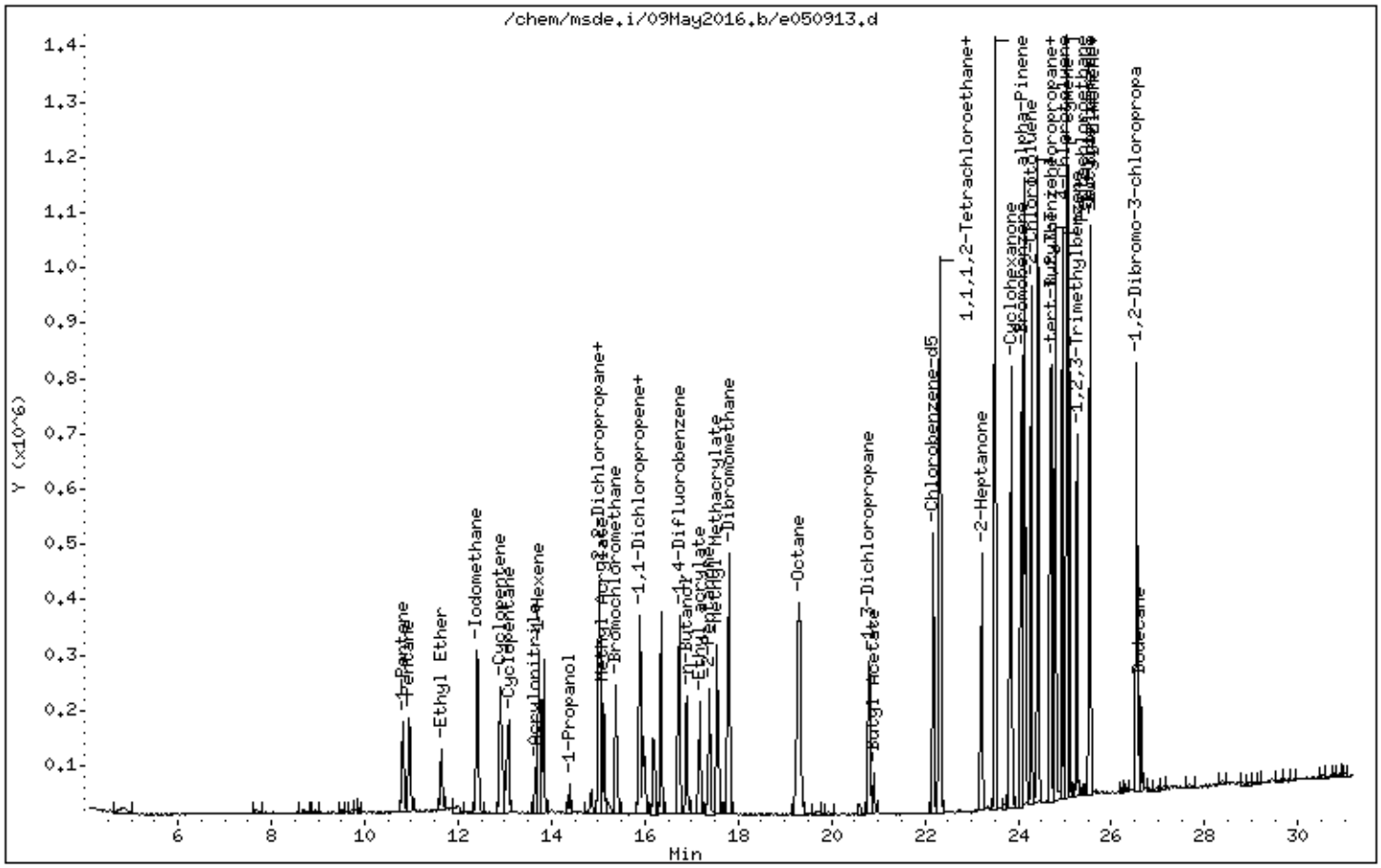
Instrument: msde.i

Sample Info: 250mL# 2789-105

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/30Mar2016.b/e033009.d
Lab Smp Id: ICAL Client Smp ID: Level 12
Inj Date : 30-MAR-2016 16:25
Operator : ef Inst ID: msde.i
Smp Info : 250mL# 2789-45
Misc Info : 5.0ppbv (5.0ppbv) Acrolein
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/30Mar2016.b/e16l0317c.m
Meth Date : 30-Mar-2016 17:06 ealcan Quant Type: ISTD
Cal Date : 30-MAR-2016 16:25 Cal File: e033009.d
Als bottle: 1 Calibration Sample, Level: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AcroleinICAL.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 Acrolein					CAS #: 107-02-8		
12.233	12.233 (0.785)	56	38032	5.00000	4.341	0.00- 0.00	100.00
12.233	12.233 (0.785)	55	27826			0.00- 0.00	73.16
* 98 Bromochloromethane					CAS #: 74-97-5		
15.580	15.580 (1.000)	130	151841	5.00000		80.00- 120.00	100.00
15.580	15.580 (1.000)	128	118683			52.25- 112.25	78.16
15.580	15.580 (1.000)	49	111139			89.81- 149.81	73.19
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
16.939	16.939 (1.000)	114	573763	5.00000		80.00- 120.00	100.00
16.939	16.939 (1.000)	88	83947			0.00- 45.20	14.63
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.365	22.365 (1.000)	117	524326	5.00000		80.00- 120.00	100.00
22.365	22.365 (1.000)	82	269974			20.64- 80.64	51.49

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e033009.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/30Mar2016.b/e16l0317c.m
Misc Info: 5.0ppbv (5.0ppbv) Acrolein

Calibration Date: 30-MAR-2016
Calibration Time: 11:07
Client Smp ID: Level 12
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	190719	114431	267007	151841	-20.38
123 1,4-Difluorobenze	725285	435171	1015399	573763	-20.89
163 Chlorobenzene-d5	658854	395312	922396	524326	-20.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/30Mar2016.b/e033009.d

Date : 30-MAR-2016 16:25

Client ID: Level 12

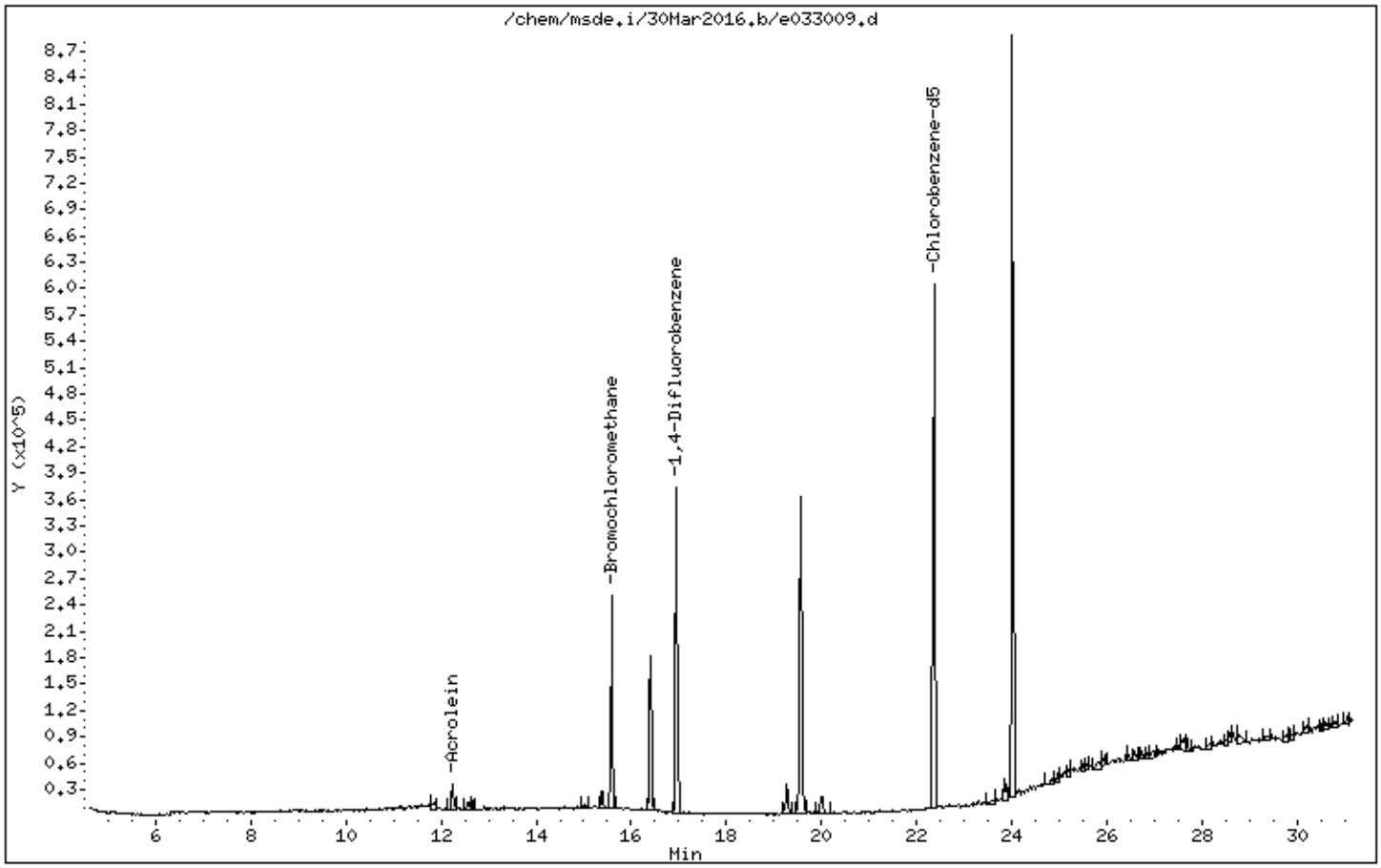
Instrument: msde.i

Sample Info: 250mL# 2789-45

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/25Mar2016.b/e032507.d
Lab Smp Id: ICAL Client Smp ID: Level 12
Inj Date : 25-MAR-2016 13:44
Operator : ef Inst ID: msde.i
Smp Info : 250mL# 2789-4
Misc Info : 5.0ppbv (5.0ppbv) Combo
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/25Mar2016.b/e16l0317b.m
Meth Date : 25-Mar-2016 15:05 efinn Quant Type: ISTD
Cal Date : 25-MAR-2016 13:44 Cal File: e032507.d
Als bottle: 1 Calibration Sample, Level: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Combo-AT1ICAL.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
32 Vinyl Bromide					CAS #: 593-60-2		
10.786	10.786 (0.692)	106	165451	5.00000	5.009	0.00- 0.00	100.00
10.786	10.786 (0.692)	108	154873			0.00- 0.00	93.61
36 1-Pentene					CAS #: 109-67-1		
11.033	11.033 (0.708)	55	120891	5.00000	4.791	0.00- 0.00	100.00
11.014	11.014 (0.707)	42	131204			0.00- 0.00	108.53
34 Pentane					CAS #: 109-66-0		
11.147	11.147 (0.716)	43	227736	5.00000	5.060	0.00- 0.00	100.00
11.147	11.147 (0.716)	57	43821			0.00- 0.00	19.24
11.166	11.166 (0.717)	72	38684			0.00- 0.00	16.99
44 Ethyl Ether					CAS #: 60-29-7		
11.833	11.833 (0.759)	74	75966	5.00000	4.452	0.00- 0.00	100.00(T)
11.833	11.833 (0.759)	59	90713			0.00- 0.00	119.41
0.000	1.000 (0.000)	31	0			0.00- 0.00	0.00

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

   53 Iodomethane                                   CAS #: 74-88-4
 12.614  12.614 (0.810)   142    524475 5.00000    4.930   0.00-   0.00   100.00
 12.614  12.614 (0.810)   127    246212                    0.00-   0.00    46.94
-------------------------------------------------------------------------------
   63 Acetonitrile                                  CAS #: 75-05-8
 13.204  13.204 (0.848)    41    112429 5.00000    5.342   0.00-   0.00   100.00
 13.204  13.204 (0.848)    40     60311                    0.00-   0.00    53.64
 13.204  13.204 (0.848)    39     21709                    0.00-   0.00    19.31
-------------------------------------------------------------------------------
   64 Cyclopentane                                  CAS #: 287-92-3
 13.280  13.280 (0.852)    70    108011 5.00000    4.972   0.00-   0.00   100.00
 13.280  13.280 (0.852)    55    110570                    0.00-   0.00   102.37
-------------------------------------------------------------------------------
   74 Acrylonitrile                                 CAS #: 107-13-1
 13.838  13.838 (0.888)    53    110018 5.00000    4.760   0.00-   0.00   100.00
 13.838  13.838 (0.888)    52    101087                    0.00-   0.00    91.88
-------------------------------------------------------------------------------
   76 1-Hexene                                      CAS #: 592-41-6
 13.921  13.921 (0.894)    55    105101 5.00000    4.902   0.00-   0.00   100.00
 13.921  13.921 (0.894)    41    154482                    0.00-   0.00   146.98
 13.921  13.921 (0.894)    84     56003                    0.00-   0.00    53.28
-------------------------------------------------------------------------------
   94 Ethyl Acetate                                 CAS #: 141-78-6
 15.221  15.221 (0.977)    70     38018 5.00000    5.472   0.00-   0.00   100.00
 15.221  15.221 (0.977)    43    270011                    0.00-   0.00   710.22
 15.221  15.221 (0.977)    61    103146                    0.00-   0.00   271.31
-------------------------------------------------------------------------------
   93 Methyl Acrylate                               CAS #: 96-33-3
 15.316  15.316 (0.983)    55    259654 5.00000    5.363   0.00-   0.00   100.00
 15.316  15.316 (0.983)    85     59593                    0.00-   0.00    22.95
 15.316  15.316 (0.983)    58     25835                    0.00-   0.00     9.95
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.580  15.580 (1.000)   130    173196 5.00000           80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    132775                   52.25- 112.25    76.66
 15.580  15.580 (1.000)    49    137798                   89.81- 149.81    79.56
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                          CAS #: 540-36-3
 16.939  16.939 (1.000)   114    677694 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88    104850                    0.00-  45.20    15.47
-------------------------------------------------------------------------------
  128 Ethyl acrylate                                CAS #: 140-88-5
 17.397  17.397 (1.027)    99     23213 5.00000    4.588   0.00-   0.00   100.00
 17.397  17.397 (1.027)    45     24943                    0.00-   0.00   107.45
 17.397  17.397 (1.027)    55    247459                    0.00-   0.00  1066.04
-------------------------------------------------------------------------------
```

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

  131 2-Pentanone                                  CAS #: 107-87-9
 17.614  17.614 (1.040)    43    312126 5.00000    4.906   0.00-   0.00   100.00
 17.614  17.614 (1.040)    58     31705                    0.00-   0.00    10.16
 17.614  17.614 (1.040)    86     80957                    0.00-   0.00    25.94
-------------------------------------------------------------------------------
  134 Methyl Methacrylate                          CAS #: 80-62-6
 17.782  17.782 (1.050)    41    151568 5.00000    4.775   0.00-   0.00   100.00
 17.782  17.782 (1.050)    69    161442                    0.00-   0.00   106.51
 17.807  17.807 (1.051)   100     68347                    0.00-   0.00    45.09
-------------------------------------------------------------------------------
  137 Dibromomethane                               CAS #: 74-95-3
 18.048  18.048 (1.065)   174    228753 5.00000    4.763   0.00-   0.00   100.00
 18.048  18.048 (1.065)    93    183455                    0.00-   0.00    80.20
 18.048  18.048 (1.065)    95    162937                    0.00-   0.00    71.23
-------------------------------------------------------------------------------
  148 Octane                                       CAS #: 111-65-9
 19.624  19.624 (1.158)    57    173838 5.00000    4.774   0.00-   0.00   100.00
 19.624  19.624 (1.158)    85    250803                    0.00-   0.00   144.27
 19.624  19.624 (1.158)    43    359907                    0.00-   0.00   207.04
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                             CAS #: 3114-55-4
 22.366  22.366 (1.000)   117    633398 5.00000           80.00- 120.00   100.00
 22.366  22.366 (1.000)    82    315456                   20.64-  80.64    49.80
-------------------------------------------------------------------------------
  170 Nonane                                       CAS #: 111-84-2
 22.490  22.490 (1.006)    43    338947 5.00000    4.787   0.00-   0.00   100.00
 22.490  22.490 (1.006)    57    354266                    0.00-   0.00   104.52
 22.490  22.490 (1.006)    85    181297                    0.00-   0.00    53.49
-------------------------------------------------------------------------------
  184 trans-1,4-Dichloro-2-butene                  CAS #: 110-57-6
 24.289  24.289 (1.086)    75    465599 5.00000    4.841   0.00-   0.00   100.00
 24.289  24.289 (1.086)    89     56823                    0.00-   0.00    12.20
 24.267  24.267 (1.085)    53     79053                    0.00-   0.00    16.98
-------------------------------------------------------------------------------
  187 Decane                                       CAS #: 124-18-5
 24.581  24.581 (1.099)    57    334448 5.00000    5.003   0.00-   0.00   100.00
 24.581  24.581 (1.099)    71      3657                    0.00-   0.00     1.09
 24.603  24.603 (1.100)   142     61910                    0.00-   0.00    18.51
-------------------------------------------------------------------------------
  206 bis(2-Chloroethyl) Ether                     CAS #: 111-44-4
 25.186  25.186 (1.126)    93    386161 5.00000    4.835   0.00-   0.00   100.00
 25.186  25.186 (1.126)    95    120236                    0.00-   0.00    31.14
 25.186  25.186 (1.126)    63    242116                    0.00-   0.00    62.70
-------------------------------------------------------------------------------
  215 Undecane                                     CAS #: 1120-21-4
 25.657  25.657 (1.147)    57    129551 5.00000    4.662   0.00-   0.00   100.00
```

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
215 Undecane (continued)								
25.657	25.657	(1.147)	43	96989			0.00- 0.00	74.87
25.657	25.657	(1.147)	85	49341			0.00- 0.00	38.09
225 Dodecane						CAS #: 112-40-3		
26.800	26.800	(1.198)	85	19932	5.00000	5.049	0.00- 0.00	100.00
26.800	26.800	(1.198)	57	42384			0.00- 0.00	212.64
26.800	26.800	(1.198)	43	33919			0.00- 0.00	170.17

QC Flag Legend

T - Target compound detected outside RT window.

Report Date: 25-Mar-2016 15:05

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e032507.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/25Mar2016.b/e16l0317b.m
Misc Info: 5.0ppbv (5.0ppbv) Combo

Calibration Date: 25-MAR-2016
Calibration Time: 09:25
Client Smp ID: Level 12
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	196631	117979	275283	173196	-11.92
123 1,4-Difluorobenze	760212	456127	1064297	677694	-10.85
163 Chlorobenzene-d5	680500	408300	952700	633398	-6.92

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/25Mar2016.b/e032507.d

Date : 25-MAR-2016 13:44

Client ID: Level 12

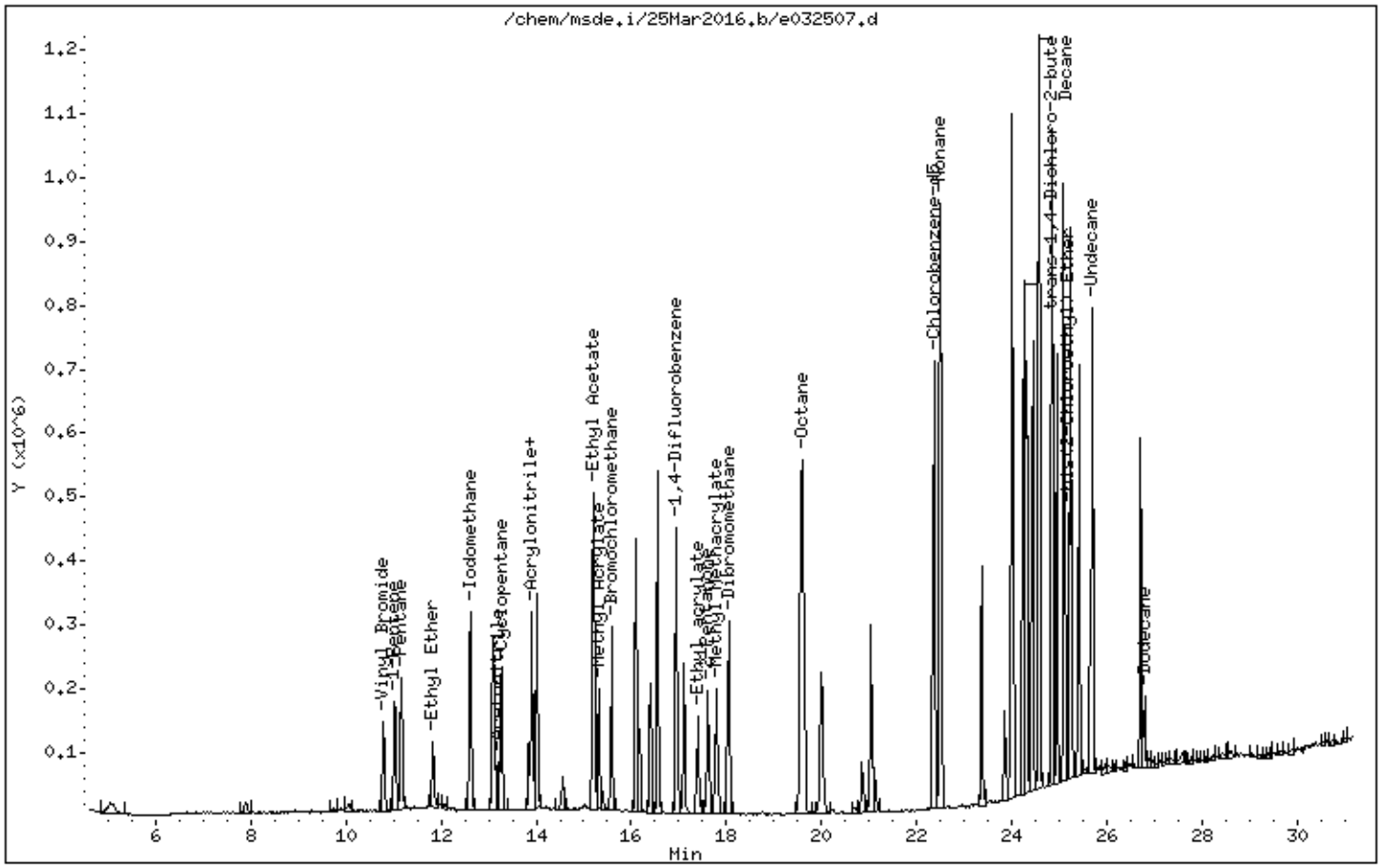
Instrument: msde.i

Sample Info: 250mL# 2789-4

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/22Mar2016.b/e032209.d
Lab Smp Id: ICAL Client Smp ID: Level 12
Inj Date : 22-MAR-2016 15:32
Operator : ef Inst ID: msde.i
Smp Info : 250mL# 2759-238
Misc Info : 5.0ppbv (5.0ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/22Mar2016.b/e16l0317a.m
Meth Date : 24-Mar-2016 08:33 efinn Quant Type: ISTD
Cal Date : 22-MAR-2016 15:32 Cal File: e032209.d
Als bottle: 1 Calibration Sample, Level: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1.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
7 Freon 134a					CAS #: 811-97-2		
4.901	4.901 (0.315)	83	77227	5.00000	4.739	0.00- 0.00	100.00(T)
4.925	4.925 (0.316)	69	54552			0.00- 0.00	70.64
0.000	1.000 (0.000)	0	0			0.00- 0.00	0.00
10 1,1-Difluoroethane					CAS #: 75-37-6		
5.359	5.359 (0.344)	65	32956	5.00000	4.791	0.00- 0.00	100.00(M)
5.359	5.359 (0.344)	51	51930			0.00- 0.00	157.57
13 Chlorodifluoromethane					CAS #: 75-45-6		
6.010	6.010 (0.386)	51	82526	5.00000	4.657	0.00- 0.00	100.00
6.010	6.010 (0.386)	67	20911			0.00- 0.00	25.34
5.985	5.985 (0.384)	85	1042			0.00- 0.00	1.26
16 Freon 142b					CAS #: 75-68-3		
7.094	7.094 (0.455)	65	169757	5.00000	4.723	0.00- 0.00	100.00
7.118	7.118 (0.457)	45	31498			0.00- 0.00	18.55

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

   16 Freon 142b (continued)
  7.070   7.070 (0.454)    81      4962                     0.00-   0.00     2.92
-------------------------------------------------------------------------------
   37 Dichlorofluoromethane                        CAS #: 75-43-4
 11.071  11.071 (0.711)    67    179160 5.00000    4.773   0.00-   0.00   100.00
 11.071  11.071 (0.711)    69     59500                     0.00-   0.00    33.21
 11.071  11.071 (0.711)    47     14409                     0.00-   0.00     8.04
-------------------------------------------------------------------------------
   48 Freon 123                                    CAS #: 306-83-2
 12.213  12.213 (0.784)    83    276077 5.00000    4.762   0.00-   0.00   100.00
 12.213  12.213 (0.784)   133     80928                     0.00-   0.00    29.31
 12.213  12.213 (0.784)    85    193182                     0.00-   0.00    69.97
-------------------------------------------------------------------------------
   59 Cyclopentene                                 CAS #: 142-29-0
 13.090  13.090 (0.840)    67    123373 5.00000    4.632   0.00-   0.00   100.00
 13.090  13.090 (0.840)    68     47526                     0.00-   0.00    38.52
 13.090  13.090 (0.840)    53     20897                     0.00-   0.00    16.94
-------------------------------------------------------------------------------
   84 1-Propanol                                   CAS #: 71-23-8
 14.552  14.552 (0.934)    59     36617 5.00000    4.900   0.00-   0.00   100.00
 14.552  14.552 (0.934)    42     24690                     0.00-   0.00    67.43
 14.552  14.552 (0.934)    41     20825                     0.00-   0.00    56.87
-------------------------------------------------------------------------------
   90 2,2-Dichloropropane                          CAS #: 594-20-7
 15.201  15.201 (0.976)    77    219774 5.00000    4.668   0.00-   0.00   100.00
 15.201  15.201 (0.976)    79     74592                     0.00-   0.00    33.94
 15.201  15.201 (0.976)    97     44793                     0.00-   0.00    20.38
-------------------------------------------------------------------------------
*  98 Bromochloromethane                          CAS #: 74-97-5
 15.580  15.580 (1.000)   130    199992 5.00000           80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    152390                   52.25- 112.25    76.20
 15.580  15.580 (1.000)    49    154162                   89.81- 149.81    77.08
-------------------------------------------------------------------------------
  107 1,1-Dichloropropene                         CAS #: 563-58-6
 16.104  16.104 (1.034)   110     58226 5.00000    4.743   0.00-   0.00   100.00
 16.104  16.104 (1.034)    75    156172                     0.00-   0.00   268.22
-------------------------------------------------------------------------------
  115 Isobutanol                                  CAS #: 78-83-1
 16.165  16.165 (1.038)    43    169269 5.00000    4.687   0.00-   0.00   100.00
 16.165  16.165 (1.038)    41    138945                     0.00-   0.00    82.09
 16.165  16.165 (1.038)    55     14350                     0.00-   0.00     8.48
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                         CAS #: 540-36-3
 16.939  16.939 (1.000)   114    753466 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88    114257                     0.00-  45.20    15.16
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
124 n-Butanol					CAS #: 71-36-3		
17.108	17.108 (1.010)	56	248013	5.00000	5.208	0.00- 0.00	100.00
17.108	17.108 (1.010)	41	164379			0.00- 0.00	66.28
17.108	17.108 (1.010)	43	126222			0.00- 0.00	50.89
157 1,3-Dichloropropane					CAS #: 142-28-9		
21.045	21.045 (0.941)	76	284505	5.00000	4.876	0.00- 0.00	100.00
21.045	21.045 (0.941)	41	141469			0.00- 0.00	49.72
21.045	21.045 (0.941)	78	96798			0.00- 0.00	34.02
159 Butyl Acetate					CAS #: 123-86-4		
21.128	21.128 (0.945)	56	35598	5.00000	5.191	0.00- 0.00	100.00
21.128	21.128 (0.945)	73	19759			0.00- 0.00	55.51
21.128	21.128 (0.945)	43	83093			0.00- 0.00	233.42
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.365	22.365 (1.000)	117	686632	5.00000		80.00- 120.00	100.00
22.365	22.365 (1.000)	82	350822			20.64- 80.64	51.09
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.531	22.531 (1.007)	131	337911	5.00000	4.850	0.00- 0.00	100.00
22.511	22.511 (1.006)	117	213501			0.00- 0.00	63.18
22.511	22.511 (1.006)	95	123190			0.00- 0.00	36.46
173 2-Heptanone					CAS #: 110-43-0		
23.381	23.381 (1.045)	58	265455	5.00000	5.258	0.00- 0.00	100.00
23.381	23.381 (1.045)	43	375302			0.00- 0.00	141.38
176 Cyclohexanone					CAS #: 108-94-1		
23.975	23.975 (1.072)	55	206624	5.00000	4.844	0.00- 0.00	100.00
23.975	23.975 (1.072)	98	122635			0.00- 0.00	59.35
23.975	23.975 (1.072)	42	142418			0.00- 0.00	68.93
180 Bromobenzene					CAS #: 108-86-1		
24.244	24.244 (1.084)	156	360655	5.00000	4.793	0.00- 0.00	100.00
24.244	24.244 (1.084)	158	358601			0.00- 0.00	99.43
24.244	24.244 (1.084)	77	492929			0.00- 0.00	136.68
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
24.289	24.289 (1.086)	110	183219	5.00000	4.907	0.00- 0.00	100.00
24.289	24.289 (1.086)	75	436860			0.00- 0.00	238.44
24.289	24.289 (1.086)	61	97886			0.00- 0.00	53.43
189 2-Chlorotoluene					CAS #: 95-49-8		
24.446	24.446 (1.093)	126	249779	5.00000	4.889	0.00- 0.00	100.00
24.446	24.446 (1.093)	91	670456			0.00- 0.00	268.42

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
189 2-Chlorotoluene (continued)							
24.446	24.446 (1.093)	65	61678			0.00- 0.00	24.69
191 4-Chlorotoluene					CAS #: 106-43-4		
24.581	24.581 (1.099)	126	247223	5.00000	4.846	0.00- 0.00	100.00
24.581	24.581 (1.099)	91	668582			0.00- 0.00	270.44
24.581	24.581 (1.099)	63	77347			0.00- 0.00	31.29
195 tert-Butylbenzene					CAS #: 98-06-6		
24.850	24.850 (1.111)	119	771196	5.00000	4.843	0.00- 0.00	100.00
24.850	24.850 (1.111)	134	189054			0.00- 0.00	24.51
24.850	24.850 (1.111)	91	484438			0.00- 0.00	62.82
197 Pentachloroethane					CAS #: 76-01-7		
24.962	24.962 (1.116)	167	278331	5.00000	4.876	0.00- 0.00	100.00
24.962	24.962 (1.116)	117	241655			0.00- 0.00	86.82
24.962	24.962 (1.116)	169	130805			0.00- 0.00	47.00
203 sec-Butylbenzene					CAS #: 135-98-8		
25.096	25.096 (1.122)	105	1051147	5.00000	4.914	0.00- 0.00	100.00
25.096	25.096 (1.122)	134	220900			0.00- 0.00	21.02
25.096	25.096 (1.122)	91	161571			0.00- 0.00	15.37
207 p-Cymene					CAS #: 99-87-6		
25.253	25.253 (1.129)	119	832038	5.00000	4.934	0.00- 0.00	100.00
25.253	25.253 (1.129)	134	224341			0.00- 0.00	26.96
25.253	25.253 (1.129)	91	193312			0.00- 0.00	23.23
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
25.410	25.410 (1.136)	120	259831	5.00000	4.980	0.00- 0.00	100.00
25.410	25.410 (1.136)	105	597337			0.00- 0.00	229.89
25.410	25.410 (1.136)	77	72861			0.00- 0.00	28.04
213 Butylbenzene					CAS #: 104-51-8		
25.702	25.702 (1.149)	134	184121	5.00000	4.872	0.00- 0.00	100.00
25.702	25.702 (1.149)	91	636755			0.00- 0.00	345.84
25.702	25.702 (1.149)	92	336044			0.00- 0.00	182.51
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
26.710	26.710 (1.194)	157	329354	5.00000	4.851	0.00- 0.00	100.00
26.710	26.710 (1.194)	75	276928			0.00- 0.00	84.08
26.710	26.710 (1.194)	155	254440			0.00- 0.00	77.25

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e032209.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/22Mar2016.b/e16l0317a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 22-MAR-2016
Calibration Time: 09:49
Client Smp ID: Level 12
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	190421	114253	266589	199992	5.03
123 1,4-Difluorobenze	736283	441770	1030796	753466	2.33
163 Chlorobenzene-d5	650623	390374	910872	686632	5.53

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/22Mar2016.b/e032209.d

Date : 22-MAR-2016 15:32

Client ID: Level 12

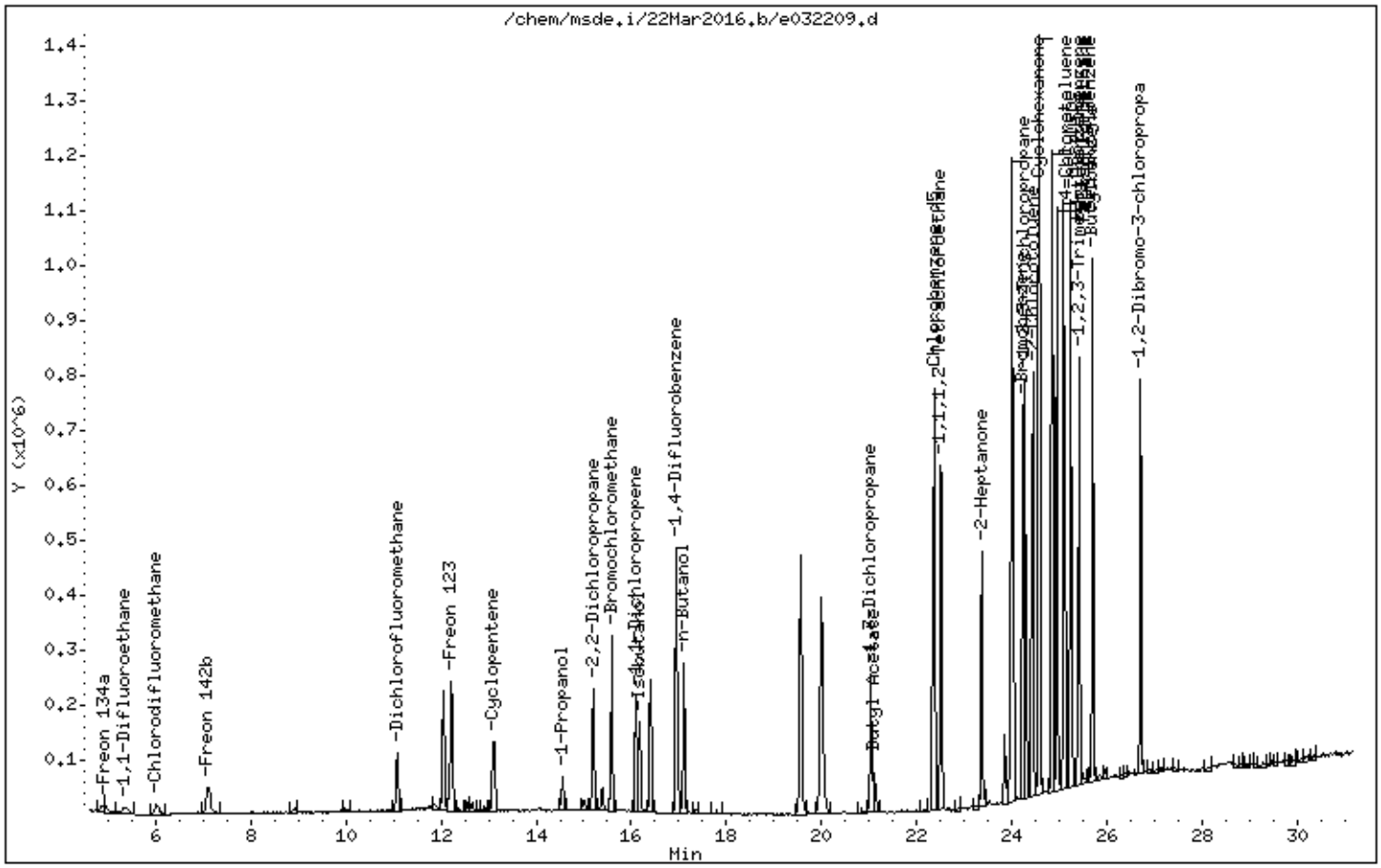
Instrument: msde.i

Sample Info: 250mL# 2759-238

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/17Mar2016.b/e031710.d
Lab Smp Id: ICAL Client Smp ID: Level 12
Inj Date : 17-MAR-2016 17:24
Operator : ea Inst ID: msde.i
Smp Info : 25mL# 2759-223
Misc Info : 5.0ppbv (50ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/17Mar2016.b/e16l0317a.m
Meth Date : 25-Apr-2016 15:58 efinn Quant Type: ISTD
Cal Date : 17-MAR-2016 17:24 Cal File: e031710.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
9 Propylene					CAS #: 115-07-1		
4.997	4.997 (0.321)	41	114844	5.00000	5.361	80.00- 120.00	100.00
4.997	4.997 (0.321)	42	78937			38.73- 98.73	68.73
5.021	5.021 (0.322)	39	98546			55.81- 115.81	85.81
11 Freon 12					CAS #: 75-71-8		
5.455	5.455 (0.350)	85	747837	5.00000	5.390	80.00- 120.00	100.00
5.455	5.455 (0.350)	87	239285			2.00- 62.00	32.00
15 Freon 114					CAS #: 76-14-2		
6.805	6.805 (0.437)	135	532724	5.00000	5.247	80.00- 120.00	100.00
6.829	6.829 (0.438)	137	166796			1.31- 61.31	31.31
6.805	6.805 (0.437)	85	659947			93.88- 153.88	123.88
17 Chloromethane					CAS #: 74-87-3		
7.167	7.167 (0.460)	50	136868	5.00000	5.200	80.00- 120.00	100.00
7.167	7.167 (0.460)	52	48589			5.50- 65.50	35.50

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
23 Butane					CAS #: 106-97-8		
7.872	7.872 (0.505)	58	36822	5.00000	5.400	80.00- 120.00	100.00
7.872	7.872 (0.505)	43	227769			588.57- 648.57	618.57
25 Vinyl Chloride					CAS #: 75-01-4		
7.993	7.993 (0.513)	62	192646	5.00000	5.202	80.00- 120.00	100.00
7.993	7.993 (0.513)	64	63844			3.14- 63.14	33.14
26 1,3-Butadiene					CAS #: 106-99-0		
8.236	8.236 (0.529)	54	130793	5.00000	5.251	80.00- 120.00	100.00
8.236	8.236 (0.529)	39	124529			65.21- 125.21	95.21
29 Bromomethane					CAS #: 74-83-9		
9.711	9.711 (0.623)	94	211801	5.00000	5.241	80.00- 120.00	100.00
9.711	9.711 (0.623)	96	199434			64.16- 124.16	94.16
30 Chloroethane					CAS #: 75-00-3		
10.176	10.176 (0.653)	64	96996	5.00000	5.544	80.00- 120.00	100.00
10.176	10.176 (0.653)	49	24159			0.00- 54.91	24.91
10.176	10.176 (0.653)	66	32609			3.62- 63.62	33.62
31 Isopentane					CAS #: 78-78-4		
10.310	10.310 (0.662)	57	133523	5.00000	5.264	80.00- 120.00	100.00
10.310	10.310 (0.662)	43	150463			82.69- 142.69	112.69
10.329	10.329 (0.663)	42	131721			68.65- 128.65	98.65
35 Freon 11					CAS #: 75-69-4		
10.938	10.938 (0.702)	101	766641	5.00000	5.132	80.00- 120.00	100.00
10.938	10.938 (0.702)	103	514957			37.17- 97.17	67.17
42 Ethanol					CAS #: 64-17-5		
11.833	11.833 (0.759)	45	59664	5.00000	5.512	80.00- 120.00	100.00
11.852	11.852 (0.761)	46	21843			6.61- 66.61	36.61
11.852	11.852 (0.761)	43	14712			0.00- 54.66	24.66
49 Freon 113					CAS #: 76-13-1		
12.271	12.271 (0.788)	151	532173	5.00000	4.754	80.00- 120.00	100.00
12.271	12.271 (0.788)	153	338662			33.64- 93.64	63.64
12.271	12.271 (0.788)	101	587513			80.40- 140.40	110.40
50 1,1-Dichloroethene					CAS #: 75-35-4		
12.271	12.271 (0.788)	98	158915	5.00000	5.090	80.00- 120.00	100.00
12.290	12.290 (0.789)	61	373282			204.89- 264.89	234.89
12.290	12.290 (0.789)	96	250590			127.69- 187.69	157.69
52 Acetone					CAS #: 67-64-1		
12.537	12.537 (0.805)	58	86870	5.00000	4.759	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
52 Acetone (continued)							
12.537	12.537 (0.805)	43	305324			321.47- 381.47	351.47
56 Carbon Disulfide					CAS #: 75-15-0		
12.652	12.652 (0.812)	76	726978	5.00000	5.225	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
12.880	12.880 (0.827)	45	300103	5.00000	5.374	80.00- 120.00	100.00
12.880	12.880 (0.827)	43	72303			0.00- 54.09	24.09
12.880	12.880 (0.827)	59	13298			0.00- 34.43	4.43
58 3-Chloropropene					CAS #: 107-05-1		
13.071	13.071 (0.839)	76	108607	5.00000	5.222	80.00- 120.00	100.00
13.071	13.071 (0.839)	41	210441			163.76- 223.76	193.76
66 Methylene Chloride					CAS #: 75-09-2		
13.338	13.338 (0.856)	84	218872	5.00000	5.004	80.00- 120.00	100.00
13.338	13.338 (0.856)	49	205722			63.99- 123.99	93.99
13.338	13.338 (0.856)	51	66300			0.29- 60.29	30.29
71 tert-Butyl alcohol					CAS #: 75-65-0		
13.536	13.536 (0.869)	59	487013	5.00000	4.767	80.00- 120.00	100.00
13.536	13.536 (0.869)	41	105492			0.00- 51.66	21.66
13.536	13.536 (0.869)	57	65736			0.00- 43.50	13.50
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
13.674	13.674 (0.878)	73	749567	5.00000	5.359	80.00- 120.00	100.00
13.674	13.674 (0.878)	57	136840			0.00- 48.26	18.26
13.674	13.674 (0.878)	41	116764			0.00- 45.58	15.58
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.729	13.729 (0.881)	98	173089	5.00000	5.459	80.00- 120.00	100.00
13.729	13.729 (0.881)	61	320692			155.28- 215.28	185.28
13.729	13.729 (0.881)	96	270330			126.18- 186.18	156.18
78 Hexane					CAS #: 110-54-3		
14.003	14.003 (0.899)	57	294787	5.00000	5.402	80.00- 120.00	100.00
14.003	14.003 (0.899)	43	151753			21.48- 81.48	51.48
14.003	14.003 (0.899)	86	63423			0.00- 51.51	21.51
83 Isopropyl ether					CAS #: 108-20-3		
14.360	14.360 (0.922)	45	550869	5.00000	5.535	80.00- 120.00	100.00
14.360	14.360 (0.922)	87	219703			9.88- 69.88	39.88
14.360	14.360 (0.922)	59	69937			0.00- 42.70	12.70
82 1,1-Dichloroethane					CAS #: 75-34-3		
14.415	14.415 (0.925)	63	447667	5.00000	5.395	80.00- 120.00	100.00

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

   82 1,1-Dichloroethane (continued)
 14.415  14.415 (0.925)    65    142277                     1.78-  61.78    31.78
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                CAS #: 108-05-4
 14.442  14.442 (0.927)    86     68571 5.00000    5.312  80.00- 120.00   100.00
 14.442  14.442 (0.927)    42     51224                    44.70- 104.70    74.70
 14.442  14.442 (0.927)    43    539878                   757.33- 817.33   787.33
-------------------------------------------------------------------------------
   88 Ethyl-tert-butyl ether                       CAS #: 637-92-3
 14.859  14.859 (0.954)    59    710444 5.00000    5.593  80.00- 120.00   100.00
 14.859  14.859 (0.954)    87    353372                    19.74-  79.74    49.74
 14.859  14.859 (0.954)    41    116086                     0.00-  46.34    16.34
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                       CAS #: 156-59-2
 15.240  15.240 (0.978)    98    178900 5.00000    5.158  80.00- 120.00   100.00
 15.240  15.240 (0.978)    61    314689                   145.90- 205.90   175.90
 15.240  15.240 (0.978)    96    278249                   125.53- 185.53   155.53
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
 15.221  15.221 (0.977)    72    121619 5.00000    5.531  80.00- 120.00   100.00
 15.221  15.221 (0.977)    43    355442                   262.26- 322.26   292.26
 15.221  15.221 (0.977)    57     31266                     0.00-  55.71    25.71
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                              CAS #: 109-99-9
 15.580  15.580 (1.000)    42    220559 5.00000    5.466  80.00- 120.00   100.00
 15.580  15.580 (1.000)    71    125391                    26.85-  86.85    56.85
 15.580  15.580 (1.000)    72    137221                    32.22-  92.22    62.22
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.580  15.580 (1.000)   130    164946 5.00000           80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    135666                    52.25- 112.25    82.25
 15.580  15.580 (1.000)    49    197619                    89.81- 149.81   119.81
-------------------------------------------------------------------------------
  100 Chloroform                                   CAS #: 67-66-3
 15.641  15.641 (1.004)    83    614120 5.00000    5.157  80.00- 120.00   100.00
 15.641  15.641 (1.004)    85    392863                    33.97-  93.97    63.97
-------------------------------------------------------------------------------
  102 Cyclohexane                                  CAS #: 110-82-7
 15.888  15.888 (1.020)    84    333250 5.00000    5.392  80.00- 120.00   100.00
 15.888  15.888 (1.020)    56    295554                    58.69- 118.69    88.69
 15.888  15.888 (1.020)    41    163216                    18.98-  78.98    48.98
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                        CAS #: 71-55-6
 15.888  15.888 (1.020)    97    726214 5.00000    5.242  80.00- 120.00   100.00
 15.888  15.888 (1.020)    99    466296                    34.21-  94.21    64.21
-------------------------------------------------------------------------------
```

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

  106 Carbon Tetrachloride                          CAS #: 56-23-5
 16.073  16.073 (1.032)   119    752378 5.00000    5.546  80.00- 120.00   100.00
 16.073  16.073 (1.032)   117    783150                   74.09- 134.09   104.09
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                        CAS #: 540-84-1
 16.313  16.313 (1.047)    56    353111 5.00000    5.110  80.00- 120.00   100.00
 16.313  16.313 (1.047)    57   1188711                  306.64- 366.64   336.64
 16.313  16.313 (1.047)    41    332416                   64.14- 124.14    94.14
-------------------------------------------------------------------------------
  116 Benzene                                       CAS #: 71-43-2
 16.409  16.409 (0.969)    78    747719 5.00000    4.977  80.00- 120.00   100.00
 16.409  16.409 (0.969)    77    179223                    0.00-  53.97    23.97
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                         CAS #: 17060-07-0
 16.409  16.409 (1.053)    65    234231 5.00000    4.946  80.00- 120.00   100.00
 16.409  16.409 (1.053)    67    119830                   21.16-  81.16    51.16
-------------------------------------------------------------------------------
  119 tert-Amyl methyl ether                        CAS #: 994-05-8
 16.433  16.433 (0.970)    87    210772 5.00000    5.464  80.00- 120.00   100.00
 16.433  16.433 (0.970)    73    777446                  338.86- 398.86   368.86
 16.433  16.433 (0.970)    55    157070                   44.52- 104.52    74.52
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                            CAS #: 107-06-2
 16.505  16.505 (0.974)    62    418974 5.00000    5.350  80.00- 120.00   100.00
 16.505  16.505 (0.974)    64    130013                    1.03-  61.03    31.03
-------------------------------------------------------------------------------
  121 Heptane                                       CAS #: 142-82-5
 16.554  16.554 (0.977)    57    183800 5.00000    5.161  80.00- 120.00   100.00
 16.554  16.554 (0.977)   100    107840                   28.67-  88.67    58.67
 16.554  16.554 (0.977)    43    292088                  128.92- 188.92   158.92
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                           CAS #: 540-36-3
 16.939  16.939 (1.000)   114    626935 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88     95276                    0.00-  45.20    15.20
-------------------------------------------------------------------------------
  125 Trichloroethene                               CAS #: 79-01-6
 17.349  17.349 (1.024)   130    406965 5.00000    5.222  80.00- 120.00   100.00
 17.349  17.349 (1.024)    95    382524                   63.99- 123.99    93.99
 17.349  17.349 (1.024)    97    240947                   29.21-  89.21    59.21
-------------------------------------------------------------------------------
  127 Methylcyclohexane                             CAS #: 108-87-2
 17.590  17.590 (1.038)    83    458031 5.00000    5.476  80.00- 120.00   100.00
 17.590  17.590 (1.038)    55    280737                   31.29-  91.29    61.29
 17.590  17.590 (1.038)    56     86023                    0.00-  48.78    18.78
-------------------------------------------------------------------------------
  132 1,2-Dichloropropane                           CAS #: 78-87-5
 17.807  17.807 (1.051)    63    251132 5.00000    5.192  80.00- 120.00   100.00
```

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

  132 1,2-Dichloropropane (continued)
 17.807  17.807 (1.051)    62    161197                    34.19-  94.19    64.19
 17.807  17.807 (1.051)    41    144112                    27.38-  87.38    57.38
-------------------------------------------------------------------------------
  136 1,4-Dioxane                                  CAS #: 123-91-1
 17.927  17.927 (1.058)    88    185804 5.00000    5.129  80.00- 120.00   100.00
 17.927  17.927 (1.058)    58    102246                    25.03-  85.03    55.03
 17.927  17.927 (1.058)    57     38401                     0.00-  50.67    20.67
-------------------------------------------------------------------------------
  138 Bromodichloromethane                         CAS #: 75-27-4
 18.240  18.240 (1.077)    83    658181 5.00000    5.279  80.00- 120.00   100.00
 18.240  18.240 (1.077)    85    428800                    35.15-  95.15    65.15
-------------------------------------------------------------------------------
  144 cis-1,3-Dichloropropene                      CAS #: 10061-01-5
 19.086  19.086 (1.127)    75    500326 5.00000    5.385  80.00- 120.00   100.00
 19.086  19.086 (1.127)    77    152346                     0.45-  60.45    30.45
 19.063  19.063 (1.125)    39    218606                    13.69-  73.69    43.69
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                         CAS #: 108-10-1
 19.265  19.265 (1.137)    43    412979 5.00000    5.327  80.00- 120.00   100.00
 19.265  19.265 (1.137)    58    188504                    15.64-  75.64    45.64
 19.265  19.265 (1.137)    85    110311                     0.00-  56.71    26.71
-------------------------------------------------------------------------------
$ 146 Toluene-d8                                   CAS #: 2037-26-5
 19.556  19.556 (1.155)    98    623703 5.00000    5.066  80.00- 120.00   100.00
 19.556  19.556 (1.155)    70     63080                     0.00-  40.11    10.11
 19.556  19.556 (1.155)   100    421519                    37.58-  97.58    67.58
-------------------------------------------------------------------------------
  147 Toluene                                      CAS #: 108-88-3
 19.713  19.713 (1.164)    91    936282 5.00000    5.232  80.00- 120.00   100.00
 19.713  19.713 (1.164)    92    551687                    28.92-  88.92    58.92
-------------------------------------------------------------------------------
  150 trans-1,3-Dichloropropene                    CAS #: 10061-02-6
 20.276  20.276 (0.907)    75    469728 5.00000    5.344  80.00- 120.00   100.00
 20.276  20.276 (0.907)    77    143498                     0.55-  60.55    30.55
 20.276  20.276 (0.907)    39    179682                     8.25-  68.25    38.25
-------------------------------------------------------------------------------
  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
 20.688  20.688 (0.925)    97    340995 5.00000    4.984  80.00- 120.00   100.00
 20.688  20.688 (0.925)    99    214511                    32.91-  92.91    62.91
 20.688  20.688 (0.925)    83    265754                    47.93- 107.93    77.93
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
 20.853  20.853 (0.932)   166    564666 5.00000    5.356  80.00- 120.00   100.00
 20.853  20.853 (0.932)   129    408288                    42.31- 102.31    72.31
 20.853  20.853 (0.932)   131    395886                    40.11- 100.11    70.11
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
158 2-Hexanone					CAS #: 591-78-6		
21.018	21.018 (0.940)	58	235305	5.00000	5.344	80.00- 120.00	100.00
21.018	21.018 (0.940)	43	401046			140.44- 200.44	170.44
21.018	21.018 (0.940)	100	69696			0.00- 59.62	29.62
160 Dibromochloromethane					CAS #: 124-48-1		
21.430	21.430 (0.958)	129	754807	5.00000	5.434	80.00- 120.00	100.00
21.430	21.430 (0.958)	127	579827			46.82- 106.82	76.82
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
21.677	21.677 (0.969)	107	564793	5.00000	5.379	80.00- 120.00	100.00
21.677	21.677 (0.969)	109	539067			65.45- 125.45	95.45
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.366	22.366 (1.000)	117	567678	5.00000		80.00- 120.00	100.00
22.366	22.366 (1.000)	82	287474			20.64- 80.64	50.64
165 Chlorobenzene					CAS #: 108-90-7		
22.407	22.407 (1.002)	112	811200	5.00000	5.282	80.00- 120.00	100.00
22.407	22.407 (1.002)	114	262983			2.42- 62.42	32.42
22.407	22.407 (1.002)	77	434353			23.54- 83.54	53.54
167 Ethyl Benzene					CAS #: 100-41-4		
22.490	22.490 (1.006)	106	392193	5.00000	5.243	80.00- 120.00	100.00
22.490	22.490 (1.006)	91	1225624			282.51- 342.51	312.51
169 m,p-Xylene					CAS #: 108-38-3		
22.656	22.656 (1.013)	106	477877	5.00000	5.499	80.00- 120.00	100.00
22.656	22.656 (1.013)	91	938840			166.46- 226.46	196.46
171 o-Xylene					CAS #: 95-47-6		
23.257	23.257 (1.040)	106	440673	5.00000	5.529	80.00- 120.00	100.00
23.257	23.257 (1.040)	91	943084			184.01- 244.01	214.01
172 Styrene					CAS #: 100-42-5		
23.299	23.299 (1.042)	104	742314	5.00000	5.504	80.00- 120.00	100.00
23.278	23.278 (1.041)	78	373180			20.27- 80.27	50.27
174 Bromoform					CAS #: 75-25-2		
23.639	23.639 (1.057)	173	757728	5.00000	5.506	80.00- 120.00	100.00
23.639	23.639 (1.057)	171	385536			20.88- 80.88	50.88
175 Cumene					CAS #: 98-82-8		
23.728	23.728 (1.061)	105	1464900	5.00000	5.406	80.00- 120.00	100.00
23.728	23.728 (1.061)	120	402388			0.00- 57.47	27.47

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

$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 24.020  24.020 (1.074)   174    391878 5.00000    5.031  80.00- 120.00   100.00
 24.020  24.020 (1.074)    95    420970                   77.42- 137.42   107.42
 24.020  24.020 (1.074)   176    373758                   65.38- 125.38    95.38
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 24.199  24.199 (1.082)    83    654850 5.00000    5.189  80.00- 120.00   100.00
 24.199  24.199 (1.082)    85    430448                   35.73-  95.73    65.73
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
 24.267  24.267 (1.085)    91   1518478 5.00000    5.320  80.00- 120.00   100.00
 24.267  24.267 (1.085)   120    383260                    0.00-  55.24    25.24
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 24.401  24.401 (1.091)   105   1265650 5.00000    5.232  80.00- 120.00   100.00
 24.401  24.401 (1.091)   120    393369                    1.08-  61.08    31.08
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.469  24.469 (1.094)   105    998504 5.00000    5.315  80.00- 120.00   100.00
 24.469  24.469 (1.094)   120    483680                   18.44-  78.44    48.44
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.917  24.917 (1.114)   105    825838 5.00000    5.074  80.00- 120.00   100.00
 24.917  24.917 (1.114)   120    381532                   16.20-  76.20    46.20
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 25.321  25.321 (1.132)   146    757713 5.00000    4.930  80.00- 120.00   100.00
 25.321  25.321 (1.132)   148    496358                   35.51-  95.51    65.51
 25.321  25.321 (1.132)   111    298175                    9.35-  69.35    39.35
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 25.433  25.433 (1.137)   146    732048 5.00000    5.079  80.00- 120.00   100.00
 25.433  25.433 (1.137)   148    458311                   32.61-  92.61    62.61
 25.433  25.433 (1.137)   111    270151                    6.90-  66.90    36.90
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 25.567  25.567 (1.143)    91    974701 5.00000    5.374  80.00- 120.00   100.00
 25.567  25.567 (1.143)   126    212719                    0.00-  51.82    21.82
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.859  25.859 (1.156)   146    672376 5.00000    5.100  80.00- 120.00   100.00
 25.859  25.859 (1.156)   148    428222                   33.69-  93.69    63.69
 25.859  25.859 (1.156)   111    261969                    8.96-  68.96    38.96
-------------------------------------------------------------------------------
  226 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 27.607  27.607 (1.234)   180    290324 5.00000    4.856  80.00- 120.00   100.00
```

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
226 1,2,4-Trichlorobenzene (continued)								
27.607	27.607	(1.234)	182	278853			66.05- 126.05	96.05
227 Hexachlorobutadiene						CAS #: 87-68-3		
27.697	27.697	(1.238)	225	422190	5.00000	5.194	80.00- 120.00	100.00
27.697	27.697	(1.238)	223	269281			33.78- 93.78	63.78
228 Naphthalene						CAS #: 91-20-3		
27.921	27.921	(1.248)	128	44081	0.50000	0.5049	80.00- 120.00	100.00
27.921	27.921	(1.248)	127	7223			0.00- 46.39	16.39

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e031710.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msde.i/17Mar2016.b/e16l0317a.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 17-MAR-2016
Calibration Time: 17:24
Client Smp ID: Level 12
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	164946	98968	230924	164946	0.00
123 1,4-Difluorobenze	626935	376161	877709	626935	0.00
163 Chlorobenzene-d5	567678	340607	794749	567678	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/17Mar2016.b/e031710.d

Date : 17-MAR-2016 17:24

Client ID: Level 12

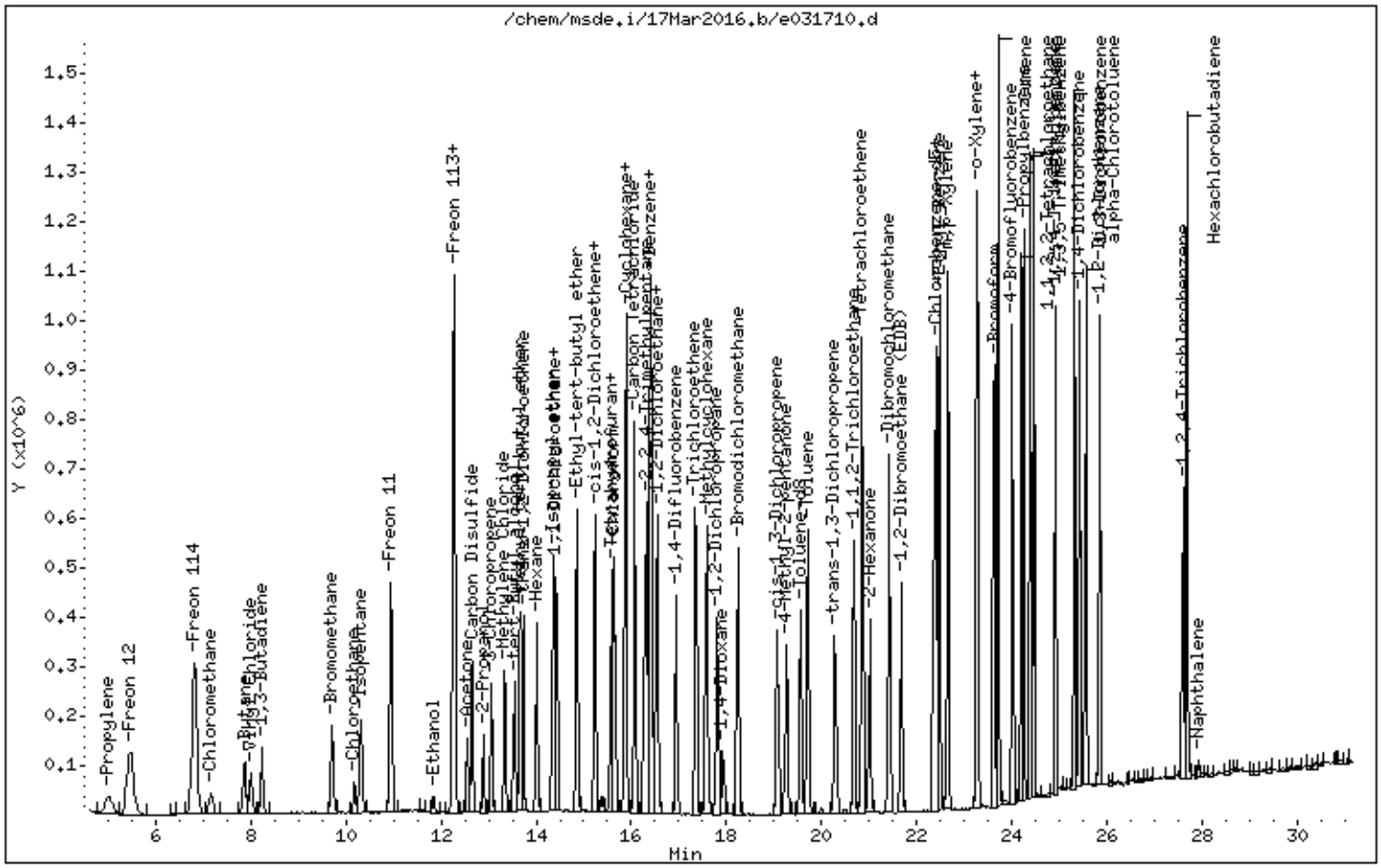
Instrument: msde.i

Sample Info: 25mL# 2759-223

Operator: ea

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/17Mar2016.b/e031711.d
Lab Smp Id: ICAL Client Smp ID: Level 13
Inj Date : 17-MAR-2016 18:10
Operator : ea Inst ID: msde.i
Smp Info : 50mL# 2759-223
Misc Info : 10ppbv (50ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/17Mar2016.b/e16l0317a.m
Meth Date : 23-Mar-2016 08:52 efinn Quant Type: ISTD
Cal Date : 17-MAR-2016 18:10 Cal File: e031711.d
Als bottle: 1 Calibration Sample, Level: 13
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
9 Propylene					CAS #: 115-07-1		
5.022	5.022 (0.322)	41	224554	10.0000	10.379	80.00- 120.00	100.00
5.022	5.022 (0.322)	42	143270			38.73- 98.73	63.80
5.022	5.022 (0.322)	39	178226			55.81- 115.81	79.37
11 Freon 12					CAS #: 75-71-8		
5.479	5.479 (0.352)	85	1388089	10.0000	9.906	80.00- 120.00	100.00
5.479	5.479 (0.352)	87	435051			2.00- 62.00	31.34
15 Freon 114					CAS #: 76-14-2		
6.829	6.829 (0.438)	135	1011476	10.0000	9.863	80.00- 120.00	100.00
6.805	6.805 (0.437)	137	331054			1.31- 61.31	32.73
6.805	6.805 (0.437)	85	1257901			93.88- 153.88	124.36
17 Chloromethane					CAS #: 74-87-3		
7.167	7.167 (0.460)	50	261195	10.0000	9.824	80.00- 120.00	100.00
7.167	7.167 (0.460)	52	86785			5.50- 65.50	33.23

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
23 Butane					CAS #: 106-97-8		
7.872	7.872 (0.505)	58	71016	10.0000	10.312	80.00- 120.00	100.00
7.872	7.872 (0.505)	43	441638			588.57- 648.57	621.89
25 Vinyl Chloride					CAS #: 75-01-4		
7.993	7.993 (0.513)	62	377577	10.0000	10.095	80.00- 120.00	100.00
7.993	7.993 (0.513)	64	128285			3.14- 63.14	33.98
26 1,3-Butadiene					CAS #: 106-99-0		
8.236	8.236 (0.529)	54	248933	10.0000	9.895	80.00- 120.00	100.00
8.236	8.236 (0.529)	39	240238			65.21- 125.21	96.51
29 Bromomethane					CAS #: 74-83-9		
9.712	9.712 (0.623)	94	403679	10.0000	9.890	80.00- 120.00	100.00
9.712	9.712 (0.623)	96	378287			64.16- 124.16	93.71
30 Chloroethane					CAS #: 75-00-3		
10.176	10.176 (0.653)	64	188820	10.0000	10.685	80.00- 120.00	100.00
10.176	10.176 (0.653)	49	41555			0.00- 54.91	22.01
10.176	10.176 (0.653)	66	59925			3.62- 63.62	31.74
31 Isopentane					CAS #: 78-78-4		
10.310	10.310 (0.662)	57	253338	10.0000	9.889	80.00- 120.00	100.00
10.310	10.310 (0.662)	43	297512			82.69- 142.69	117.44
10.310	10.310 (0.662)	42	241501			68.65- 128.65	95.33
35 Freon 11					CAS #: 75-69-4		
10.938	10.938 (0.702)	101	1435109	10.0000	9.512	80.00- 120.00	100.00
10.938	10.938 (0.702)	103	939408			37.17- 97.17	65.46
42 Ethanol					CAS #: 64-17-5		
11.833	11.833 (0.759)	45	97164	10.0000	8.887	80.00- 120.00	100.00
11.833	11.833 (0.759)	46	37990			6.61- 66.61	39.10
11.833	11.833 (0.759)	43	25310			0.00- 54.66	26.05
49 Freon 113					CAS #: 76-13-1		
12.252	12.252 (0.786)	151	1151782	10.0000	10.186	80.00- 120.00	100.00
12.252	12.252 (0.786)	153	754407			33.64- 93.64	65.50
12.252	12.252 (0.786)	101	1296774			80.40- 140.40	112.59
50 1,1-Dichloroethene					CAS #: 75-35-4		
12.271	12.271 (0.788)	98	303226	10.0000	9.617	80.00- 120.00	100.00
12.271	12.271 (0.788)	61	716757			204.89- 264.89	236.38
12.271	12.271 (0.788)	96	473247			127.69- 187.69	156.07
52 Acetone					CAS #: 67-64-1		
12.538	12.538 (0.805)	58	174564	10.0000	9.468	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
52 Acetone (continued)							
12.538	12.538 (0.805)	43	577155			321.47- 381.47	330.63
56 Carbon Disulfide					CAS #: 75-15-0		
12.633	12.633 (0.811)	76	1332073	10.0000	9.479	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
12.899	12.899 (0.828)	45	566562	10.0000	10.045	80.00- 120.00	100.00
12.899	12.899 (0.828)	43	135008			0.00- 54.09	23.83
12.899	12.899 (0.828)	59	27684			0.00- 34.43	4.89
58 3-Chloropropene					CAS #: 107-05-1		
13.071	13.071 (0.839)	76	211156	10.0000	10.052	80.00- 120.00	100.00
13.071	13.071 (0.839)	41	404334			163.76- 223.76	191.49
66 Methylene Chloride					CAS #: 75-09-2		
13.338	13.338 (0.856)	84	419651	10.0000	9.499	80.00- 120.00	100.00
13.338	13.338 (0.856)	49	384144			63.99- 123.99	91.54
13.338	13.338 (0.856)	51	123056			0.29- 60.29	29.32
71 tert-Butyl alcohol					CAS #: 75-65-0		
13.536	13.536 (0.869)	59	1099876	10.0000	10.660	80.00- 120.00	100.00
13.536	13.536 (0.869)	41	186403			0.00- 51.66	16.95
13.536	13.536 (0.869)	57	138529			0.00- 43.50	12.59
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
13.674	13.674 (0.878)	73	1414221	10.0000	10.010	80.00- 120.00	100.00
13.674	13.674 (0.878)	57	252637			0.00- 48.26	17.86
13.674	13.674 (0.878)	41	228634			0.00- 45.58	16.17
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.729	13.729 (0.881)	98	316324	10.0000	9.877	80.00- 120.00	100.00
13.729	13.729 (0.881)	61	604150			155.28- 215.28	190.99
13.729	13.729 (0.881)	96	490570			126.18- 186.18	155.08
78 Hexane					CAS #: 110-54-3		
14.003	14.003 (0.899)	57	555918	10.0000	10.087	80.00- 120.00	100.00
14.003	14.003 (0.899)	43	305203			21.48- 81.48	54.90
14.003	14.003 (0.899)	86	119590			0.00- 51.51	21.51
83 Isopropyl ether					CAS #: 108-20-3		
14.360	14.360 (0.922)	45	1047954	10.0000	10.425	80.00- 120.00	100.00
14.360	14.360 (0.922)	87	432042			9.88- 69.88	41.23
14.360	14.360 (0.922)	59	139127			0.00- 42.70	13.28
82 1,1-Dichloroethane					CAS #: 75-34-3		
14.415	14.415 (0.925)	63	830424	10.0000	9.908	80.00- 120.00	100.00

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

   82 1,1-Dichloroethane (continued)
 14.415  14.415 (0.925)    65    266513                     1.78-  61.78    32.09
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                CAS #: 108-05-4
 14.442  14.442 (0.927)    86    134038 10.0000   10.280  80.00- 120.00   100.00
 14.442  14.442 (0.927)    42     97964                    44.70- 104.70    73.09
 14.442  14.442 (0.927)    43   1091527                   757.33- 817.33   814.34
-------------------------------------------------------------------------------
   88 Ethyl-tert-butyl ether                       CAS #: 637-92-3
 14.859  14.859 (0.954)    59   1377036 10.0000   10.733  80.00- 120.00   100.00
 14.859  14.859 (0.954)    87    676670                    19.74-  79.74    49.14
 14.859  14.859 (0.954)    41    216175                     0.00-  46.34    15.70
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                       CAS #: 156-59-2
 15.240  15.240 (0.978)    98    345903 10.0000    9.874  80.00- 120.00   100.00
 15.240  15.240 (0.978)    61    601158                   145.90- 205.90   173.79
 15.240  15.240 (0.978)    96    520318                   125.53- 185.53   150.42
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
 15.240  15.240 (0.978)    72    227303 10.0000   10.235  80.00- 120.00   100.00
 15.221  15.221 (0.977)    43    667981                   262.26- 322.26   293.87
 15.221  15.221 (0.977)    57     65479                     0.00-  55.71    28.81
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                              CAS #: 109-99-9
 15.580  15.580 (1.000)    42    419464 10.0000   10.292  80.00- 120.00   100.00
 15.580  15.580 (1.000)    71    251643                    26.85-  86.85    59.99
 15.580  15.580 (1.000)    72    270285                    32.22-  92.22    64.44
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.580  15.580 (1.000)   130    166597 5.00000            80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    130946                    52.25- 112.25    78.60
 15.580  15.580 (1.000)    49    133949                    89.81- 149.81    80.40
-------------------------------------------------------------------------------
  100 Chloroform                                   CAS #: 67-66-3
 15.642  15.642 (1.004)    83   1145811 10.0000    9.526  80.00- 120.00   100.00
 15.642  15.642 (1.004)    85    757917                    33.97-  93.97    66.15
-------------------------------------------------------------------------------
  102 Cyclohexane                                  CAS #: 110-82-7
 15.888  15.888 (1.020)    84    646781 10.0000   10.362  80.00- 120.00   100.00
 15.888  15.888 (1.020)    56    555728                    58.69- 118.69    85.92
 15.888  15.888 (1.020)    41    307013                    18.98-  78.98    47.47
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                        CAS #: 71-55-6
 15.888  15.888 (1.020)    97   1333546 10.0000    9.531  80.00- 120.00   100.00
 15.888  15.888 (1.020)    99    900202                    34.21-  94.21    67.50
-------------------------------------------------------------------------------
```

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

  106 Carbon Tetrachloride                          CAS #: 56-23-5
 16.073  16.073 (1.032)   119   1443826 10.0000   10.537  80.00- 120.00   100.00
 16.073  16.073 (1.032)   117   1479227                   74.09- 134.09   102.45
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                        CAS #: 540-84-1
 16.313  16.313 (1.047)    56    661721 10.0000    9.482  80.00- 120.00   100.00
 16.313  16.313 (1.047)    57   2173399                  306.64- 366.64   328.45
 16.313  16.313 (1.047)    41    638251                   64.14- 124.14    96.45
-------------------------------------------------------------------------------
  116 Benzene                                       CAS #: 71-43-2
 16.409  16.409 (0.969)    78   1376713 10.0000    9.011  80.00- 120.00   100.00
 16.409  16.409 (0.969)    77    328971                    0.00-  53.97    23.90
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                         CAS #: 17060-07-0
 16.409  16.409 (1.053)    65    230796 5.00000    4.826  80.00- 120.00   100.00
 16.409  16.409 (1.053)    67    122076                   21.16-  81.16    52.89
-------------------------------------------------------------------------------
  119 tert-Amyl methyl ether                        CAS #: 994-05-8
 16.433  16.433 (0.970)    87    394090 10.0000   10.046  80.00- 120.00   100.00
 16.433  16.433 (0.970)    73   1502484                  338.86- 398.86   381.25
 16.433  16.433 (0.970)    55    300151                   44.52- 104.52    76.16
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                            CAS #: 107-06-2
 16.506  16.506 (0.974)    62    767037 10.0000    9.632  80.00- 120.00   100.00
 16.506  16.506 (0.974)    64    252620                    1.03-  61.03    32.93
-------------------------------------------------------------------------------
  121 Heptane                                       CAS #: 142-82-5
 16.554  16.554 (0.977)    57    358164 10.0000    9.890  80.00- 120.00   100.00
 16.554  16.554 (0.977)   100    204029                   28.67-  88.67    56.97
 16.554  16.554 (0.977)    43    561210                  128.92- 188.92   156.69
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                           CAS #: 540-36-3
 16.939  16.939 (1.000)   114    637581 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88     96576                    0.00-  45.20    15.15
-------------------------------------------------------------------------------
  125 Trichloroethene                               CAS #: 79-01-6
 17.373  17.373 (1.026)   130    793464 10.0000   10.012  80.00- 120.00   100.00
 17.349  17.349 (1.024)    95    715220                   63.99- 123.99    90.14
 17.349  17.349 (1.024)    97    460751                   29.21-  89.21    58.07
-------------------------------------------------------------------------------
  127 Methylcyclohexane                             CAS #: 108-87-2
 17.590  17.590 (1.038)    83    869819 10.0000   10.225  80.00- 120.00   100.00
 17.590  17.590 (1.038)    55    548772                   31.29-  91.29    63.09
 17.590  17.590 (1.038)    56    164597                    0.00-  48.78    18.92
-------------------------------------------------------------------------------
  132 1,2-Dichloropropane                           CAS #: 78-87-5
 17.807  17.807 (1.051)    63    485462 10.0000    9.868  80.00- 120.00   100.00
```

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

  132 1,2-Dichloropropane (continued)
 17.807  17.807 (1.051)    62    305888                    34.19-  94.19    63.01
 17.807  17.807 (1.051)    41    268343                    27.38-  87.38    55.28
-------------------------------------------------------------------------------
  136 1,4-Dioxane                                  CAS #: 123-91-1
 17.927  17.927 (1.058)    88    354646 10.0000    9.626  80.00- 120.00   100.00
 17.927  17.927 (1.058)    58    196318                    25.03-  85.03    55.36
 17.927  17.927 (1.058)    57     70533                     0.00-  50.67    19.89
-------------------------------------------------------------------------------
  138 Bromodichloromethane                         CAS #: 75-27-4
 18.240  18.240 (1.077)    83   1270633 10.0000   10.021  80.00- 120.00   100.00
 18.240  18.240 (1.077)    85    833447                    35.15-  95.15    65.59
-------------------------------------------------------------------------------
  144 cis-1,3-Dichloropropene                      CAS #: 10061-01-5
 19.086  19.086 (1.127)    75    945339 10.0000   10.005  80.00- 120.00   100.00
 19.086  19.086 (1.127)    77    305858                     0.45-  60.45    32.35
 19.086  19.086 (1.127)    39    406437                    13.69-  73.69    42.99
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                         CAS #: 108-10-1
 19.265  19.265 (1.137)    43    796140 10.0000   10.098  80.00- 120.00   100.00
 19.265  19.265 (1.137)    58    352066                    15.64-  75.64    44.22
 19.265  19.265 (1.137)    85    209083                     0.00-  56.71    26.26
-------------------------------------------------------------------------------
$ 146 Toluene-d8                                   CAS #: 2037-26-5
 19.556  19.556 (1.155)    98    633038 5.00000    5.055  80.00- 120.00   100.00
 19.556  19.556 (1.155)    70     66373                     0.00-  40.11    10.48
 19.556  19.556 (1.155)   100    419925                    37.58-  97.58    66.33
-------------------------------------------------------------------------------
  147 Toluene                                      CAS #: 108-88-3
 19.713  19.713 (1.164)    91   1762092 10.0000    9.682  80.00- 120.00   100.00
 19.713  19.713 (1.164)    92   1038319                    28.92-  88.92    58.93
-------------------------------------------------------------------------------
  150 trans-1,3-Dichloropropene                    CAS #: 10061-02-6
 20.276  20.276 (0.907)    75    900982 10.0000   10.057  80.00- 120.00   100.00
 20.276  20.276 (0.907)    77    289316                     0.55-  60.55    32.11
 20.276  20.276 (0.907)    39    341641                     8.25-  68.25    37.92
-------------------------------------------------------------------------------
  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
 20.688  20.688 (0.925)    97    640526 10.0000    9.184  80.00- 120.00   100.00
 20.688  20.688 (0.925)    99    412214                    32.91-  92.91    64.36
 20.688  20.688 (0.925)    83    515323                    47.93- 107.93    80.45
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
 20.853  20.853 (0.932)   166   1032947 10.0000    9.612  80.00- 120.00   100.00
 20.853  20.853 (0.932)   129    746739                    42.31- 102.31    72.29
 20.853  20.853 (0.932)   131    743545                    40.11- 100.11    71.98
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
158 2-Hexanone					CAS #: 591-78-6		
21.018	21.018 (0.940)	58	464502	10.0000	10.350	80.00- 120.00	100.00
21.018	21.018 (0.940)	43	787320			140.44- 200.44	169.50
21.018	21.018 (0.940)	100	133775			0.00- 59.62	28.80
160 Dibromochloromethane					CAS #: 124-48-1		
21.430	21.430 (0.958)	129	1426043	10.0000	10.073	80.00- 120.00	100.00
21.430	21.430 (0.958)	127	1094799			46.82- 106.82	76.77
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
21.677	21.677 (0.969)	107	1055551	10.0000	9.863	80.00- 120.00	100.00
21.677	21.677 (0.969)	109	1005531			65.45- 125.45	95.26
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.366	22.366 (1.000)	117	578602	5.00000		80.00- 120.00	100.00
22.366	22.366 (1.000)	82	288327			20.64- 80.64	49.83
165 Chlorobenzene					CAS #: 108-90-7		
22.407	22.407 (1.002)	112	1520233	10.0000	9.711	80.00- 120.00	100.00
22.407	22.407 (1.002)	114	501335			2.42- 62.42	32.98
22.407	22.407 (1.002)	77	816749			23.54- 83.54	53.73
167 Ethyl Benzene					CAS #: 100-41-4		
22.490	22.490 (1.006)	106	746677	10.0000	9.794	80.00- 120.00	100.00
22.490	22.490 (1.006)	91	2335672			282.51- 342.51	312.81
169 m,p-Xylene					CAS #: 108-38-3		
22.656	22.656 (1.013)	106	907577	10.0000	10.247	80.00- 120.00	100.00
22.656	22.656 (1.013)	91	1816518			166.46- 226.46	200.15
171 o-Xylene					CAS #: 95-47-6		
23.257	23.257 (1.040)	106	834619	10.0000	10.274	80.00- 120.00	100.00
23.257	23.257 (1.040)	91	1766135			184.01- 244.01	211.61
172 Styrene					CAS #: 100-42-5		
23.299	23.299 (1.042)	104	1419978	10.0000	10.330	80.00- 120.00	100.00
23.278	23.278 (1.041)	78	739778			20.27- 80.27	52.10
174 Bromoform					CAS #: 75-25-2		
23.639	23.639 (1.057)	173	1478323	10.0000	10.539	80.00- 120.00	100.00
23.639	23.639 (1.057)	171	754798			20.88- 80.88	51.06
175 Cumene					CAS #: 98-82-8		
23.728	23.728 (1.061)	105	2778980	10.0000	10.061	80.00- 120.00	100.00
23.728	23.728 (1.061)	120	754428			0.00- 57.47	27.15

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

$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 24.020  24.020 (1.074)   174    400816 5.00000    5.048  80.00- 120.00   100.00
 24.020  24.020 (1.074)    95    419905                   77.42- 137.42   104.76
 24.020  24.020 (1.074)   176    392308                   65.38- 125.38    97.88
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 24.200  24.200 (1.082)    83   1258098 10.0000    9.781  80.00- 120.00   100.00
 24.200  24.200 (1.082)    85    820207                   35.73-  95.73    65.19
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
 24.267  24.267 (1.085)    91   2940087 10.0000   10.106  80.00- 120.00   100.00
 24.267  24.267 (1.085)   120    735604                    0.00-  55.24    25.02
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 24.401  24.401 (1.091)   105   2457441 10.0000    9.966  80.00- 120.00   100.00
 24.401  24.401 (1.091)   120    760021                    1.08-  61.08    30.93
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.469  24.469 (1.094)   105   1954035 10.0000   10.205  80.00- 120.00   100.00
 24.469  24.469 (1.094)   120    940045                   18.44-  78.44    48.11
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.917  24.917 (1.114)   105   1613755 10.0000    9.727  80.00- 120.00   100.00
 24.917  24.917 (1.114)   120    737582                   16.20-  76.20    45.71
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 25.321  25.321 (1.132)   146   1478957 10.0000    9.440  80.00- 120.00   100.00
 25.321  25.321 (1.132)   148    947475                   35.51-  95.51    64.06
 25.321  25.321 (1.132)   111    573984                    9.35-  69.35    38.81
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 25.433  25.433 (1.137)   146   1413836 10.0000    9.624  80.00- 120.00   100.00
 25.433  25.433 (1.137)   148    918447                   32.61-  92.61    64.96
 25.433  25.433 (1.137)   111    524560                    6.90-  66.90    37.10
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 25.567  25.567 (1.143)    91   1937867 10.0000   10.483  80.00- 120.00   100.00
 25.567  25.567 (1.143)   126    432963                    0.00-  51.82    22.34
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.859  25.859 (1.156)   146   1320802 10.0000    9.828  80.00- 120.00   100.00
 25.859  25.859 (1.156)   148    832755                   33.69-  93.69    63.05
 25.859  25.859 (1.156)   111    517176                    8.96-  68.96    39.16
-------------------------------------------------------------------------------
  226 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 27.607  27.607 (1.234)   180    635603 10.0000   10.431  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
226 1,2,4-Trichlorobenzene (continued)							
27.607	27.607 (1.234)	182	599547			66.05- 126.05	94.33
227 Hexachlorobutadiene					CAS #: 87-68-3		
27.697	27.697 (1.238)	225	866561	10.0000	10.459	80.00- 120.00	100.00
27.697	27.697 (1.238)	223	546910			33.78- 93.78	63.11
228 Naphthalene					CAS #: 91-20-3		
27.921	27.921 (1.248)	128	91163	1.00000	1.024	80.00- 120.00	100.00
27.921	27.921 (1.248)	127	14412			0.00- 46.39	15.81

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e031711.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msde.i/17Mar2016.b/e16l0317a.m
Misc Info: 10ppbv (50ppbv)

Calibration Date: 17-MAR-2016
Calibration Time: 17:24
Client Smp ID: Level 13
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	164946	98968	230924	166597	1.00
123 1,4-Difluorobenze	626935	376161	877709	637581	1.70
163 Chlorobenzene-d5	567678	340607	794749	578602	1.92

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/17Mar2016.b/e031711.d

Date : 17-MAR-2016 18:10

Client ID: Level 13

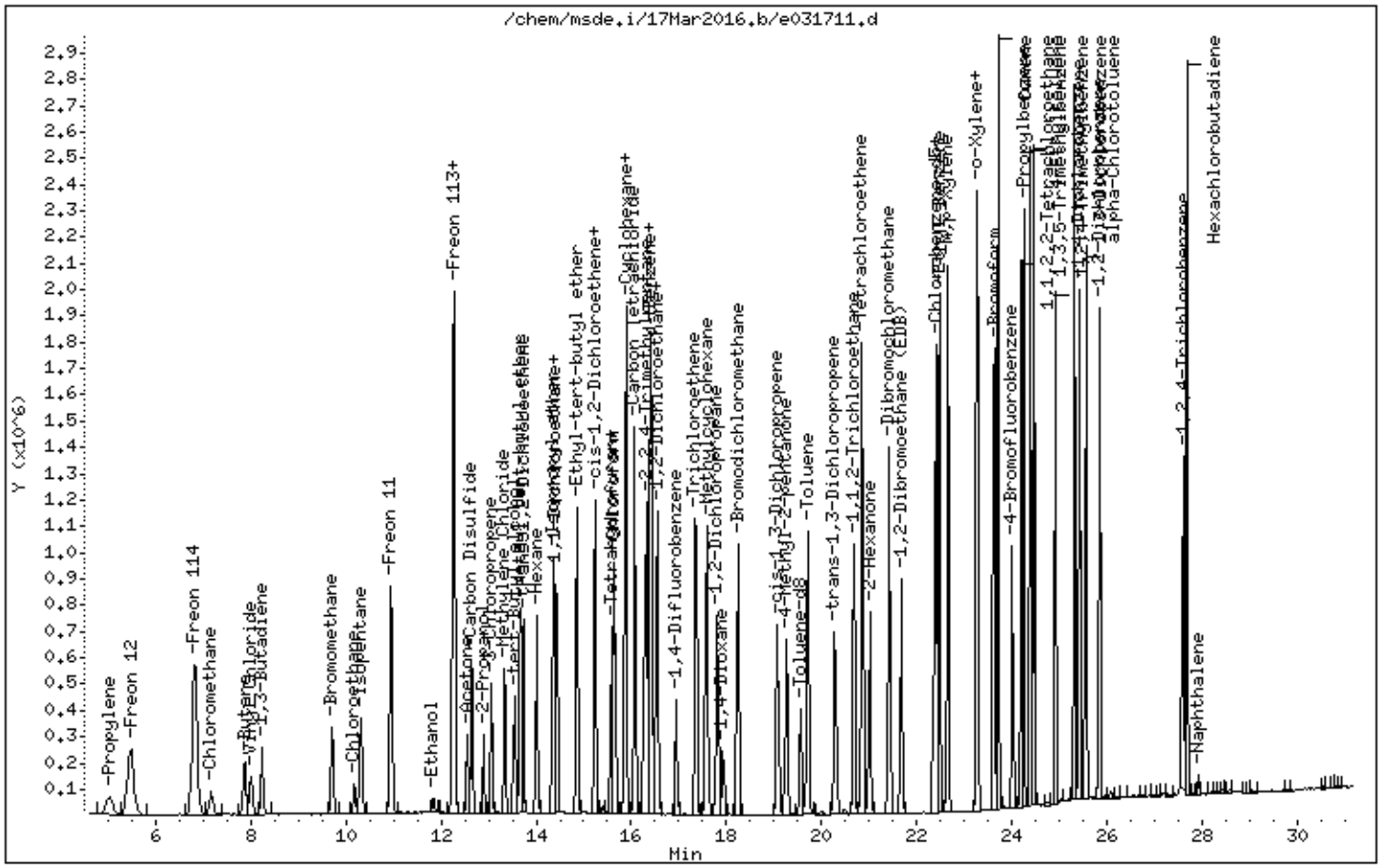
Instrument: msde.i

Sample Info: 50mL# 2759-223

Operator: ea

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/17Mar2016.b/e031712.d
Lab Smp Id: ICAL Client Smp ID: Level 15
Inj Date : 17-MAR-2016 19:01
Operator : ea Inst ID: msde.i
Smp Info : 100mL# 2759-223
Misc Info : 20ppbv (50ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/17Mar2016.b/e16l0317a.m
Meth Date : 23-Mar-2016 08:52 efinn Quant Type: ISTD
Cal Date : 17-MAR-2016 19:01 Cal File: e031712.d
Als bottle: 1 Calibration Sample, Level: 15
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
9 Propylene					CAS #: 115-07-1		
5.045	5.045 (0.324)	41	418694	20.0000	18.236	80.00- 120.00	100.00
5.045	5.045 (0.324)	42	279974			38.73- 98.73	66.87
5.045	5.045 (0.324)	39	361722			55.81- 115.81	86.39
11 Freon 12					CAS #: 75-71-8		
5.479	5.479 (0.352)	85	2632699	20.0000	17.706	80.00- 120.00	100.00
5.479	5.479 (0.352)	87	857792			2.00- 62.00	32.58
15 Freon 114					CAS #: 76-14-2		
6.829	6.829 (0.438)	135	1987627	20.0000	18.265	80.00- 120.00	100.00
6.829	6.829 (0.438)	137	656978			1.31- 61.31	33.05
6.829	6.829 (0.438)	85	2452054			93.88- 153.88	123.37
17 Chloromethane					CAS #: 74-87-3		
7.167	7.167 (0.460)	50	503169	20.0000	17.835	80.00- 120.00	100.00
7.167	7.167 (0.460)	52	165187			5.50- 65.50	32.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
23 Butane					CAS #: 106-97-8		
7.854	7.854 (0.504)	58	135889	20.0000	18.595	80.00- 120.00	100.00
7.871	7.871 (0.505)	43	874878			588.57- 648.57	643.82
25 Vinyl Chloride					CAS #: 75-01-4		
7.993	7.993 (0.513)	62	716755	20.0000	18.058	80.00- 120.00	100.00
7.993	7.993 (0.513)	64	246035			3.14- 63.14	34.33
26 1,3-Butadiene					CAS #: 106-99-0		
8.236	8.236 (0.529)	54	496268	20.0000	18.590	80.00- 120.00	100.00
8.236	8.236 (0.529)	39	477809			65.21- 125.21	96.28
29 Bromomethane					CAS #: 74-83-9		
9.711	9.711 (0.623)	94	748900	20.0000	17.291	80.00- 120.00	100.00
9.711	9.711 (0.623)	96	724975			64.16- 124.16	96.81
30 Chloroethane					CAS #: 75-00-3		
10.176	10.176 (0.653)	64	361425	20.0000	19.274	80.00- 120.00	100.00
10.176	10.176 (0.653)	49	81655			0.00- 54.91	22.59
10.176	10.176 (0.653)	66	116360			3.62- 63.62	32.19
31 Isopentane					CAS #: 78-78-4		
10.309	10.309 (0.662)	57	504085	20.0000	18.544	80.00- 120.00	100.00
10.309	10.309 (0.662)	43	578390			82.69- 142.69	114.74
10.309	10.309 (0.662)	42	481221			68.65- 128.65	95.46
35 Freon 11					CAS #: 75-69-4		
10.938	10.938 (0.702)	101	2802600	20.0000	17.505	80.00- 120.00	100.00
10.938	10.938 (0.702)	103	1820853			37.17- 97.17	64.97
42 Ethanol					CAS #: 64-17-5		
11.833	11.833 (0.759)	45	199906	20.0000	17.231	80.00- 120.00	100.00
11.833	11.833 (0.759)	46	74162			6.61- 66.61	37.10
11.833	11.833 (0.759)	43	50080			0.00- 54.66	25.05
49 Freon 113					CAS #: 76-13-1		
12.252	12.252 (0.786)	151	2261346	20.0000	18.847	80.00- 120.00	100.00
12.252	12.252 (0.786)	153	1455081			33.64- 93.64	64.35
12.252	12.252 (0.786)	101	2489402			80.40- 140.40	110.08
50 1,1-Dichloroethene					CAS #: 75-35-4		
12.271	12.271 (0.788)	98	586348	20.0000	17.525	80.00- 120.00	100.00
12.271	12.271 (0.788)	61	1384315			204.89- 264.89	236.09
12.271	12.271 (0.788)	96	918085			127.69- 187.69	156.58
52 Acetone					CAS #: 67-64-1		
12.537	12.537 (0.805)	58	335171	20.0000	17.131	80.00- 120.00	100.00

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

   52 Acetone (continued)
 12.537  12.537 (0.805)    43   1101970                   321.47- 381.47   328.78
-------------------------------------------------------------------------------
   56 Carbon Disulfide                                CAS #: 75-15-0
 12.633  12.633 (0.811)    76   2592283 20.0000   17.384  80.00- 120.00   100.00
-------------------------------------------------------------------------------
   57 2-Propanol                                      CAS #: 67-63-0
 12.880  12.880 (0.827)    45   1145088 20.0000   19.132  80.00- 120.00   100.00
 12.880  12.880 (0.827)    43    259174                    0.00-  54.09    22.63
 12.899  12.899 (0.828)    59     50134                    0.00-  34.43     4.38
-------------------------------------------------------------------------------
   58 3-Chloropropene                                 CAS #: 107-05-1
 13.071  13.071 (0.839)    76    407845 20.0000   18.297  80.00- 120.00   100.00
 13.052  13.052 (0.838)    41    789918                  163.76- 223.76   193.68
-------------------------------------------------------------------------------
   66 Methylene Chloride                              CAS #: 75-09-2
 13.337  13.337 (0.856)    84    777428 20.0000   16.583  80.00- 120.00   100.00
 13.337  13.337 (0.856)    49    739367                   63.99- 123.99    95.10
 13.337  13.337 (0.856)    51    224948                    0.29-  60.29    28.93
-------------------------------------------------------------------------------
   71 tert-Butyl alcohol                              CAS #: 75-65-0
 13.536  13.536 (0.869)    59   1942029 20.0000   17.737  80.00- 120.00   100.00
 13.536  13.536 (0.869)    41    389153                    0.00-  51.66    20.04
 13.536  13.536 (0.869)    57    255553                    0.00-  43.50    13.16
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                         CAS #: 1634-04-4
 13.674  13.674 (0.878)    73   2724323 20.0000   18.173  80.00- 120.00   100.00
 13.646  13.646 (0.876)    57    500585                    0.00-  48.26    18.37
 13.646  13.646 (0.876)    41    440409                    0.00-  45.58    16.17
-------------------------------------------------------------------------------
   73 trans-1,2-Dichloroethene                        CAS #: 156-60-5
 13.728  13.728 (0.881)    98    627152 20.0000   18.454  80.00- 120.00   100.00
 13.701  13.701 (0.879)    61   1193618                  155.28- 215.28   190.32
 13.728  13.728 (0.881)    96    947436                  126.18- 186.18   151.07
-------------------------------------------------------------------------------
   78 Hexane                                          CAS #: 110-54-3
 14.003  14.003 (0.899)    57   1077207 20.0000   18.420  80.00- 120.00   100.00
 14.003  14.003 (0.899)    43    601258                   21.48-  81.48    55.82
 14.003  14.003 (0.899)    86    228691                    0.00-  51.51    21.23
-------------------------------------------------------------------------------
   83 Isopropyl ether                                 CAS #: 108-20-3
 14.360  14.360 (0.922)    45   2022509 20.0000   18.961  80.00- 120.00   100.00
 14.360  14.360 (0.922)    87    821885                    9.88-  69.88    40.64
 14.360  14.360 (0.922)    59    273848                    0.00-  42.70    13.54
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                              CAS #: 75-34-3
 14.415  14.415 (0.925)    63   1574041 20.0000   17.698  80.00- 120.00   100.00
```

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

   82 1,1-Dichloroethane (continued)
 14.415  14.415 (0.925)    65    521077                     1.78-  61.78    33.10
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                CAS #: 108-05-4
 14.442  14.442 (0.927)    86    253784 20.0000   18.342  80.00- 120.00   100.00
 14.442  14.442 (0.927)    42    187287                   44.70- 104.70    73.80
 14.442  14.442 (0.927)    43   2008795                  757.33- 817.33   791.54
-------------------------------------------------------------------------------
   88 Ethyl-tert-butyl ether                       CAS #: 637-92-3
 14.859  14.859 (0.954)    59   2651597 20.0000   19.476  80.00- 120.00   100.00
 14.859  14.859 (0.954)    87   1287755                   19.74-  79.74    48.57
 14.859  14.859 (0.954)    41    412828                    0.00-  46.34    15.57
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                       CAS #: 156-59-2
 15.239  15.239 (0.978)    98    663794 20.0000   17.856  80.00- 120.00   100.00
 15.239  15.239 (0.978)    61   1158555                  145.90- 205.90   174.54
 15.239  15.239 (0.978)    96   1023549                  125.53- 185.53   154.20
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
 15.220  15.220 (0.977)    72    443259 20.0000   18.809  80.00- 120.00   100.00
 15.220  15.220 (0.977)    43   1314838                  262.26- 322.26   296.63
 15.220  15.220 (0.977)    57    126768                    0.00-  55.71    28.60
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                              CAS #: 109-99-9
 15.580  15.580 (1.000)    42    838603 20.0000   19.391  80.00- 120.00   100.00
 15.580  15.580 (1.000)    71    494844                   26.85-  86.85    59.01
 15.580  15.580 (1.000)    72    534524                   32.22-  92.22    63.74
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.580  15.580 (1.000)   130    176784 5.00000           80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    163103                   52.25- 112.25    92.26
 15.641  15.641 (1.000)    49    318483                   89.81- 149.81   180.15
-------------------------------------------------------------------------------
  100 Chloroform                                   CAS #: 67-66-3
 15.641  15.641 (1.004)    83   2237024 20.0000   17.526  80.00- 120.00   100.00
 15.641  15.641 (1.004)    85   1452544                   33.97-  93.97    64.93
-------------------------------------------------------------------------------
  102 Cyclohexane                                  CAS #: 110-82-7
 15.888  15.888 (1.020)    84   1263544 20.0000   19.076  80.00- 120.00   100.00
 15.888  15.888 (1.020)    56   1087383                   58.69- 118.69    86.06
 15.888  15.888 (1.020)    41    589441                   18.98-  78.98    46.65
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                        CAS #: 71-55-6
 15.888  15.888 (1.020)    97   2564559 20.0000   17.273  80.00- 120.00   100.00
 15.888  15.888 (1.020)    99   1664024                   34.21-  94.21    64.89
-------------------------------------------------------------------------------
```

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

  106 Carbon Tetrachloride                          CAS #: 56-23-5
 16.073  16.073 (1.032)   119   2744213 20.0000   18.873  80.00- 120.00   100.00
 16.073  16.073 (1.032)   117   2840230                   74.09- 134.09   103.50
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                        CAS #: 540-84-1
 16.313  16.313 (1.047)    56   1243884 20.0000   16.797  80.00- 120.00   100.00
 16.313  16.313 (1.047)    57   4056024                  306.64- 366.64   326.08
 16.313  16.313 (1.047)    41   1098899                   64.14- 124.14    88.34
-------------------------------------------------------------------------------
  116 Benzene                                       CAS #: 71-43-2
 16.409  16.409 (0.969)    78   2702628 20.0000   17.387  80.00- 120.00   100.00
 16.409  16.409 (0.969)    77    635782                    0.00-  53.97    23.52
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                         CAS #: 17060-07-0
 16.409  16.409 (1.053)    65    250827 5.00000    4.942  80.00- 120.00   100.00
 16.409  16.409 (1.053)    67    127229                   21.16-  81.16    50.72
-------------------------------------------------------------------------------
  119 tert-Amyl methyl ether                        CAS #: 994-05-8
 16.433  16.433 (0.970)    87    781060 20.0000   19.570  80.00- 120.00   100.00
 16.433  16.433 (0.970)    73   2909750                  338.86- 398.86   372.54
 16.433  16.433 (0.970)    55    577394                   44.52- 104.52    73.92
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                            CAS #: 107-06-2
 16.505  16.505 (0.974)    62   1472227 20.0000   18.172  80.00- 120.00   100.00
 16.505  16.505 (0.974)    64    499418                    1.03-  61.03    33.92
-------------------------------------------------------------------------------
  121 Heptane                                       CAS #: 142-82-5
 16.553  16.553 (0.977)    57    699144 20.0000   18.975  80.00- 120.00   100.00
 16.553  16.553 (0.977)   100    388942                   28.67-  88.67    55.63
 16.553  16.553 (0.977)    43   1094226                  128.92- 188.92   156.51
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                           CAS #: 540-36-3
 16.939  16.939 (1.000)   114    648654 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88     91936                    0.00-  45.20    14.17
-------------------------------------------------------------------------------
  125 Trichloroethene                               CAS #: 79-01-6
 17.349  17.349 (1.024)   130   1530843 20.0000   18.987  80.00- 120.00   100.00
 17.349  17.349 (1.024)    95   1372279                   63.99- 123.99    89.64
 17.349  17.349 (1.024)    97    884941                   29.21-  89.21    57.81
-------------------------------------------------------------------------------
  127 Methylcyclohexane                             CAS #: 108-87-2
 17.589  17.589 (1.038)    83   1713849 20.0000   19.804  80.00- 120.00   100.00
 17.589  17.589 (1.038)    55   1085608                   31.29-  91.29    63.34
 17.589  17.589 (1.038)    56    328939                    0.00-  48.78    19.19
-------------------------------------------------------------------------------
  132 1,2-Dichloropropane                           CAS #: 78-87-5
 17.806  17.806 (1.051)    63    922002 20.0000   18.422  80.00- 120.00   100.00
```

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

  132 1,2-Dichloropropane (continued)
 17.806  17.806 (1.051)    62    594433                    34.19-  94.19    64.47
 17.806  17.806 (1.051)    41    506600                    27.38-  87.38    54.95
-------------------------------------------------------------------------------
  136 1,4-Dioxane                                  CAS #: 123-91-1
 17.927  17.927 (1.058)    88    706032 20.0000   18.837  80.00- 120.00   100.00
 17.927  17.927 (1.058)    58    383534                    25.03-  85.03    54.32
 17.927  17.927 (1.058)    57    133620                     0.00-  50.67    18.93
-------------------------------------------------------------------------------
  138 Bromodichloromethane                         CAS #: 75-27-4
 18.240  18.240 (1.077)    83   2475762 20.0000   19.193  80.00- 120.00   100.00
 18.240  18.240 (1.077)    85   1590847                    35.15-  95.15    64.26
-------------------------------------------------------------------------------
  144 cis-1,3-Dichloropropene                      CAS #: 10061-01-5
 19.063  19.063 (1.125)    75   1864177 20.0000   19.393  80.00- 120.00   100.00
 19.063  19.063 (1.125)    77    583129                     0.45-  60.45    31.28
 19.063  19.063 (1.125)    39    785432                    13.69-  73.69    42.13
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                         CAS #: 108-10-1
 19.265  19.265 (1.137)    43   1586505 20.0000   19.778  80.00- 120.00   100.00
 19.265  19.265 (1.137)    58    699882                    15.64-  75.64    44.11
 19.265  19.265 (1.137)    85    400441                     0.00-  56.71    25.24
-------------------------------------------------------------------------------
$ 146 Toluene-d8                                   CAS #: 2037-26-5
 19.556  19.556 (1.155)    98    644126 5.00000    5.056  80.00- 120.00   100.00
 19.556  19.556 (1.155)    70     67969                     0.00-  40.11    10.55
 19.556  19.556 (1.155)   100    425854                    37.58-  97.58    66.11
-------------------------------------------------------------------------------
  147 Toluene                                      CAS #: 108-88-3
 19.713  19.713 (1.164)    91   3453581 20.0000   18.653  80.00- 120.00   100.00
 19.713  19.713 (1.164)    92   2035608                    28.92-  88.92    58.94
-------------------------------------------------------------------------------
  150 trans-1,3-Dichloropropene                    CAS #: 10061-02-6
 20.276  20.276 (0.907)    75   1766927 20.0000   19.589  80.00- 120.00   100.00
 20.276  20.276 (0.907)    77    562651                     0.55-  60.55    31.84
 20.276  20.276 (0.907)    39    663369                     8.25-  68.25    37.54
-------------------------------------------------------------------------------
  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
 20.688  20.688 (0.925)    97   1241409 20.0000   17.680  80.00- 120.00   100.00
 20.688  20.688 (0.925)    99    762706                    32.91-  92.91    61.44
 20.688  20.688 (0.925)    83   1006926                    47.93- 107.93    81.11
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
 20.853  20.853 (0.932)   166   2049673 20.0000   18.944  80.00- 120.00   100.00
 20.853  20.853 (0.932)   129   1475541                    42.31- 102.31    71.99
 20.853  20.853 (0.932)   131   1422288                    40.11- 100.11    69.39
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
158 2-Hexanone					CAS #: 591-78-6		
21.018	21.018 (0.940)	58	925824	20.0000	20.489	80.00- 120.00	100.00
21.018	21.018 (0.940)	43	1549540			140.44- 200.44	167.37
21.018	21.018 (0.940)	100	263024			0.00- 59.62	28.41
160 Dibromochloromethane					CAS #: 124-48-1		
21.430	21.430 (0.958)	129	2772219	20.0000	19.449	80.00- 120.00	100.00
21.430	21.430 (0.958)	127	2136449			46.82- 106.82	77.07
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
21.677	21.677 (0.969)	107	2057142	20.0000	19.091	80.00- 120.00	100.00
21.677	21.677 (0.969)	109	1962128			65.45- 125.45	95.38
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
22.365	22.365 (1.000)	117	582541	5.00000		80.00- 120.00	100.00
22.365	22.365 (1.000)	82	299842			20.64- 80.64	51.47
165 Chlorobenzene					CAS #: 108-90-7		
22.407	22.407 (1.002)	112	2967481	20.0000	18.828	80.00- 120.00	100.00
22.407	22.407 (1.002)	114	974023			2.42- 62.42	32.82
22.407	22.407 (1.002)	77	1615915			23.54- 83.54	54.45
167 Ethyl Benzene					CAS #: 100-41-4		
22.490	22.490 (1.006)	106	1477913	20.0000	19.254	80.00- 120.00	100.00
22.490	22.490 (1.006)	91	4586862			282.51- 342.51	310.36
169 m,p-Xylene					CAS #: 108-38-3		
22.656	22.656 (1.013)	106	1769334	20.0000	19.842	80.00- 120.00	100.00
22.656	22.656 (1.013)	91	3555026			166.46- 226.46	200.92
171 o-Xylene					CAS #: 95-47-6		
23.257	23.257 (1.040)	106	1669242	20.0000	20.409	80.00- 120.00	100.00
23.257	23.257 (1.040)	91	3533405			184.01- 244.01	211.68
172 Styrene					CAS #: 100-42-5		
23.278	23.278 (1.041)	104	2817814	20.0000	20.360	80.00- 120.00	100.00
23.278	23.278 (1.041)	78	1432244			20.27- 80.27	50.83
174 Bromoform					CAS #: 75-25-2		
23.616	23.616 (1.056)	173	2866617	20.0000	20.298	80.00- 120.00	100.00
23.616	23.616 (1.056)	171	1472658			20.88- 80.88	51.37
175 Cumene					CAS #: 98-82-8		
23.728	23.728 (1.061)	105	5502310	20.0000	19.786	80.00- 120.00	100.00
23.728	23.728 (1.061)	120	1510007			0.00- 57.47	27.44

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

$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 24.020  24.020 (1.074)   174    410339 5.00000    5.134  80.00- 120.00   100.00
 24.020  24.020 (1.074)    95    445297                   77.42- 137.42   108.52
 24.020  24.020 (1.074)   176    386330                   65.38- 125.38    94.15
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 24.199  24.199 (1.082)    83   2487186 20.0000   19.205  80.00- 120.00   100.00
 24.199  24.199 (1.082)    85   1607378                   35.73-  95.73    64.63
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
 24.244  24.244 (1.084)    91   5828029 20.0000   19.898  80.00- 120.00   100.00
 24.267  24.267 (1.085)   120   1460719                    0.00-  55.24    25.06
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 24.401  24.401 (1.091)   105   4874217 20.0000   19.634  80.00- 120.00   100.00
 24.401  24.401 (1.091)   120   1481952                    1.08-  61.08    30.40
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.468  24.468 (1.094)   105   3769488 20.0000   19.553  80.00- 120.00   100.00
 24.468  24.468 (1.094)   120   1832663                   18.44-  78.44    48.62
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.917  24.917 (1.114)   105   3261797 20.0000   19.528  80.00- 120.00   100.00
 24.917  24.917 (1.114)   120   1513731                   16.20-  76.20    46.41
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 25.320  25.320 (1.132)   146   2941634 20.0000   18.650  80.00- 120.00   100.00
 25.320  25.320 (1.132)   148   1890981                   35.51-  95.51    64.28
 25.320  25.320 (1.132)   111   1115798                    9.35-  69.35    37.93
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 25.433  25.433 (1.137)   146   2840365 20.0000   19.203  80.00- 120.00   100.00
 25.433  25.433 (1.137)   148   1808538                   32.61-  92.61    63.67
 25.410  25.410 (1.136)   111   1050010                    6.90-  66.90    36.97
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 25.567  25.567 (1.143)    91   3909627 20.0000   21.007  80.00- 120.00   100.00
 25.567  25.567 (1.143)   126    885383                    0.00-  51.82    22.65
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.858  25.858 (1.156)   146   2590182 20.0000   19.144  80.00- 120.00   100.00
 25.858  25.858 (1.156)   148   1656897                   33.69-  93.69    63.97
 25.858  25.858 (1.156)   111   1036977                    8.96-  68.96    40.03
-------------------------------------------------------------------------------
  226 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 27.607  27.607 (1.234)   180   1279654 20.0000   20.858  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
226 1,2,4-Trichlorobenzene (continued)							
27.607	27.607 (1.234)	182	1222301			66.05- 126.05	95.52
227 Hexachlorobutadiene					CAS #: 87-68-3		
27.697	27.697 (1.238)	225	1737234	20.0000	20.826	80.00- 120.00	100.00
27.697	27.697 (1.238)	223	1088824			33.78- 93.78	62.68
228 Naphthalene					CAS #: 91-20-3		
27.921	27.921 (1.248)	128	184142	2.00000	2.055	80.00- 120.00	100.00
27.921	27.921 (1.248)	127	26394			0.00- 46.39	14.33

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e031712.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msde.i/17Mar2016.b/e16l0317a.m
Misc Info: 20ppbv (50ppbv)

Calibration Date: 17-MAR-2016
Calibration Time: 17:24
Client Smp ID: Level 15
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	164946	98968	230924	176784	7.18
123 1,4-Difluorobenze	626935	376161	877709	648654	3.46
163 Chlorobenzene-d5	567678	340607	794749	582541	2.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/17Mar2016.b/e031712.d

Date : 17-MAR-2016 19:01

Client ID: Level 15

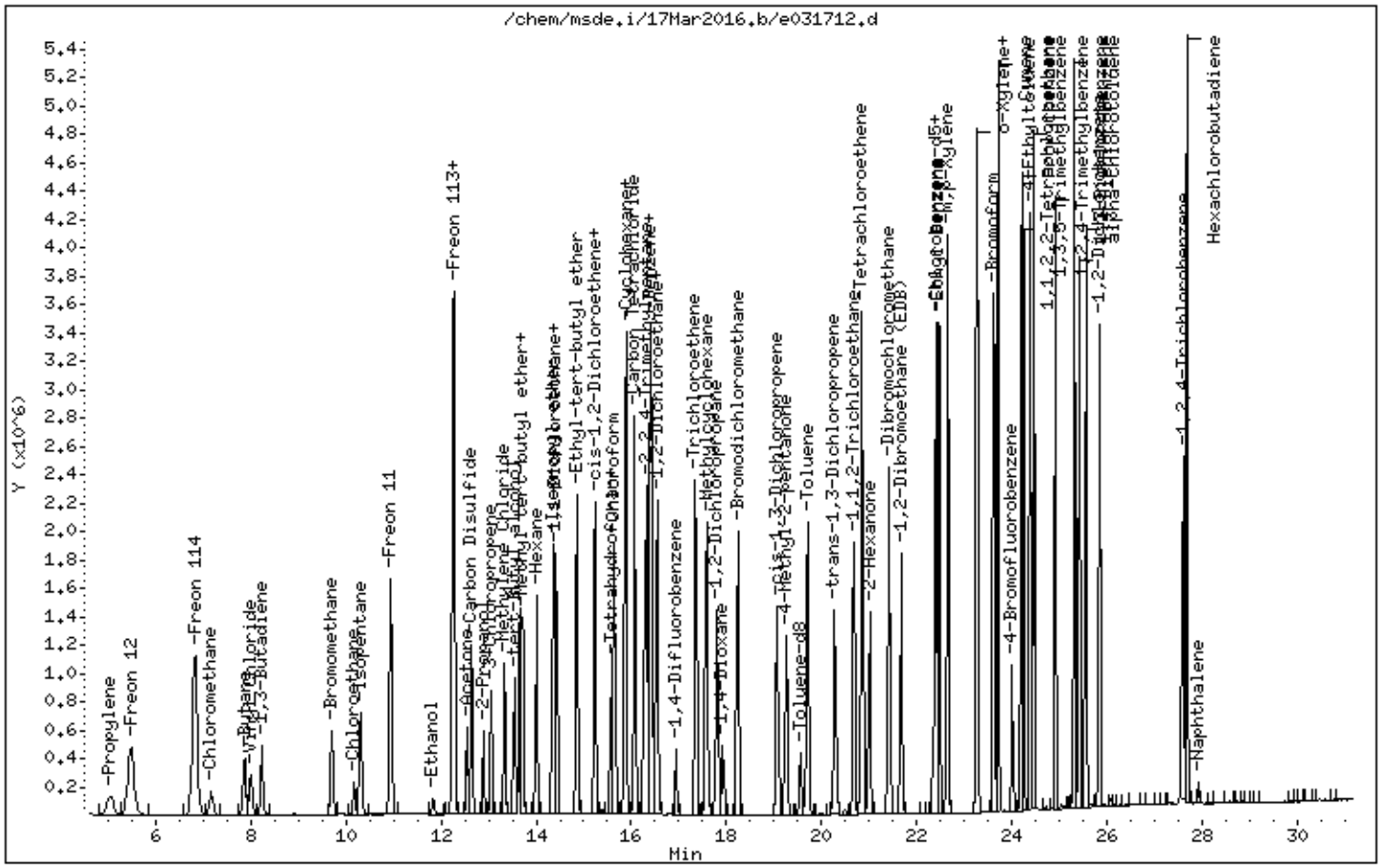
Instrument: msde.i

Sample Info: 100mL# 2759-223

Operator: ea

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/17Mar2016.b/e031713.d
Lab Smp Id: ICAL Client Smp ID: Level 16
Inj Date : 17-MAR-2016 19:49
Operator : ea Inst ID: msde.i
Smp Info : 200mL# 2759-223
Misc Info : 40ppbv (50ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/17Mar2016.b/e16l0317a.m
Meth Date : 23-Mar-2016 08:53 efinn Quant Type: ISTD
Cal Date : 17-MAR-2016 19:49 Cal File: e031713.d
Als bottle: 1 Calibration Sample, Level: 16
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
9 Propylene					CAS #: 115-07-1		
5.070	5.070 (0.325)	41	863758	40.0000	38.692	80.00- 120.00	100.00
5.046	5.046 (0.324)	42	555479			38.73- 98.73	64.31
5.070	5.070 (0.325)	39	718996			55.81- 115.81	83.24
11 Freon 12					CAS #: 75-71-8		
5.479	5.479 (0.352)	85	5204716	40.0000	36.000	80.00- 120.00	100.00
5.479	5.479 (0.352)	87	1696862			2.00- 62.00	32.60
15 Freon 114					CAS #: 76-14-2		
6.829	6.829 (0.438)	135	3924996	40.0000	37.094	80.00- 120.00	100.00
6.829	6.829 (0.438)	137	1271459			1.31- 61.31	32.39
6.829	6.829 (0.438)	85	4818737			93.88- 153.88	122.77
17 Chloromethane					CAS #: 74-87-3		
7.167	7.167 (0.460)	50	1005880	40.0000	36.669	80.00- 120.00	100.00
7.167	7.167 (0.460)	52	327142			5.50- 65.50	32.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
23 Butane					CAS #: 106-97-8		
7.872	7.872 (0.505)	58	291239	40.0000	40.988	80.00- 120.00	100.00(A)
7.872	7.872 (0.505)	43	1765809			588.57- 648.57	606.31
25 Vinyl Chloride					CAS #: 75-01-4		
8.010	8.010 (0.514)	62	1457287	40.0000	37.761	80.00- 120.00	100.00
8.010	8.010 (0.514)	64	491266			3.14- 63.14	33.71
26 1,3-Butadiene					CAS #: 106-99-0		
8.236	8.236 (0.529)	54	1013084	40.0000	39.030	80.00- 120.00	100.00
8.236	8.236 (0.529)	39	980715			65.21- 125.21	96.80
29 Bromomethane					CAS #: 74-83-9		
9.711	9.711 (0.623)	94	1501037	40.0000	35.644	80.00- 120.00	100.00
9.711	9.711 (0.623)	96	1418889			64.16- 124.16	94.53
30 Chloroethane					CAS #: 75-00-3		
10.176	10.176 (0.653)	64	701588	40.0000	38.479	80.00- 120.00	100.00
10.176	10.176 (0.653)	49	163149			0.00- 54.91	23.25
10.176	10.176 (0.653)	66	231227			3.62- 63.62	32.96
31 Isopentane					CAS #: 78-78-4		
10.309	10.309 (0.662)	57	1001897	40.0000	37.906	80.00- 120.00	100.00
10.309	10.309 (0.662)	43	1166835			82.69- 142.69	116.46
10.309	10.309 (0.662)	42	953658			68.65- 128.65	95.19
35 Freon 11					CAS #: 75-69-4		
10.938	10.938 (0.702)	101	5489142	40.0000	35.260	80.00- 120.00	100.00
10.938	10.938 (0.702)	103	3611529			37.17- 97.17	65.79
42 Ethanol					CAS #: 64-17-5		
11.852	11.852 (0.761)	45	387299	40.0000	34.334	80.00- 120.00	100.00
11.852	11.852 (0.761)	46	145349			6.61- 66.61	37.53
11.852	11.852 (0.761)	43	94449			0.00- 54.66	24.39
49 Freon 113					CAS #: 76-13-1		
12.252	12.252 (0.786)	151	4503251	40.0000	38.600	80.00- 120.00	100.00
12.252	12.252 (0.786)	153	2889506			33.64- 93.64	64.16
12.252	12.252 (0.786)	101	4908902			80.40- 140.40	109.01
50 1,1-Dichloroethene					CAS #: 75-35-4		
12.271	12.271 (0.788)	98	1185266	40.0000	36.433	80.00- 120.00	100.00
12.271	12.271 (0.788)	61	2751481			204.89- 264.89	232.14
12.271	12.271 (0.788)	96	1868444			127.69- 187.69	157.64
52 Acetone					CAS #: 67-64-1		
12.537	12.537 (0.805)	58	666418	40.0000	35.032	80.00- 120.00	100.00

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

   52 Acetone (continued)
 12.537  12.537 (0.805)    43   2190345                  321.47- 381.47   328.67
-------------------------------------------------------------------------------
   56 Carbon Disulfide                                CAS #: 75-15-0
 12.633  12.633 (0.811)    76   5014477 40.0000   34.585  80.00- 120.00   100.00
-------------------------------------------------------------------------------
   57 2-Propanol                                      CAS #: 67-63-0
 12.899  12.899 (0.828)    45   2335707 40.0000   40.136  80.00- 120.00   100.00(A)
 12.899  12.899 (0.828)    43    507081                    0.00-  54.09    21.71
 12.899  12.899 (0.828)    59    103121                    0.00-  34.43     4.41
-------------------------------------------------------------------------------
   58 3-Chloropropene                                 CAS #: 107-05-1
 13.071  13.071 (0.839)    76    827057 40.0000   38.160  80.00- 120.00   100.00
 13.071  13.071 (0.839)    41   1576278                  163.76- 223.76   190.59
-------------------------------------------------------------------------------
   66 Methylene Chloride                              CAS #: 75-09-2
 13.337  13.337 (0.856)    84   1565356 40.0000   34.340  80.00- 120.00   100.00
 13.337  13.337 (0.856)    49   1444018                   63.99- 123.99    92.25
 13.337  13.337 (0.856)    51    451272                    0.29-  60.29    28.83
-------------------------------------------------------------------------------
   71 tert-Butyl alcohol                              CAS #: 75-65-0
 13.536  13.536 (0.869)    59   4076001 40.0000   38.286  80.00- 120.00   100.00
 13.536  13.536 (0.869)    41    839932                    0.00-  51.66    20.61
 13.536  13.536 (0.869)    57    467210                    0.00-  43.50    11.46
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                         CAS #: 1634-04-4
 13.674  13.674 (0.878)    73   5452833 40.0000   37.408  80.00- 120.00   100.00
 13.674  13.674 (0.878)    57   1017832                    0.00-  48.26    18.67
 13.674  13.674 (0.878)    41    882802                    0.00-  45.58    16.19
-------------------------------------------------------------------------------
   73 trans-1,2-Dichloroethene                        CAS #: 156-60-5
 13.729  13.729 (0.881)    98   1250633 40.0000   37.848  80.00- 120.00   100.00
 13.729  13.729 (0.881)    61   2410285                  155.28- 215.28   192.73
 13.729  13.729 (0.881)    96   1896284                  126.18- 186.18   151.63
-------------------------------------------------------------------------------
   78 Hexane                                          CAS #: 110-54-3
 14.003  14.003 (0.899)    57   2161417 40.0000   38.012  80.00- 120.00   100.00
 14.003  14.003 (0.899)    43   1167365                   21.48-  81.48    54.01
 14.003  14.003 (0.899)    86    449944                    0.00-  51.51    20.82
-------------------------------------------------------------------------------
   83 Isopropyl ether                                 CAS #: 108-20-3
 14.360  14.360 (0.922)    45   4028468 40.0000   38.842  80.00- 120.00   100.00
 14.360  14.360 (0.922)    87   1633777                    9.88-  69.88    40.56
 14.360  14.360 (0.922)    59    547515                    0.00-  42.70    13.59
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                              CAS #: 75-34-3
 14.415  14.415 (0.925)    63   3159565 40.0000   36.536  80.00- 120.00   100.00
```

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

   82 1,1-Dichloroethane (continued)
 14.415  14.415 (0.925)    65   1015877                     1.78-  61.78    32.15
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                CAS #: 108-05-4
 14.442  14.442 (0.927)    86    516090 40.0000   38.361  80.00- 120.00   100.00
 14.442  14.442 (0.927)    42    387316                   44.70- 104.70    75.05
 14.442  14.442 (0.927)    43   4136557                  757.33- 817.33   801.52
-------------------------------------------------------------------------------
   88 Ethyl-tert-butyl ether                       CAS #: 637-92-3
 14.859  14.859 (0.954)    59   5270533 40.0000   39.813  80.00- 120.00   100.00
 14.859  14.859 (0.954)    87   2604070                   19.74-  79.74    49.41
 14.859  14.859 (0.954)    41    818740                    0.00-  46.34    15.53
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                       CAS #: 156-59-2
 15.240  15.240 (0.978)    98   1347909 40.0000   37.292  80.00- 120.00   100.00
 15.240  15.240 (0.978)    61   2347413                  145.90- 205.90   174.15
 15.240  15.240 (0.978)    96   2060982                  125.53- 185.53   152.90
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
 15.221  15.221 (0.977)    72    905755 40.0000   39.528  80.00- 120.00   100.00
 15.221  15.221 (0.977)    43   2643825                  262.26- 322.26   291.89
 15.221  15.221 (0.977)    57    257586                    0.00-  55.71    28.44
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                              CAS #: 109-99-9
 15.580  15.580 (1.000)    42   1732019 40.0000   41.189  80.00- 120.00   100.00(A)
 15.580  15.580 (1.000)    71   1007250                   26.85-  86.85    58.15
 15.580  15.580 (1.000)    72   1080455                   32.22-  92.22    62.38
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.580  15.580 (1.000)   130    171892 5.00000           80.00- 120.00   100.00
 15.580  15.580 (1.000)   128    135575                   52.25- 112.25    78.87
 15.641  15.641 (1.000)    49    423395                   89.81- 149.81   246.31
-------------------------------------------------------------------------------
  100 Chloroform                                   CAS #: 67-66-3
 15.641  15.641 (1.004)    83   4440244 40.0000   35.778  80.00- 120.00   100.00
 15.641  15.641 (1.004)    85   2883671                   33.97-  93.97    64.94
-------------------------------------------------------------------------------
  102 Cyclohexane                                  CAS #: 110-82-7
 15.888  15.888 (1.020)    84   2533848 40.0000   39.343  80.00- 120.00   100.00
 15.888  15.888 (1.020)    56   2175304                   58.69- 118.69    85.85
 15.888  15.888 (1.020)    41   1154767                   18.98-  78.98    45.57
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                        CAS #: 71-55-6
 15.888  15.888 (1.020)    97   5085363 40.0000   35.227  80.00- 120.00   100.00
 15.888  15.888 (1.020)    99   3315295                   34.21-  94.21    65.19
-------------------------------------------------------------------------------
```

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

  106 Carbon Tetrachloride                          CAS #: 56-23-5
 16.073  16.073 (1.032)   119   5420654 40.0000   38.341  80.00- 120.00   100.00
 16.073  16.073 (1.032)   117   5603565                   74.09- 134.09   103.37
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                        CAS #: 540-84-1
 16.313  16.313 (1.047)    56   2487597 40.0000   34.548  80.00- 120.00   100.00
 16.313  16.313 (1.047)    57   8537233                  306.64- 366.64   343.19
 16.313  16.313 (1.047)    41   2399438                   64.14- 124.14    96.46
-------------------------------------------------------------------------------
  116 Benzene                                       CAS #: 71-43-2
 16.409  16.409 (0.969)    78   5322656 40.0000   33.574  80.00- 120.00   100.00
 16.409  16.409 (0.969)    77   1264691                    0.00-  53.97    23.76
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                         CAS #: 17060-07-0
 16.409  16.409 (1.053)    65    239923 5.00000    4.862  80.00- 120.00   100.00
 16.409  16.409 (1.053)    67    140715                   21.16-  81.16    58.65
-------------------------------------------------------------------------------
  119 tert-Amyl methyl ether                        CAS #: 994-05-8
 16.433  16.433 (0.970)    87   1549433 40.0000   38.065  80.00- 120.00   100.00
 16.433  16.433 (0.970)    73   5825136                  338.86- 398.86   375.95
 16.433  16.433 (0.970)    55   1119795                   44.52- 104.52    72.27
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                            CAS #: 107-06-2
 16.505  16.505 (0.974)    62   2898522 40.0000   35.078  80.00- 120.00   100.00
 16.505  16.505 (0.974)    64    973360                    1.03-  61.03    33.58
-------------------------------------------------------------------------------
  121 Heptane                                       CAS #: 142-82-5
 16.554  16.554 (0.977)    57   1404053 40.0000   37.364  80.00- 120.00   100.00
 16.554  16.554 (0.977)   100    787152                   28.67-  88.67    56.06
 16.554  16.554 (0.977)    43   2182187                  128.92- 188.92   155.42
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                           CAS #: 540-36-3
 16.939  16.939 (1.000)   114    661560 5.00000           80.00- 120.00   100.00
 16.939  16.939 (1.000)    88    104690                    0.00-  45.20    15.82
-------------------------------------------------------------------------------
  125 Trichloroethene                               CAS #: 79-01-6
 17.349  17.349 (1.024)   130   3039931 40.0000   36.969  80.00- 120.00   100.00
 17.349  17.349 (1.024)    95   2720928                   63.99- 123.99    89.51
 17.349  17.349 (1.024)    97   1804422                   29.21-  89.21    59.36
-------------------------------------------------------------------------------
  127 Methylcyclohexane                             CAS #: 108-87-2
 17.590  17.590 (1.038)    83   3424441 40.0000   38.798  80.00- 120.00   100.00
 17.590  17.590 (1.038)    55   2160959                   31.29-  91.29    63.10
 17.590  17.590 (1.038)    56    649455                    0.00-  48.78    18.97
-------------------------------------------------------------------------------
  132 1,2-Dichloropropane                           CAS #: 78-87-5
 17.806  17.806 (1.051)    63   1842737 40.0000   36.101  80.00- 120.00   100.00
```

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

  132 1,2-Dichloropropane (continued)
 17.806  17.806 (1.051)    62   1197979                    34.19-  94.19    65.01
 17.806  17.806 (1.051)    41   1029606                    27.38-  87.38    55.87
-------------------------------------------------------------------------------
  136 1,4-Dioxane                                  CAS #: 123-91-1
 17.927  17.927 (1.058)    88   1403733 40.0000   36.720  80.00- 120.00   100.00
 17.927  17.927 (1.058)    58    793286                    25.03-  85.03    56.51
 17.927  17.927 (1.058)    57    271870                     0.00-  50.67    19.37
-------------------------------------------------------------------------------
  138 Bromodichloromethane                         CAS #: 75-27-4
 18.240  18.240 (1.077)    83   4928740 40.0000   37.464  80.00- 120.00   100.00
 18.240  18.240 (1.077)    85   3156706                    35.15-  95.15    64.05
-------------------------------------------------------------------------------
  144 cis-1,3-Dichloropropene                      CAS #: 10061-01-5
 19.063  19.063 (1.125)    75   3760015 40.0000   38.353  80.00- 120.00   100.00
 19.086  19.086 (1.127)    77   1197455                     0.45-  60.45    31.85
 19.063  19.063 (1.125)    39   1561472                    13.69-  73.69    41.53
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                         CAS #: 108-10-1
 19.265  19.265 (1.137)    43   3171953 40.0000   38.772  80.00- 120.00   100.00
 19.265  19.265 (1.137)    58   1398111                    15.64-  75.64    44.08
 19.265  19.265 (1.137)    85    822493                     0.00-  56.71    25.93
-------------------------------------------------------------------------------
$ 146 Toluene-d8                                   CAS #: 2037-26-5
 19.556  19.556 (1.155)    98    658694 5.00000    5.070  80.00- 120.00   100.00
 19.556  19.556 (1.155)    70     68390                     0.00-  40.11    10.38
 19.556  19.556 (1.155)   100    441805                    37.58-  97.58    67.07
-------------------------------------------------------------------------------
  147 Toluene                                      CAS #: 108-88-3
 19.713  19.713 (1.164)    91   6864830 40.0000   36.354  80.00- 120.00   100.00
 19.713  19.713 (1.164)    92   4082893                    28.92-  88.92    59.48
-------------------------------------------------------------------------------
  150 trans-1,3-Dichloropropene                    CAS #: 10061-02-6
 20.276  20.276 (0.907)    75   3589089 40.0000   37.805  80.00- 120.00   100.00
 20.276  20.276 (0.907)    77   1127670                     0.55-  60.55    31.42
 20.276  20.276 (0.907)    39   1354089                     8.25-  68.25    37.73
-------------------------------------------------------------------------------
  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
 20.688  20.688 (0.925)    97   2453341 40.0000   33.196  80.00- 120.00   100.00
 20.688  20.688 (0.925)    99   1559156                    32.91-  92.91    63.55
 20.688  20.688 (0.925)    83   2007206                    47.93- 107.93    81.82
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
 20.853  20.853 (0.932)   166   4090136 40.0000   35.917  80.00- 120.00   100.00
 20.853  20.853 (0.932)   129   2965927                    42.31- 102.31    72.51
 20.853  20.853 (0.932)   131   2914967                    40.11- 100.11    71.27
-------------------------------------------------------------------------------
```

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

  158 2-Hexanone                                   CAS #: 591-78-6
 21.018  21.018 (0.940)    58   1915270 40.0000   40.270  80.00- 120.00   100.00(A)
 21.018  21.018 (0.940)    43   3186870                  140.44- 200.44   166.39
 21.018  21.018 (0.940)   100    538711                    0.00-  59.62    28.13
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
 21.430  21.430 (0.958)   129   5498473 40.0000   36.649  80.00- 120.00   100.00
 21.430  21.430 (0.958)   127   4243810                   46.82- 106.82    77.18
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
 21.677  21.677 (0.969)   107   4146365 40.0000   36.560  80.00- 120.00   100.00
 21.677  21.677 (0.969)   109   3948816                   65.45- 125.45    95.24
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                             CAS #: 3114-55-4
 22.366  22.366 (1.000)   117    613145 5.00000           80.00- 120.00   100.00
 22.366  22.366 (1.000)    82    319825                   20.64-  80.64    52.16
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
 22.407  22.407 (1.002)   112   5991758 40.0000   36.119  80.00- 120.00   100.00
 22.407  22.407 (1.002)   114   1926107                    2.42-  62.42    32.15
 22.407  22.407 (1.002)    77   3233167                   23.54-  83.54    53.96
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
 22.490  22.490 (1.006)   106   2968967 40.0000   36.748  80.00- 120.00   100.00
 22.490  22.490 (1.006)    91   9222100                  282.51- 342.51   310.62
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
 22.656  22.656 (1.013)   106   3568298 40.0000   38.019  80.00- 120.00   100.00
 22.656  22.656 (1.013)    91   7176993                  166.46- 226.46   201.13
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
 23.257  23.257 (1.040)   106   3352270 40.0000   38.940  80.00- 120.00   100.00
 23.257  23.257 (1.040)    91   7015998                  184.01- 244.01   209.29
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
 23.298  23.298 (1.042)   104   5688203 40.0000   39.048  80.00- 120.00   100.00
 23.278  23.278 (1.041)    78   2842935                   20.27-  80.27    49.98
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
 23.639  23.639 (1.057)   173   5716979 40.0000   38.461  80.00- 120.00   100.00
 23.639  23.639 (1.057)   171   2984813                   20.88-  80.88    52.21
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
 23.728  23.728 (1.061)   105  10843336 40.0000   37.047  80.00- 120.00   100.00
 23.728  23.728 (1.061)   120   2997563                    0.00-  57.47    27.64
-------------------------------------------------------------------------------
```

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

$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 24.020  24.020 (1.074)   174    416867 5.00000    4.955  80.00- 120.00   100.00
 24.020  24.020 (1.074)    95    452332                   77.42- 137.42   108.51
 24.020  24.020 (1.074)   176    403389                   65.38- 125.38    96.77
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 24.199  24.199 (1.082)    83   4899652 40.0000   35.945  80.00- 120.00   100.00
 24.199  24.199 (1.082)    85   3194971                   35.73-  95.73    65.21
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
 24.267  24.267 (1.085)    91  11506199 40.0000   37.324  80.00- 120.00   100.00
 24.267  24.267 (1.085)   120   2895821                    0.00-  55.24    25.17
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 24.401  24.401 (1.091)   105   9603125 40.0000   36.752  80.00- 120.00   100.00
 24.401  24.401 (1.091)   120   2967050                    1.08-  61.08    30.90
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.469  24.469 (1.094)   105   7567927 40.0000   37.296  80.00- 120.00   100.00
 24.469  24.469 (1.094)   120   3687287                   18.44-  78.44    48.72
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.917  24.917 (1.114)   105   6284398 40.0000   35.747  80.00- 120.00   100.00
 24.917  24.917 (1.114)   120   2950078                   16.20-  76.20    46.94
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 25.321  25.321 (1.132)   146   5746579 40.0000   34.615  80.00- 120.00   100.00
 25.321  25.321 (1.132)   148   3746438                   35.51-  95.51    65.19
 25.321  25.321 (1.132)   111   2228537                    9.35-  69.35    38.78
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 25.433  25.433 (1.137)   146   5554738 40.0000   35.680  80.00- 120.00   100.00
 25.433  25.433 (1.137)   148   3585224                   32.61-  92.61    64.54
 25.433  25.433 (1.137)   111   2098530                    6.90-  66.90    37.78
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 25.567  25.567 (1.143)    91   7764625 40.0000   39.638  80.00- 120.00   100.00
 25.567  25.567 (1.143)   126   1774279                    0.00-  51.82    22.85
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.859  25.859 (1.156)   146   5092681 40.0000   35.761  80.00- 120.00   100.00
 25.859  25.859 (1.156)   148   3274434                   33.69-  93.69    64.30
 25.859  25.859 (1.156)   111   2050643                    8.96-  68.96    40.27
-------------------------------------------------------------------------------
  226 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 27.607  27.607 (1.234)   180   2536594 40.0000   39.282  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
226 1,2,4-Trichlorobenzene (continued)							
27.607	27.607 (1.234)	182	2425641			66.05- 126.05	95.63
227 Hexachlorobutadiene					CAS #: 87-68-3		
27.697	27.697 (1.238)	225	3486370	40.0000	39.708	80.00- 120.00	100.00
27.697	27.697 (1.238)	223	2253285			33.78- 93.78	64.63
228 Naphthalene					CAS #: 91-20-3		
27.921	27.921 (1.248)	128	361692	4.00000	3.836	80.00- 120.00	100.00
27.921	27.921 (1.248)	127	44834			0.00- 46.39	12.40

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: e031713.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msde.i/17Mar2016.b/e16l0317a.m
Misc Info: 40ppbv (50ppbv)

Calibration Date: 17-MAR-2016
Calibration Time: 17:24
Client Smp ID: Level 16
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	164946	98968	230924	171892	4.21
123 1,4-Difluorobenze	626935	376161	877709	661560	5.52
163 Chlorobenzene-d5	567678	340607	794749	613145	8.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.58	15.25	15.91	15.58	0.00
123 1,4-Difluorobenze	16.94	16.61	17.27	16.94	0.00
163 Chlorobenzene-d5	22.37	22.04	22.70	22.37	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/17Mar2016.b/e031713.d

Date : 17-MAR-2016 19:49

Client ID: Level 16

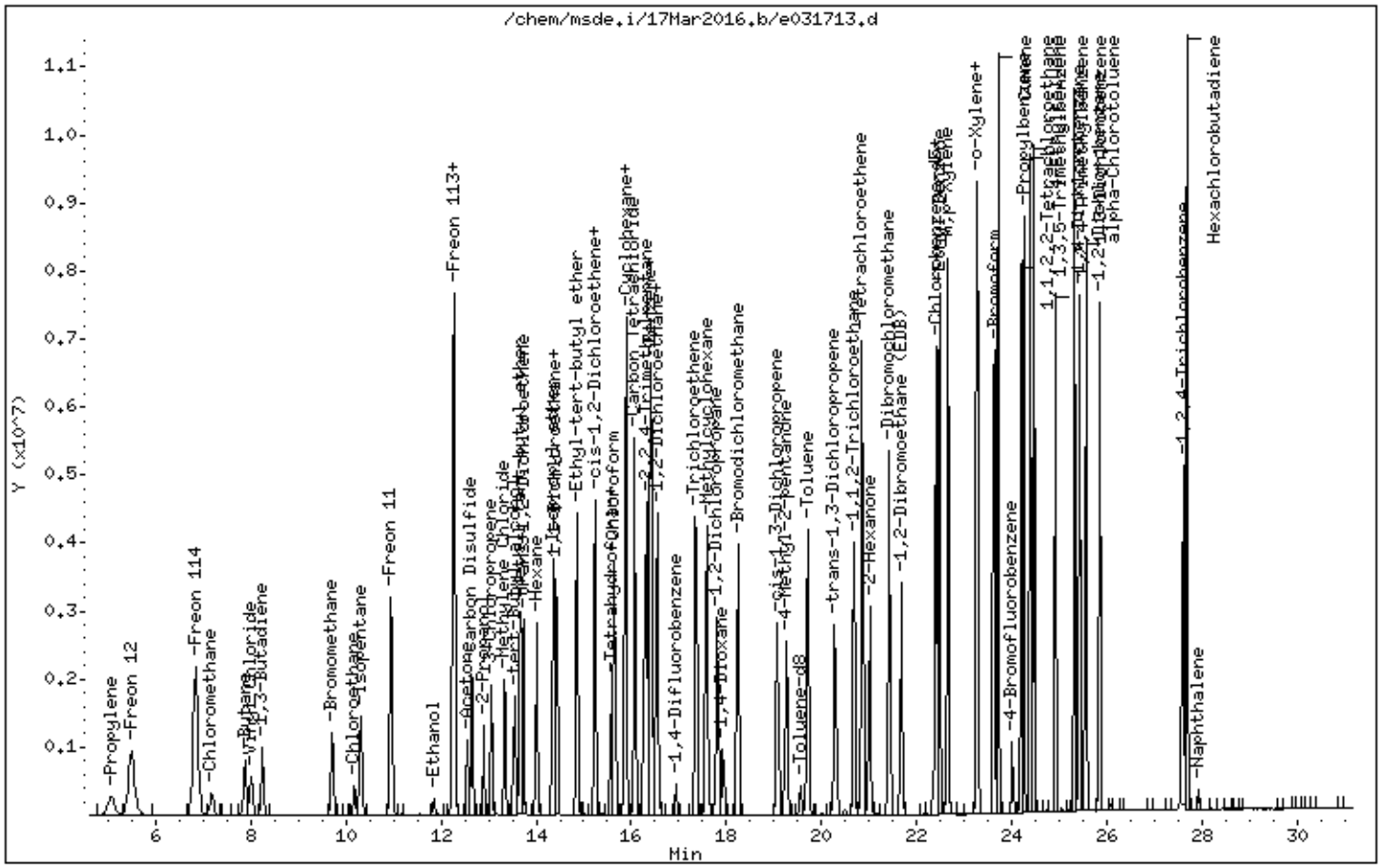
Instrument: msde.i

Sample Info: 200mL# 2759-223

Operator: ea

Column phase: RTX-624

Column diameter: 0.32



Report Date : 27-Oct-2015 08:30

0.1 ppbv LL MDL
#2757-22 (1.0 ppbv); 25 mL LOAD.
INCLUDES SPIKE FOR 1,2,4-TCB AND HEXACHLOROBUTADIENE.

0.5 ppbv LL MDL
#2759-41 (1.0 ppbv); 125 mL LOAD.
INCLUDES 0.05 ppbv NAPHTHALENE MDL.

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/19Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/19Oct2015.b
Inst ID: msde.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	e101908	e101909	e101910	e101911	e101912	e101913	e101914	e101915
INJ.DATE:	19-OCT-2015	19-OCT-2015	19-OCT-2015	19-OCT-2015	19-OCT-2015	19-OCT-2015	19-OCT-2015	19-OCT-2015
INJ.TIME:	14:19	15:05	16:00	16:45	17:47	18:47	19:31	20:33

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL (ppbv)	
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
6 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
7 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
8 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
9 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
10 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
11 Freon 12	120.62	131.35	111.59	122.44	122.60	127.34	116.79	126.66	122.42	6.26	18.76	100
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
15 Freon 114	110.10	114.51	108.45	100.40	97.29	116.20	85.52	109.09	105.39	10.21	30.62	100
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
17 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

MDL VERIFICATION:
0.1 ppbv: #2757-22 (1.0 ppbv); 20 mL LOAD (0.08 ppbv).
0.5 ppbv: #2759-41 (1.0 ppbv); 50 mL LOAD (0.2 ppbv).

Reviewer 1 [signature] Date: 10/27/15
Reviewer 2 Date:

$\bar{x} = 1.02$
$2\bar{x} = 0.04$
$3\bar{x} = 0.06$
$4\bar{x} = 0.08$

ALL 0.1 ppbv COMPOUNDS: THE 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/19Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/19Oct2015.b
Inst ID: msde.i

Std (ppbv)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
19 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
20 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
21 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
22 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
23 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
25 Vinyl Chloride	99.12	98.56	115.58	107.20	98.76	106.62	84.89	107.34	102.26	9.13	27.38	100
26 1,3-Butadiene	134.12	140.59	123.19	122.25	127.07	122.49	115.54	134.89	127.52	8.32	24.93	100
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
29 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
34 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
35 Freon 11	99.79	104.44	106.48	99.27	104.47	104.01	89.35	107.26	101.88	5.81	17.41	100
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
37 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/19Oct2015.b/e15l1016a.m
Batch File: /chem/msde.i/19Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
40 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
41 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
42 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
43 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
44 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
45 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
46 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
47 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
48 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
49 Freon 113	104.55	102.76	99.94	116.12	94.86	104.42	96.34	94.81	101.72	7.08	21.22	100
50 1,1-Dichloroethene	144.60	102.46	132.31	118.67	129.63	117.07	115.77	127.84	123.55	12.80	38.37	100
51 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
52 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
53 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
54 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
55 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
56 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
57 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
58 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
59 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
60 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
61 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
62 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
63 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/19Oct2015.b/e15l1016a.m
Batch File: /chem/msde.i/19Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
64 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
65 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
66 Methylene Chloride	137.24	127.93	127.15	145.53	127.25	132.26	109.88	106.67	126.74	13.00	38.97	200
67 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
68 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
69 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
70 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
71 tert-Butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
72 Methyl tert-butyl ethe	105.70	106.56	102.02	117.70	107.79	87.50	101.08	111.49	104.98	8.82	26.45	100
73 trans-1,2-Dichloroethe	127.71	126.04	110.78	110.98	106.53	109.15	88.58	102.54	110.29	12.53	37.56	100
74 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
75 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
76 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
77 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
78 Hexane	120.17	108.41	92.49	143.84	93.35	112.32	115.64	88.63	109.36	18.23	54.64	100
79 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
80 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
81 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
82 1,1-Dichloroethane	98.62	99.94	94.88	105.61	91.97	109.34	96.34	93.30	98.75	6.06	18.17	100
83 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
84 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
86 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/19Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/19Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
88 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
90 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
91 cis-1,2-Dichloroethene	125.61	115.18	118.58	104.22	107.90	115.95	103.82	110.55	112.73	7.52	22.56	100
92 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
94 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 98 Bromochloromethane	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
99 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
100 Chloroform	101.87	106.92	123.61	105.85	131.99	108.08	132.06	98.94	113.67	13.45	40.33	100
101 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
102 Cyclohexane	159.39	120.62	122.71	132.67	122.67	117.64	95.25	101.20	121.52	19.57	58.66	100
103 1,1,1-Trichloroethane	125.29	106.22	126.74	117.46	119.96	131.73	109.24	108.82	118.18	9.42	28.25	100
104 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
105 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
106 Carbon Tetrachloride	108.32	118.31	119.88	110.07	122.83	109.85	118.43	110.41	114.76	5.66	16.96	100
107 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
108 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
109 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
110 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/19Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/19Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 112 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
113 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
115 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
116 Benzene	121.28	119.28	122.19	122.47	129.34	117.23	123.00	122.47	122.16	3.50	10.51	100
$ 117 1,2-Dichloroethane-d4	5195.46	5331.77	5320.45	5311.83	5289.69	5575.68	5281.57	5422.93	5339.92	114.01	341.81	
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
119 tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
120 1,2-Dichloroethane	111.85	122.89	115.97	119.07	100.97	115.19	111.91	100.88	112.34	7.92	23.74	100
121 Heptane	128.15	135.62	125.92	108.74	139.51	106.95	96.68	127.79	121.17	15.20	45.56	100
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 123 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	
124 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
125 Trichloroethene	105.31	97.47	116.24	115.78	102.31	98.46	100.81	102.63	104.88	7.29	21.87	100
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
128 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
129 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
130 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
131 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
132 1,2-Dichloropropane	111.56	102.04	105.91	98.05	92.00	98.30	87.37	93.46	98.59	7.83	23.48	100
133 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
134 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/19Oct2015.b/e15l1016a.m
Batch File: /chem/msde.i/19Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
135 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
136 1,4-Dioxane	90.67	110.32	99.98	113.53	104.06	87.34	91.33	82.40	97.45	11.25	33.74	100
137 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
138 Bromodichloromethane	111.39	120.02	107.73	102.67	105.63	104.43	102.32	101.63	106.98	6.18	18.52	100
139 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
140 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
141 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
142 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
143 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
144 cis-1,3-Dichloropropen	96.47	99.24	102.03	98.85	97.68	99.74	89.56	88.81	96.55	4.82	14.46	100
145 4-Methyl-2-pentanone	119.42	98.77	86.21	104.16	108.90	91.72	109.07	102.01	102.53	10.48	31.42	100
$ 146 Toluene-d8	4908.91	4772.67	4791.14	4960.86	4824.96	4851.56	4770.70	4806.63	4835.93	68.05	204.03	
147 Toluene	108.11	121.37	104.68	110.57	110.70	104.99	106.00	99.58	108.25	6.40	19.20	100
148 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
149 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
150 trans-1,3-Dichloroprop	110.96	100.84	102.06	111.05	100.57	106.23	96.86	116.76	105.67	6.76	20.28	100
151 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
152 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
153 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
154 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
155 1,1,2-Trichloroethane	127.67	125.45	124.55	110.03	111.73	103.98	120.91	100.82	115.61	10.42	31.23	100
156 Tetrachloroethene	105.92	105.41	108.52	110.19	101.12	109.00	105.37	93.97	104.94	5.25	15.75	100
157 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
158 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/19Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/19Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
159 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
160 Dibromochloromethane	98.32	99.71	99.19	102.13	95.86	92.49	98.97	89.73	97.05	4.12	12.34	100
161 1,2-Dibromoethane (EDB	101.29	98.94	93.86	96.80	92.90	108.30	103.66	92.89	98.58	5.58	16.72	100 0.01672
162 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 163 Chlorobenzene-d5	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
164 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
165 Chlorobenzene	115.70	119.95	106.63	111.56	100.53	114.05	108.21	111.30	110.99	5.96	17.86	100
166 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
167 Ethyl Benzene	104.94	115.04	96.48	117.86	111.81	125.30	114.95	106.54	111.62	8.85	26.54	100
168 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
169 m,p-Xylene	109.46	116.45	113.95	98.79	98.52	102.74	108.04	103.78	106.47	6.66	19.96	100
170 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
171 o-Xylene	106.45	107.35	103.16	106.09	92.61	89.27	105.58	111.20	102.71	7.65	22.95	100
172 Styrene	101.74	99.19	116.49	105.28	107.19	105.03	104.51	97.15	104.57	5.87	17.61	100
173 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
174 Bromoform	102.14	99.22	101.01	107.36	94.32	98.87	101.66	94.64	99.90	4.23	12.69	100
175 Cumene	102.07	101.62	104.52	105.01	96.46	97.72	99.92	102.18	101.19	3.02	9.04	100
176 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 177 4-Bromofluorobenzene	5315.02	5193.57	5234.30	5168.96	5029.84	5161.45	5204.44	5213.90	5190.18	80.44	241.16	
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
179 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
180 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
181 1,1,2,2-Tetrachloroeth	114.64	122.40	118.15	115.42	109.15	116.06	109.15	117.79	115.34	4.50	13.48	100
182 Propylbenzene	105.54	109.31	109.77	115.43	98.23	112.23	107.71	108.27	108.31	5.06	15.16	100

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/19Oct2015.b/el511016a.m
Batch File: /chem/msde.i/19Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
183 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
184 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
185 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
186 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
187 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
188 4-Ethyltoluene	107.94	108.43	104.25	104.77	109.50	107.43	96.78	106.24	105.67	4.01	12.03	100
189 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
190 1,3,5-Trimethylbenzene	99.67	103.95	108.32	94.72	102.39	102.63	94.19	104.88	101.35	4.91	14.71	100
191 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
192 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
193 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
194 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
195 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
196 1,2,4-Trimethylbenzene	108.09	102.84	106.13	92.38	94.03	94.80	88.06	104.90	98.91	7.45	22.34	100
197 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
198 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
199 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
200 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
201 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
202 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
203 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
204 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
205 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/19Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/19Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
206 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
207 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
208 1,3-Dichlorobenzene	101.30	108.50	108.90	108.40	100.24	106.17	110.68	102.40	105.82	3.97	11.89	100
209 1,4-Dichlorobenzene	116.25	111.65	101.89	103.64	99.59	103.00	103.76	100.86	105.08	5.78	17.34	100
210 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
211 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
212 alpha-Chlorotoluene	105.03	99.31	104.91	100.87	95.89	102.36	95.81	96.50	100.08	3.83	11.49	100
213 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
214 1,2-Dichlorobenzene	113.99	108.31	105.64	113.62	101.10	101.58	112.82	106.57	107.95	5.17	15.50	100
215 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
216 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
217 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
218 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
219 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
220 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
221 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
222 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
223 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
224 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
225 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
226 1,2,4-Trichlorobenzene	137.68	111.62	121.78	111.64	100.46	102.99	105.63	94.37	110.77	13.67	40.99	500
227 Hexachlorobutadiene	120.54	96.92	121.52	110.45	93.00	112.72	105.66	119.31	110.01	10.80	32.39	500
228 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/19Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/19Oct2015.b
Inst ID: msde.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
	230 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	231 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	234 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	235 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	236 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
M	237 1,2-Dichloroethene (To	253.31	241.22	229.36	215.20	214.43	225.09	192.40	213.09	223.01	18.76	56.25	N/A
M	238 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
M	239 Total Xylene	215.91	223.81	217.11	204.88	191.13	192.01	213.61	214.98	209.18	12.04	36.09	N/A
M	240 3 and 4-Ethyltoluene	107.94	108.43	104.25	104.77	109.50	107.43	96.78	106.24	105.67	4.01	12.03	N/A
	241 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	242 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	243 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	244 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	245 TPH reference MinералS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	246 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	247 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	248 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	249 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	250 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	251 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	252 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	253 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/19Oct2015.b/e15l1016a.m
Batch File: /chem/msde.i/19Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
254 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
268 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
269 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
270 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Report Date : 27-Oct-2015 11:05

0.5 ppbv LL MDL

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/23Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/23Oct2015.b
Inst ID: msde.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	e102308	e102309	e102310	e102311	e102312	e102313	e102314	e102315
INJ.DATE:	23-OCT-2015	23-OCT-2015	23-OCT-2015	23-OCT-2015	23-OCT-2015	23-OCT-2015	23-OCT-2015	23-OCT-2015
INJ.TIME:	13:41	14:23	15:05	15:53	16:39	17:47	18:43	19:31

Rx (ppbv)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
6 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
7 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
8 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
9 Propylene	490.35	632.89	598.02	536.37	608.40	454.87	633.76	596.11	568.85	67.28	201.69	500
10 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
11 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
15 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
17 Chloromethane	498.27	465.64	448.84	444.02	466.47	460.16	457.87	433.76	459.38	19.30	57.87	600

Reviewer 1 [signature] Date: 10/27/15
Reviewer 2 Date:

$\bar{x}$ = 0.086

2σ = 0.17

All 0.5 ppbv compounds: The ratio of the mean recovered concentration and the MDL value is between 1 and 10.

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/23Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/23Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
19 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
20 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
21 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
22 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
23 Butane	493.31	492.66	421.00	454.59	460.88	492.90	401.58	426.73	455.45	36.18	108.48	500
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
25 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
26 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
29 Bromomethane	510.40	515.08	529.76	470.84	509.80	550.26	559.60	500.71	518.31	28.20	84.54	500
30 Chloroethane	423.17	488.81	458.92	452.08	444.95	442.11	436.50	414.06	445.07	22.92	68.72	500
31 Isopentane	530.27	528.78	502.73	537.31	449.12	481.75	461.72	471.94	495.45	34.13	102.32	500
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
34 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
35 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
37 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/23Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/23Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
40 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
41 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
42 Ethanol	515.92	465.55	368.04	426.82	469.33	494.30	444.64	538.52	465.39	53.65	160.84	500
43 1,2-Dichloro-1-fluoroe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
44 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
45 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
46 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
47 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
48 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
49 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
50 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
51 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
52 Acetone	545.36	534.60	492.73	440.81	470.20	556.04	484.10	494.04	502.23	39.80	119.32	500
53 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
54 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
55 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
56 Carbon Disulfide	616.48	523.53	495.04	497.76	485.88	579.38	535.57	510.71	530.54	45.62	136.77	500
57 2-Propanol	465.19	495.71	471.95	504.84	431.82	448.32	445.52	418.64	460.25	30.01	89.98	500
58 3-Chloropropene	413.63	413.93	384.24	382.75	369.09	375.51	393.80	375.70	388.58	17.18	51.51	500
59 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
60 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
61 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
62 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
63 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/23Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/23Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
64 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
65 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
66 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
67 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
68 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
69 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
70 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
71 tert-Butyl alcohol	471.26	498.06	490.76	496.66	452.53	463.19	435.39	465.73	471.70	22.28	66.81	500
72 Methyl tert-butyl ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
73 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
74 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
75 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
76 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
77 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
78 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
79 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
80 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
81 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
82 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
83 Isopropyl ether	471.91	476.18	437.71	452.66	427.51	433.36	436.16	414.77	443.78	21.48	64.40	500
84 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
86 Vinyl Acetate	495.75	385.53	391.50	398.34	422.76	464.00	387.74	424.75	421.30	40.00	119.93	500

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/23Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/23Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
88 Ethyl-tert-butyl ether	444.29	464.60	436.07	438.33	430.29	441.52	425.90	432.54	439.19	11.88	35.61	500
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
90 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
91 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
92 2-Butanone	470.61	462.53	428.02	447.32	422.43	450.31	447.77	449.58	447.32	15.95	47.80	500
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
94 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 98 Bromochloromethane	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
99 Tetrahydrofuran	445.53	436.19	422.34	482.39	389.18	389.70	472.64	501.19	442.40	41.46	124.28	500
100 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
101 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
102 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
103 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
104 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
105 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
106 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
107 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
108 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
109 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
110 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/23Oct2015.b/e15l1016a.m
Batch File: /chem/msde.i/23Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 112 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
113 2,2,4-Trimethylpentane	506.51	526.70	477.64	472.84	460.46	496.67	470.50	479.32	486.33	21.94	65.78	500
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
115 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
116 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 117 1,2-Dichloroethane-d4	5769.96	5916.36	5592.92	5730.06	5569.09	5719.88	5636.47	5761.68	5712.05	112.31	336.69	
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
119 tert-Amyl methyl ether	500.40	493.36	499.92	475.18	483.02	478.61	466.27	499.83	487.08	13.13	39.37	500
120 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
121 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 123 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	
124 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
125 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
127 Methylcyclohexane	484.89	471.00	430.58	482.01	469.11	469.79	424.18	460.60	461.52	22.47	67.36	500
128 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
129 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
130 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
131 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
132 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
133 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
134 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/23Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/23Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
135 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
137 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 146 Toluene-d8	4783.20	4786.63	4878.80	4829.41	4832.44	4850.84	4766.22	4739.42	4808.37	46.94	140.72
147 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
153 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
154 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 2-Hexanone	459.56	410.91	407.60	424.62	433.29	407.26	400.07	431.61	421.86	19.51	58.51

500

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/23Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/23Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
159 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
161 1,2-Dibromoethane (EDB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
162 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 163 Chlorobenzene-d5	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00
164 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
166 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
168 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
170 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
171 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
172 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 177 4-Bromofluorobenzene	5256.23	5016.98	5072.15	5244.81	5197.75	5100.79	5188.68	5155.51	5154.11	84.62	253.69
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/23Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/23Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
183 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 trans-1,4-Dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
189 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
191 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
197 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/23Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/23Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
206 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
209 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
210 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
213 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
215 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 4-Ethyl-1,2-dimethylbe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 1,2,4,5-tetramethylben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 1,2-Dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
227 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
228 Naphthalene	51.57	47.13	35.66	45.98	40.15	33.26	37.90	41.57	41.65	6.21	18.61
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

500

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/23Oct2015.b/e15l1016a.m
Batch File: /chem/msde.i/23Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
230 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
234 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
235 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
236 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 1,2-Dichloroethene (To	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 238 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 239 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 240 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 Total Volatile Hydroca	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference to Hexan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Hepta	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TPH reference to Gasol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
245 TPH reference MineralS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TPH reference to Stodd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 TVOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 TVOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 NMOC reference to Hexa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 NMOC reference to Hept	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 NMOC reference to Tolu	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/23Oct2015.b/e1511016a.m
Batch File: /chem/msde.i/23Oct2015.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
254 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
255 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C5 - C6 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C6-C8 Aliphatic ref He	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aliphatic ref D	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aliphatic ref	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C8-C10 Aromatic ref 1,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
268 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
269 C10-C12 Aromatic 1,2,	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
270 C10-C12 Aromatic Naph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1607235A-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e071402**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/14/16 08:35 AM**

Compound	%Recovery
Freon 12	88
Freon 114	87
Chloromethane	81
Vinyl Chloride	80
1,3-Butadiene	81
Bromomethane	90
Chloroethane	98
Freon 11	91
Ethanol	101
Freon 113	79
1,1-Dichloroethene	80
Acetone	75
2-Propanol	88
Carbon Disulfide	87
3-Chloropropene	104
Methylene Chloride	77
Methyl tert-butyl ether	80
trans-1,2-Dichloroethene	79
Hexane	76
1,1-Dichloroethane	81
2-Butanone (Methyl Ethyl Ketone)	81
cis-1,2-Dichloroethene	84
Tetrahydrofuran	62 Q
Chloroform	85
1,1,1-Trichloroethane	85
Cyclohexane	82
Carbon Tetrachloride	91
2,2,4-Trimethylpentane	79
Benzene	84
1,2-Dichloroethane	91
Heptane	81
Trichloroethene	94
1,2-Dichloropropane	82
1,4-Dioxane	86
Bromodichloromethane	93
cis-1,3-Dichloropropene	85
4-Methyl-2-pentanone	86
Toluene	88
trans-1,3-Dichloropropene	87
1,1,2-Trichloroethane	86
Tetrachloroethene	95
2-Hexanone	87

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1607235A-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e071402**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 7/14/16 08:35 AM**

Compound	%Recovery
Dibromochloromethane	92
1,2-Dibromoethane (EDB)	90
Chlorobenzene	89
Ethyl Benzene	90
m,p-Xylene	93
o-Xylene	94
Styrene	93
Bromoform	98
Cumene	86
1,1,2,2-Tetrachloroethane	73
Propylbenzene	81
4-Ethyltoluene	84
1,3,5-Trimethylbenzene	78
1,2,4-Trimethylbenzene	75
1,3-Dichlorobenzene	76
1,4-Dichlorobenzene	81
alpha-Chlorotoluene	78
1,2-Dichlorobenzene	82
1,2,4-Trichlorobenzene	116
Hexachlorobutadiene	111
Naphthalene	85

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msde.i Injection Date: 14-JUL-2016 08:35
Lab File ID: e071402.d Init. Cal. Date(s): 17-MAR-2016 24-MAY-2016
Analysis Type: AIR Init. Cal. Times: 14:00 13:20
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msde.i/14Jul2016.b/e16l0317f.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
9 Propylene	0.64936	0.51663	0.010	20.43906	40.00000	Averaged
11 Freon 12	4.20541	3.72505	0.010	11.42241	30.00000	Averaged
15 Freon 114	3.07783	2.67303	0.010	13.15189	30.00000	Averaged
17 Chloromethane	0.79793	0.64733	0.010	18.87339	30.00000	Averaged
23 Butane	0.20668	0.16161	0.010	21.80624	40.00000	Averaged
25 Vinyl Chloride	1.12258	0.90310	0.010	19.55170	30.00000	Averaged
26 1,3-Butadiene	0.75503	0.60926	0.010	19.30632	30.00000	Averaged
29 Bromomethane	1.22495	1.10029	0.010	10.17688	30.00000	Averaged
30 Chloroethane	0.53036	0.51794	0.010	2.34162	30.00000	Averaged
31 Isopentane	0.76884	0.70244	0.010	8.63625	40.00000	Averaged
35 Freon 11	4.52830	4.13290	0.010	8.73180	30.00000	Averaged
42 Ethanol	0.32813	0.33129	0.010	-0.96389	30.00000	Averaged
49 Freon 113	3.39349	2.69642	0.010	20.54151	30.00000	Averaged
50 1,1-Dichloroethene	0.94631	0.75306	0.010	20.42192	30.00000	Averaged
52 Acetone	0.55335	0.41655	0.010	24.72311	30.00000	Averaged
56 Carbon Disulfide	4.21745	3.65509	0.010	13.33400	30.00000	Averaged
57 2-Propanol	1.69275	1.48523	0.010	12.25909	30.00000	Averaged
58 3-Chloropropene	0.63044	0.65483	0.010	-3.86927	30.00000	Averaged
66 Methylene Chloride	1.32596	1.02518	0.010	22.68386	30.00000	Averaged
71 tert-Butyl alcohol	3.09672	2.09508	0.010	32.34522	40.00000	Averaged
72 Methyl tert-butyl ether	4.24002	3.37874	0.010	20.31328	30.00000	Averaged
73 trans-1,2-Dichloroethene	0.96116	0.76230	0.010	20.68957	30.00000	Averaged
78 Hexane	1.65400	1.26370	0.010	23.59768	30.00000	Averaged
83 Isopropyl ether	3.01685	2.43297	0.010	19.35383	40.00000	Averaged
82 1,1-Dichloroethane	2.51547	2.04487	0.010	18.70810	30.00000	Averaged
86 Vinyl Acetate	0.39134	0.31612	0.010	19.22088	40.00000	Averaged
88 Ethyl-tert-butyl ether	3.85071	3.28183	0.010	14.77353	40.00000	Averaged
91 cis-1,2-Dichloroethene	1.05139	0.88215	0.010	16.09741	30.00000	Averaged
92 2-Butanone	0.66654	0.53880	0.010	19.16422	30.00000	Averaged
99 Tetrahydrofuran	1.22317	0.76501	0.010	37.45671	30.00000	Averaged <-
100 Chloroform	3.60995	3.05799	0.010	15.28992	30.00000	Averaged
102 Cyclohexane	1.87337	1.53335	0.010	18.14993	30.00000	Averaged
103 1,1,1-Trichloroethane	4.19916	3.56799	0.010	15.03101	30.00000	Averaged
106 Carbon Tetrachloride	4.11244	3.74402	0.010	8.95874	30.00000	Averaged
113 2,2,4-Trimethylpentane	2.09445	1.66433	0.010	20.53601	30.00000	Averaged
116 Benzene	1.19817	1.00412	0.010	16.19560	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msde.i Injection Date: 14-JUL-2016 08:35
Lab File ID: e071402.d Init. Cal. Date(s): 17-MAR-2016 24-MAY-2016
Analysis Type: AIR Init. Cal. Times: 14:00 13:20
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msde.i/14Jul2016.b/e16l0317f.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 117 1,2-Dichloroethane-d4	1.43539	1.36185	0.010	5.12377	30.00000	Averaged
119 tert-Amyl methyl ether	0.30765	0.27915	0.010	9.26267	40.00000	Averaged
120 1,2-Dichloroethane	0.62451	0.56885	0.010	8.91261	30.00000	Averaged
121 Heptane	0.28401	0.23141	0.010	18.51935	30.00000	Averaged
125 Trichloroethene	0.62148	0.58208	0.010	6.34078	30.00000	Averaged
127 Methylcyclohexane	0.66709	0.57506	0.010	13.79510	40.00000	Averaged
132 1,2-Dichloropropane	0.38578	0.31481	0.010	18.39800	30.00000	Averaged
136 1,4-Dioxane	0.28892	0.25001	0.010	13.46751	30.00000	Averaged
138 Bromodichloromethane	0.99432	0.92729	0.010	6.74113	30.00000	Averaged
144 cis-1,3-Dichloropropene	0.74095	0.62980	0.010	15.00124	30.00000	Averaged
145 4-Methyl-2-pentanone	0.61831	0.53267	0.010	13.84984	30.00000	Averaged
$ 146 Toluene-d8	0.98198	0.99025	0.010	-0.84261	30.00000	Averaged
147 Toluene	1.42718	1.25217	0.010	12.26269	30.00000	Averaged
150 trans-1,3-Dichloropropene	0.77418	0.67689	0.010	12.56662	30.00000	Averaged
155 1,1,2-Trichloroethane	0.60267	0.51544	0.010	14.47438	30.00000	Averaged
156 Tetrachloroethene	0.92863	0.88395	0.010	4.81172	30.00000	Averaged
158 2-Hexanone	0.38784	0.33914	0.010	12.55719	30.00000	Averaged
160 Dibromochloromethane	1.22343	1.12947	0.010	7.68020	30.00000	Averaged
161 1,2-Dibromoethane (EDB)	0.92484	0.82847	0.010	10.42023	30.00000	Averaged
165 Chlorobenzene	1.35279	1.20581	0.010	10.86439	30.00000	Averaged
167 Ethyl Benzene	0.65884	0.59278	0.010	10.02767	30.00000	Averaged
169 m,p-Xylene	0.76536	0.71048	0.010	7.17117	30.00000	Averaged
171 o-Xylene	0.70201	0.65811	0.010	6.25455	30.00000	Averaged
172 Styrene	1.18792	1.10626	0.010	6.87435	30.00000	Averaged
174 Bromoform	1.21214	1.19322	0.010	1.56058	30.00000	Averaged
175 Cumene	2.38682	2.05396	0.010	13.94608	30.00000	Averaged
$ 177 4-Bromofluorobenzene	0.68607	0.67168	0.010	2.09729	30.00000	Averaged
181 1,1,2,2-Tetrachloroethane	1.11157	0.81011	0.010	27.11952	30.00000	Averaged
182 Propylbenzene	2.51395	2.03260	0.010	19.14687	30.00000	Averaged
188 4-Ethyltoluene	2.13075	1.79461	0.010	15.77574	30.00000	Averaged
190 1,3,5-Trimethylbenzene	1.65469	1.29326	0.010	21.84298	30.00000	Averaged
196 1,2,4-Trimethylbenzene	1.43361	1.07857	0.010	24.76534	30.00000	Averaged
208 1,3-Dichlorobenzene	1.35377	1.02455	0.010	24.31870	30.00000	Averaged
209 1,4-Dichlorobenzene	1.26953	1.02374	0.010	19.36071	30.00000	Averaged
212 alpha-Chlorotoluene	1.59742	1.25315	0.010	21.55137	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msde.i Injection Date: 14-JUL-2016 08:35
Lab File ID: e071402.d Init. Cal. Date(s): 17-MAR-2016 24-MAY-2016
Analysis Type: AIR Init. Cal. Times: 14:00 13:20
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msde.i/14Jul2016.b/e16l0317f.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
214 1,2-Dichlorobenzene	1.16130	0.95121	0.010	18.09103	30.00000	Averaged
226 1,2,4-Trichlorobenzene	0.52658	0.61314	0.010	-16.43784	30.00000	Averaged
227 Hexachlorobutadiene	0.71599	0.79554	0.010	-11.11100	30.00000	Averaged
228 Naphthalene	0.76893	0.65388	0.010	14.96135	40.00000	Averaged

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/14Jul2016.b/e071402.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 14-JUL-2016 08:35
Operator : ef Inst ID: msde.i
Smp Info : 25mL# 2789-173
Misc Info : 5.0ppbv (50ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/14Jul2016.b/e16l0317f.m
Meth Date : 14-Jul-2016 14:31 efinn Quant Type: ISTD
Cal Date : 24-MAY-2016 10:14 Cal File: e052406.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
9 Propylene					CAS #: 115-07-1		
4.738	4.738 (0.308)	41	68100	5.00000	3.978	80.00- 120.00	100.00
4.738	4.738 (0.308)	42	47903			38.73- 98.73	70.34
4.762	4.762 (0.309)	39	58479			55.81- 115.81	85.87
11 Freon 12					CAS #: 75-71-8		
5.220	5.220 (0.339)	85	491018	5.00000	4.429	80.00- 120.00	100.00
5.196	5.196 (0.338)	87	155581			2.00- 62.00	31.69
15 Freon 114					CAS #: 76-14-2		
6.594	6.594 (0.428)	135	352346	5.00000	4.342	80.00- 120.00	100.00
6.618	6.618 (0.430)	137	115499			1.31- 61.31	32.78
6.594	6.594 (0.428)	85	414178			93.88- 153.88	117.55
17 Chloromethane					CAS #: 74-87-3		
6.932	6.932 (0.450)	50	85328	5.00000	4.056	80.00- 120.00	100.00
6.932	6.932 (0.450)	52	27092			5.50- 65.50	31.75
23 Butane					CAS #: 106-97-8		
7.675	7.675 (0.499)	58	21303	5.00000	3.910	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
23 Butane (continued)							
7.658	7.658 (0.498)	43	136166			588.57- 648.57	639.19
25 Vinyl Chloride					CAS #: 75-01-4		
7.797	7.797 (0.507)	62	119042	5.00000	4.022	80.00- 120.00	100.00
7.797	7.797 (0.507)	64	40237			3.14- 63.14	33.80
26 1,3-Butadiene					CAS #: 106-99-0		
8.040	8.040 (0.522)	54	80310	5.00000	4.035	80.00- 120.00	100.00
8.022	8.022 (0.521)	39	77885			65.21- 125.21	96.98
29 Bromomethane					CAS #: 74-83-9		
9.510	9.510 (0.618)	94	145035	5.00000	4.491	80.00- 120.00	100.00
9.510	9.510 (0.618)	96	137920			64.16- 124.16	95.09
30 Chloroethane					CAS #: 75-00-3		
9.986	9.986 (0.649)	64	68272	5.00000	4.883	80.00- 120.00	100.00
9.986	9.986 (0.649)	49	15960			0.00- 54.91	23.38
10.005	10.005 (0.650)	66	23362			3.62- 63.62	34.22
31 Isopentane					CAS #: 78-78-4		
10.119	10.119 (0.657)	57	92592	5.00000	4.568	80.00- 120.00	100.00
10.138	10.138 (0.659)	43	103743			82.69- 142.69	112.04
10.138	10.138 (0.659)	42	87924			68.65- 128.65	94.96
35 Freon 11					CAS #: 75-69-4		
10.747	10.747 (0.698)	101	544778	5.00000	4.563	80.00- 120.00	100.00
10.747	10.747 (0.698)	103	361111			37.17- 97.17	66.29
42 Ethanol					CAS #: 64-17-5		
11.680	11.680 (0.759)	45	43669	5.00000	5.048	80.00- 120.00	100.00
11.680	11.680 (0.759)	46	16416			6.61- 66.61	37.59
11.680	11.680 (0.759)	43	13293			0.00- 54.66	30.44
49 Freon 113					CAS #: 76-13-1		
12.080	12.080 (0.785)	151	355428	5.00000	3.973	80.00- 120.00	100.00
12.080	12.080 (0.785)	153	223075			33.64- 93.64	62.76
12.080	12.080 (0.785)	101	370473			80.40- 140.40	104.23
50 1,1-Dichloroethene					CAS #: 75-35-4		
12.099	12.099 (0.786)	98	99264	5.00000	3.979	80.00- 120.00	100.00
12.099	12.099 (0.786)	61	232407			204.89- 264.89	234.13
12.099	12.099 (0.786)	96	160353			127.69- 187.69	161.54
52 Acetone					CAS #: 67-64-1		
12.366	12.366 (0.803)	58	54907	5.00000	3.764	80.00- 120.00	100.00

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

   52 Acetone (continued)
 12.366  12.366 (0.803)    43    194575                   321.47- 381.47   354.37
-------------------------------------------------------------------------------
   56 Carbon Disulfide                                CAS #: 75-15-0
 12.442  12.442 (0.808)    76    481796 5.00000    4.333  80.00- 120.00   100.00
-------------------------------------------------------------------------------
   57 2-Propanol                                      CAS #: 67-63-0
 12.728  12.728 (0.827)    45    195776 5.00000    4.387  80.00- 120.00   100.00
 12.728  12.728 (0.827)    43     53453                    0.00-  54.09    27.30
 12.728  12.728 (0.827)    59      8357                    0.00-  34.43     4.27
-------------------------------------------------------------------------------
   58 3-Chloropropene                                 CAS #: 107-05-1
 12.880  12.880 (0.837)    76     86317 5.00000    5.193  80.00- 120.00   100.00
 12.880  12.880 (0.837)    41    163449                  163.76- 223.76   189.36
-------------------------------------------------------------------------------
   66 Methylene Chloride                              CAS #: 75-09-2
 13.176  13.176 (0.856)    84    135134 5.00000    3.866  80.00- 120.00   100.00
 13.176  13.176 (0.856)    49    123307                   63.99- 123.99    91.25
 13.176  13.176 (0.856)    51     35419                    0.29-  60.29    26.21
-------------------------------------------------------------------------------
   71 tert-Butyl alcohol                              CAS #: 75-65-0
 13.368  13.368 (0.869)    59    276163 5.00000    3.383  80.00- 120.00   100.00
 13.368  13.368 (0.869)    41     50814                    0.00-  51.66    18.40
 13.368  13.368 (0.869)    57     31157                    0.00-  43.50    11.28
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                         CAS #: 1634-04-4
 13.478  13.478 (0.876)    73    445368 5.00000    3.984  80.00- 120.00   100.00
 13.478  13.478 (0.876)    57     84658                    0.00-  48.26    19.01
 13.478  13.478 (0.876)    41     80035                    0.00-  45.58    17.97
-------------------------------------------------------------------------------
   73 trans-1,2-Dichloroethene                        CAS #: 156-60-5
 13.533  13.533 (0.879)    98    100483 5.00000    3.966  80.00- 120.00   100.00
 13.533  13.533 (0.879)    61    199153                  155.28- 215.28   198.20
 13.533  13.533 (0.879)    96    169987                  126.18- 186.18   169.17
-------------------------------------------------------------------------------
   78 Hexane                                          CAS #: 110-54-3
 13.835  13.835 (0.899)    57    166574 5.00000    3.820  80.00- 120.00   100.00
 13.835  13.835 (0.899)    43     89276                   21.48-  81.48    53.60
 13.835  13.835 (0.899)    86     37562                    0.00-  51.51    22.55
-------------------------------------------------------------------------------
   83 Isopropyl ether                                 CAS #: 108-20-3
 14.192  14.192 (0.922)    45    320702 5.00000    4.032  80.00- 120.00   100.00
 14.192  14.192 (0.922)    87    139567                    9.88-  69.88    43.52
 14.192  14.192 (0.922)    59     43548                    0.00-  42.70    13.58
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                              CAS #: 75-34-3
 14.247  14.247 (0.926)    63    269545 5.00000    4.064  80.00- 120.00   100.00
```

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

   82 1,1-Dichloroethane (continued)
 14.247  14.247 (0.926)    65     83178                     1.78-  61.78    30.86
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                CAS #: 108-05-4
 14.247  14.247 (0.926)    86     41669 5.00000    4.039  80.00- 120.00   100.00
 14.247  14.247 (0.926)    42     31900                    44.70- 104.70    76.56
 14.247  14.247 (0.926)    43    309892                   757.33- 817.33   743.70
-------------------------------------------------------------------------------
   88 Ethyl-tert-butyl ether                       CAS #: 637-92-3
 14.685  14.685 (0.954)    59    432594 5.00000    4.261  80.00- 120.00   100.00
 14.685  14.685 (0.954)    87    209421                    19.74-  79.74    48.41
 14.685  14.685 (0.954)    41     75649                     0.00-  46.34    17.49
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                       CAS #: 156-59-2
 15.066  15.066 (0.979)    98    116280 5.00000    4.195  80.00- 120.00   100.00
 15.047  15.047 (0.978)    61    195480                   145.90- 205.90   168.11
 15.066  15.066 (0.979)    96    176585                   125.53- 185.53   151.86
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
 15.047  15.047 (0.978)    72     71022 5.00000    4.042  80.00- 120.00   100.00
 15.047  15.047 (0.978)    43    204950                   262.26- 322.26   288.57
 15.047  15.047 (0.978)    57     20229                     0.00-  55.71    28.48
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                              CAS #: 109-99-9
 15.391  15.391 (1.000)    42    100840 5.00000    3.127  80.00- 120.00   100.00
 15.391  15.391 (1.000)    71     64564                    26.85-  86.85    64.03
 15.391  15.391 (1.000)    72     65738                    32.22-  92.22    65.19
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.391  15.391 (1.000)   130    131815 5.00000           80.00- 120.00   100.00
 15.391  15.391 (1.000)   128     97853                    52.25- 112.25    74.24
 15.391  15.391 (1.000)    49     92964                    89.81- 149.81    70.53
-------------------------------------------------------------------------------
  100 Chloroform                                  CAS #: 67-66-3
 15.453  15.453 (1.004)    83    403089 5.00000    4.236  80.00- 120.00   100.00
 15.453  15.453 (1.004)    85    255550                    33.97-  93.97    63.40
-------------------------------------------------------------------------------
  102 Cyclohexane                                 CAS #: 110-82-7
 15.669  15.669 (1.018)    84    202119 5.00000    4.092  80.00- 120.00   100.00
 15.669  15.669 (1.018)    56    161803                    58.69- 118.69    80.05
 15.669  15.669 (1.018)    41     95728                    18.98-  78.98    47.36
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                       CAS #: 71-55-6
 15.669  15.669 (1.018)    97    470314 5.00000    4.248  80.00- 120.00   100.00
 15.669  15.669 (1.018)    99    296444                    34.21-  94.21    63.03
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
106 Carbon Tetrachloride					CAS #: 56-23-5		
15.884	15.884 (1.032)	119	493518	5.00000	4.552	80.00- 120.00	100.00
15.884	15.884 (1.032)	117	513206			74.09- 134.09	103.99
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.111	16.111 (1.047)	56	219384	5.00000	3.973	80.00- 120.00	100.00
16.111	16.111 (1.047)	57	758798			306.64- 366.64	345.88
16.111	16.111 (1.047)	41	236369			64.14- 124.14	107.74
116 Benzene					CAS #: 71-43-2		
16.183	16.183 (0.967)	78	470968	5.00000	4.190	80.00- 120.00	100.00
16.207	16.207 (0.968)	77	109687			0.00- 53.97	23.29
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.207	16.207 (1.053)	65	179512	5.00000	4.744	80.00- 120.00	100.00
16.207	16.207 (1.053)	67	94189			21.16- 81.16	52.47
119 tert-Amyl methyl ether					CAS #: 994-05-8		
16.231	16.231 (0.970)	87	130931	5.00000	4.537	80.00- 120.00	100.00
16.231	16.231 (0.970)	73	493301			338.86- 398.86	376.76
16.231	16.231 (0.970)	55	95572			44.52- 104.52	72.99
120 1,2-Dichloroethane					CAS #: 107-06-2		
16.303	16.303 (0.974)	62	266808	5.00000	4.554	80.00- 120.00	100.00
16.303	16.303 (0.974)	64	87845			1.03- 61.03	32.92
121 Heptane					CAS #: 142-82-5		
16.352	16.352 (0.977)	57	108541	5.00000	4.074	80.00- 120.00	100.00
16.352	16.352 (0.977)	100	62569			28.67- 88.67	57.65
16.352	16.352 (0.977)	43	174031			128.92- 188.92	160.34
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
16.737	16.737 (1.000)	114	469034	5.00000		80.00- 120.00	100.00
16.737	16.737 (1.000)	88	74137			0.00- 45.20	15.81
125 Trichloroethene					CAS #: 79-01-6		
17.123	17.123 (1.023)	130	273013	5.00000	4.683	80.00- 120.00	100.00
17.123	17.123 (1.023)	95	235355			63.99- 123.99	86.21
17.123	17.123 (1.023)	97	155145			29.21- 89.21	56.83
127 Methylcyclohexane					CAS #: 108-87-2		
17.363	17.363 (1.037)	83	269723	5.00000	4.310	80.00- 120.00	100.00
17.339	17.339 (1.036)	55	172617			31.29- 91.29	64.00
17.339	17.339 (1.036)	56	50659			0.00- 48.78	18.78
132 1,2-Dichloropropane					CAS #: 78-87-5		
17.580	17.580 (1.050)	63	147655	5.00000	4.080	80.00- 120.00	100.00

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

  132 1,2-Dichloropropane (continued)
 17.580  17.580 (1.050)    62     95279                    34.19-  94.19    64.53
 17.580  17.580 (1.050)    41     93382                    27.38-  87.38    63.24
-------------------------------------------------------------------------------
  136 1,4-Dioxane                                  CAS #: 123-91-1
 17.701  17.701 (1.058)    88    117263 5.00000    4.327  80.00- 120.00   100.00
 17.701  17.701 (1.058)    58     61064                    25.03-  85.03    52.07
 17.701  17.701 (1.058)    57     21288                     0.00-  50.67    18.15
-------------------------------------------------------------------------------
  138 Bromodichloromethane                         CAS #: 75-27-4
 17.990  17.990 (1.075)    83    434932 5.00000    4.663  80.00- 120.00   100.00
 17.990  17.990 (1.075)    85    279096                    35.15-  95.15    64.17
-------------------------------------------------------------------------------
  144 cis-1,3-Dichloropropene                      CAS #: 10061-01-5
 18.805  18.805 (1.124)    75    295398 5.00000    4.250  80.00- 120.00   100.00
 18.805  18.805 (1.124)    77     96053                     0.45-  60.45    32.52
 18.805  18.805 (1.124)    39    133611                    13.69-  73.69    45.23
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                         CAS #: 108-10-1
 18.984  18.984 (1.134)    43    249841 5.00000    4.308  80.00- 120.00   100.00
 18.984  18.984 (1.134)    58    106539                    15.64-  75.64    42.64
 19.006  19.006 (1.136)    85     67597                     0.00-  56.71    27.06
-------------------------------------------------------------------------------
$ 146 Toluene-d8                                   CAS #: 2037-26-5
 19.275  19.275 (1.152)    98    464463 5.00000    5.042  80.00- 120.00   100.00
 19.275  19.275 (1.152)    70     54158                     0.00-  40.11    11.66
 19.275  19.275 (1.152)   100    304841                    37.58-  97.58    65.63
-------------------------------------------------------------------------------
  147 Toluene                                      CAS #: 108-88-3
 19.432  19.432 (1.161)    91    587311 5.00000    4.387  80.00- 120.00   100.00
 19.432  19.432 (1.161)    92    350985                    28.92-  88.92    59.76
-------------------------------------------------------------------------------
  150 trans-1,3-Dichloropropene                    CAS #: 10061-02-6
 19.998  19.998 (0.902)    75    283890 5.00000    4.372  80.00- 120.00   100.00
 19.998  19.998 (0.902)    77     92383                     0.55-  60.55    32.54
 19.998  19.998 (0.902)    39    111389                     8.25-  68.25    39.24
-------------------------------------------------------------------------------
  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
 20.438  20.438 (0.922)    97    216174 5.00000    4.276  80.00- 120.00   100.00
 20.438  20.438 (0.922)    99    133448                    32.91-  92.91    61.73
 20.438  20.438 (0.922)    83    178381                    47.93- 107.93    82.52
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
 20.602  20.602 (0.929)   166    370730 5.00000    4.759  80.00- 120.00   100.00
 20.602  20.602 (0.929)   129    264773                    42.31- 102.31    71.42
 20.602  20.602 (0.929)   131    252382                    40.11- 100.11    68.08
-------------------------------------------------------------------------------
```

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

  158 2-Hexanone                                    CAS #: 591-78-6
 20.795  20.795 (0.938)    58    142236 5.00000    4.372  80.00- 120.00   100.00
 20.795  20.795 (0.938)    43    242087                  140.44- 200.44   170.20
 20.795  20.795 (0.938)   100     40526                    0.00-  59.62    28.49
-------------------------------------------------------------------------------
  160 Dibromochloromethane                          CAS #: 124-48-1
 21.207  21.207 (0.956)   129    473702 5.00000    4.616  80.00- 120.00   100.00
 21.207  21.207 (0.956)   127    364117                   46.82- 106.82    76.87
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                       CAS #: 106-93-4
 21.481  21.481 (0.969)   107    347462 5.00000    4.479  80.00- 120.00   100.00
 21.481  21.481 (0.969)   109    329143                   65.45- 125.45    94.73
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                              CAS #: 3114-55-4
 22.177  22.177 (1.000)   117    419401 5.00000           80.00- 120.00   100.00
 22.177  22.177 (1.000)    82    206237                   20.64-  80.64    49.17
-------------------------------------------------------------------------------
  165 Chlorobenzene                                 CAS #: 108-90-7
 22.218  22.218 (1.002)   112    505720 5.00000    4.457  80.00- 120.00   100.00
 22.218  22.218 (1.002)   114    167790                    2.42-  62.42    33.18
 22.218  22.218 (1.002)    77    270613                   23.54-  83.54    53.51
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                 CAS #: 100-41-4
 22.301  22.301 (1.006)   106    248611 5.00000    4.499  80.00- 120.00   100.00
 22.301  22.301 (1.006)    91    773904                  282.51- 342.51   311.29
-------------------------------------------------------------------------------
  169 m,p-Xylene                                    CAS #: 108-38-3
 22.467  22.467 (1.013)   106    297974 5.00000    4.641  80.00- 120.00   100.00
 22.467  22.467 (1.013)    91    588755                  166.46- 226.46   197.59
-------------------------------------------------------------------------------
  171 o-Xylene                                      CAS #: 95-47-6
 23.089  23.089 (1.041)   106    276010 5.00000    4.687  80.00- 120.00   100.00
 23.089  23.089 (1.041)    91    582456                  184.01- 244.01   211.03
-------------------------------------------------------------------------------
  172 Styrene                                       CAS #: 100-42-5
 23.110  23.110 (1.042)   104    463967 5.00000    4.656  80.00- 120.00   100.00
 23.110  23.110 (1.042)    78    236622                   20.27-  80.27    51.00
-------------------------------------------------------------------------------
  174 Bromoform                                     CAS #: 75-25-2
 23.452  23.452 (1.057)   173    500438 5.00000    4.922  80.00- 120.00   100.00
 23.452  23.452 (1.057)   171    261448                   20.88-  80.88    52.24
-------------------------------------------------------------------------------
  175 Cumene                                        CAS #: 98-82-8
 23.564  23.564 (1.063)   105    861431 5.00000    4.303  80.00- 120.00   100.00
 23.564  23.564 (1.063)   120    239713                    0.00-  57.47    27.83
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
23.856	23.856 (1.076)	174	281705	5.00000	4.895	80.00- 120.00	100.00
23.856	23.856 (1.076)	95	280424			77.42- 137.42	99.55
23.856	23.856 (1.076)	176	264036			65.38- 125.38	93.73
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
24.035	24.035 (1.084)	83	339763	5.00000	3.644	80.00- 120.00	100.00
24.035	24.035 (1.084)	85	218805			35.73- 95.73	64.40
182 Propylbenzene					CAS #: 103-65-1		
24.102	24.102 (1.087)	91	852476	5.00000	4.043	80.00- 120.00	100.00
24.102	24.102 (1.087)	120	213400			0.00- 55.24	25.03
188 4-Ethyltoluene					CAS #: 622-96-8		
24.237	24.237 (1.093)	105	752660	5.00000	4.211	80.00- 120.00	100.00
24.237	24.237 (1.093)	120	241232			1.08- 61.08	32.05
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.304	24.304 (1.096)	105	542393	5.00000	3.908	80.00- 120.00	100.00
24.304	24.304 (1.096)	120	268267			18.44- 78.44	49.46
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.775	24.775 (1.117)	105	452355	5.00000	3.762	80.00- 120.00	100.00
24.775	24.775 (1.117)	120	207722			16.20- 76.20	45.92
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.156	25.156 (1.134)	146	429699	5.00000	3.784	80.00- 120.00	100.00
25.156	25.156 (1.134)	148	278449			35.51- 95.51	64.80
25.156	25.156 (1.134)	111	164316			9.35- 69.35	38.24
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.268	25.268 (1.139)	146	429358	5.00000	4.032	80.00- 120.00	100.00
25.268	25.268 (1.139)	148	279333			32.61- 92.61	65.06
25.268	25.268 (1.139)	111	152904			6.90- 66.90	35.61
212 alpha-Chlorotoluene					CAS #: 100-44-7		
25.403	25.403 (1.145)	91	525573	5.00000	3.922	80.00- 120.00	100.00
25.403	25.403 (1.145)	126	117068			0.00- 51.82	22.27
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.694	25.694 (1.159)	146	398937	5.00000	4.095	80.00- 120.00	100.00
25.694	25.694 (1.159)	148	254931			33.69- 93.69	63.90
25.694	25.694 (1.159)	111	157863			8.96- 68.96	39.57
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.398	27.398 (1.235)	180	257151	5.00000	5.822	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
226 1,2,4-Trichlorobenzene (continued)							
27.398	27.398 (1.235)	182	239053			66.05- 126.05	92.96
227 Hexachlorobutadiene					CAS #: 87-68-3		
27.488	27.488 (1.239)	225	333650	5.00000	5.556	80.00- 120.00	100.00
27.488	27.488 (1.239)	223	213253			33.78- 93.78	63.92
228 Naphthalene					CAS #: 91-20-3		
27.712	27.712 (1.250)	128	27424	0.50000	0.4252	80.00- 120.00	100.00(a)
27.734	27.734 (1.251)	127	6166			0.00- 46.39	22.48

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: e071402.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/14Jul2016.b/e16l0317f.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 14-JUL-2016
Calibration Time: 10:47
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	128716	77230	180202	131815	2.41
123 1,4-Difluorobenze	454714	272828	636600	469034	3.15
163 Chlorobenzene-d5	418632	251179	586085	419401	0.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/14Jul2016.b/e071402.d

Date : 14-JUL-2016 08:35

Client ID: CCV

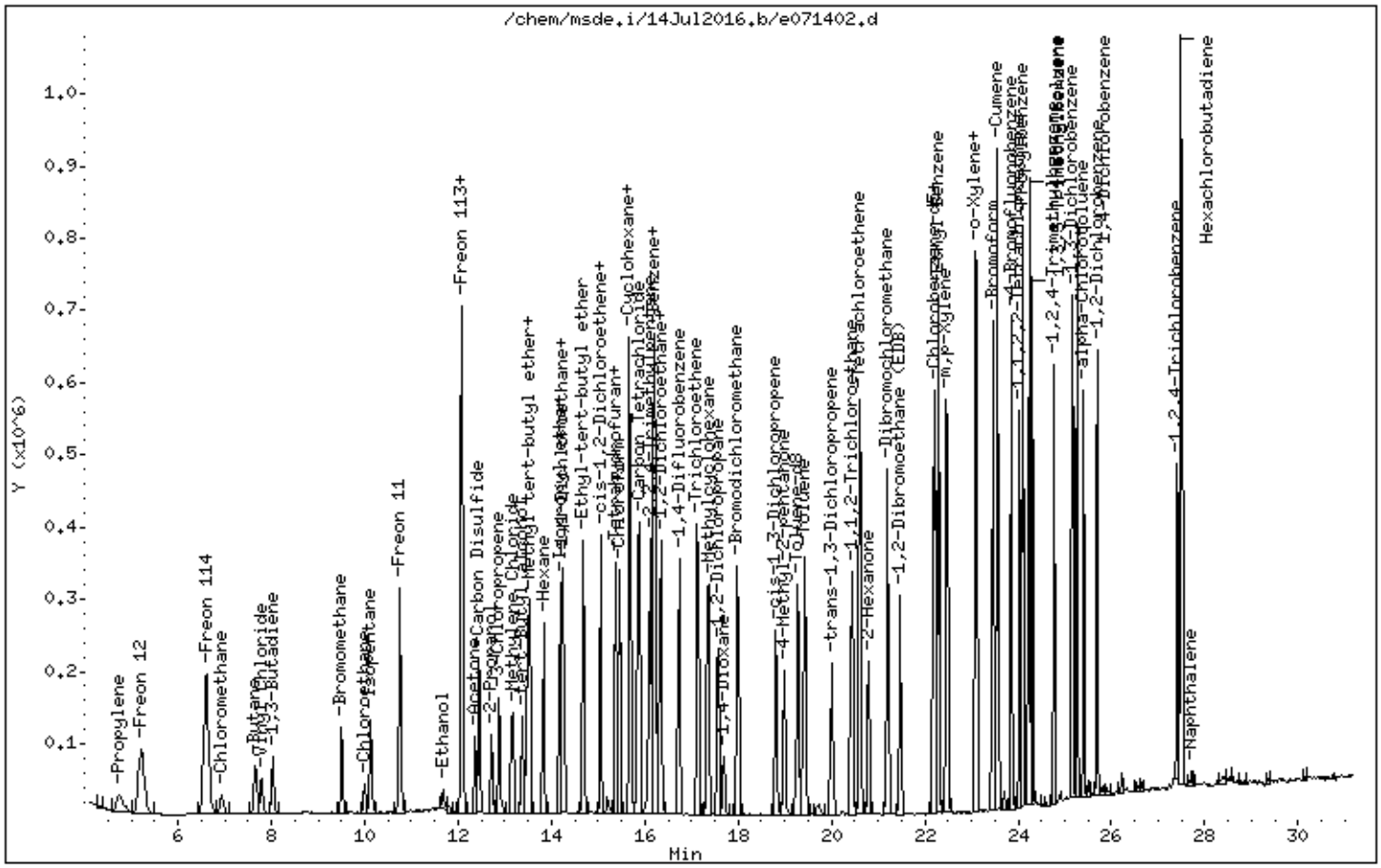
Instrument: msde.i

Sample Info: 25mL# 2789-173

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1607235A-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e071403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/14/16 09:19 AM**	

Compound	%Recovery	Method Limits
Freon 12	102	70-130
Freon 114	104	70-130
Chloromethane	89	70-130
Vinyl Chloride	93	70-130
1,3-Butadiene	86	70-130
Bromomethane	104	70-130
Chloroethane	114	70-130
Freon 11	105	70-130
Ethanol	117	70-130
Freon 113	88	70-130
1,1-Dichloroethene	93	70-130
Acetone	82	70-130
2-Propanol	89	70-130
Carbon Disulfide	87	70-130
3-Chloropropene	113	70-130
Methylene Chloride	87	70-130
Methyl tert-butyl ether	91	70-130
trans-1,2-Dichloroethene	102	70-130
Hexane	87	70-130
1,1-Dichloroethane	92	70-130
2-Butanone (Methyl Ethyl Ketone)	89	70-130
cis-1,2-Dichloroethene	90	70-130
Tetrahydrofuran	72	70-130
Chloroform	92	70-130
1,1,1-Trichloroethane	96	70-130
Cyclohexane	97	70-130
Carbon Tetrachloride	99	70-130
2,2,4-Trimethylpentane	94	70-130
Benzene	88	70-130
1,2-Dichloroethane	96	70-130
Heptane	88	70-130
Trichloroethene	97	70-130
1,2-Dichloropropane	86	70-130
1,4-Dioxane	88	70-130
Bromodichloromethane	100	70-130
cis-1,3-Dichloropropene	84	70-130
4-Methyl-2-pentanone	92	70-130
Toluene	93	70-130
trans-1,3-Dichloropropene	94	70-130
1,1,2-Trichloroethane	89	70-130
Tetrachloroethene	105	70-130
2-Hexanone	98	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1607235A-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e071403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/14/16 09:19 AM**	

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	102	70-130
1,2-Dibromoethane (EDB)	100	70-130
Chlorobenzene	99	70-130
Ethyl Benzene	101	70-130
m,p-Xylene	101	70-130
o-Xylene	100	70-130
Styrene	100	70-130
Bromoform	106	70-130
Cumene	91	70-130
1,1,2,2-Tetrachloroethane	76	70-130
Propylbenzene	86	70-130
4-Ethyltoluene	90	70-130
1,3,5-Trimethylbenzene	80	70-130
1,2,4-Trimethylbenzene	74	70-130
1,3-Dichlorobenzene	81	70-130
1,4-Dichlorobenzene	83	70-130
alpha-Chlorotoluene	89	70-130
1,2-Dichlorobenzene	85	70-130
1,2,4-Trichlorobenzene	90	70-130
Hexachlorobutadiene	91	70-130
Naphthalene	79	60-140

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	99	70-130

Report Date: 14-Jul-2016 09:59

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 14Jul2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCS
Client Smp ID: LCS
Level: LOW
Operator: ef
Data Type: MS DATA
SampleType: LCS
SpikeList File: AT09Bromo.spk
Quant Type: ISTD
Sublist File: AT09.sub
Method File: /chem/msde.i/14Jul2016.b/e16l0317f.m
Misc Info: 5.0ppbv (50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	5.000	4.467	89.34	60-140
11 Freon 12	5.000	5.101	102.03	70-130
15 Freon 114	5.000	5.190	103.81	70-130
17 Chloromethane	5.000	4.457	89.14	70-130
23 Butane	5.000	4.795	95.90	60-140
25 Vinyl Chloride	5.000	4.673	93.46	70-130
26 1,3-Butadiene	5.000	4.304	86.08	70-130
29 Bromomethane	5.000	5.180	103.60	70-130
30 Chloroethane	5.000	5.684	113.67	70-130
31 Isopentane	5.000	4.878	97.57	60-140
35 Freon 11	5.000	5.235	104.70	70-130
42 Ethanol	5.000	5.872	117.43	70-130
49 Freon 113	5.000	4.386	87.72	70-130
50 1,1-Dichloroethene	5.000	4.660	93.21	70-130
52 Acetone	5.000	4.116	82.31	70-130
56 Carbon Disulfide	5.000	4.332	86.64	70-130
57 2-Propanol	5.000	4.461	89.22	70-130
58 3-Chloropropene	5.000	5.650	113.01	70-130
66 Methylene Chloride	5.000	4.358	87.15	70-130
72 Methyl tert-butyl	5.000	4.559	91.18	70-130
73 trans-1,2-Dichloro	4.250	4.319	101.63	70-130
78 Hexane	5.000	4.360	87.20	70-130
82 1,1-Dichloroethane	5.000	4.608	92.17	70-130
86 Vinyl Acetate	5.000	4.558	91.17	60-140
91 cis-1,2-Dichloroet	5.650	5.106	90.37	70-130
92 2-Butanone	5.000	4.456	89.11	70-130
99 Tetrahydrofuran	5.000	3.595	71.90	70-130
100 Chloroform	5.000	4.579	91.59	70-130
103 1,1,1-Trichloroeth	5.000	4.802	96.03	70-130
106 Carbon Tetrachlori	5.000	4.945	98.90	70-130
102 Cyclohexane	5.000	4.856	97.11	70-130
113 2,2,4-Trimethylpen	5.000	4.690	93.80	70-130
116 Benzene	5.000	4.383	87.67	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	5.000	4.814	96.28	70-130
121 Heptane	5.000	4.401	88.03	70-130
125 Trichloroethene	5.000	4.873	97.47	70-130
127 Methylcyclohexane	5.000	4.537	90.75	60-140
132 1,2-Dichloropropan	5.000	4.307	86.14	70-130
136 1,4-Dioxane	5.000	4.392	87.84	70-130
138 Bromodichlorometha	5.000	4.983	99.67	70-130
144 cis-1,3-Dichloropr	5.000	4.222	84.44	70-130
145 4-Methyl-2-pentano	5.000	4.626	92.52	70-130
147 Toluene	5.000	4.633	92.66	70-130
150 trans-1,3-Dichloro	5.000	4.689	93.79	70-130
155 1,1,2-Trichloroeth	5.000	4.438	88.77	70-130
156 Tetrachloroethene	5.000	5.259	105.18	70-130
158 2-Hexanone	5.000	4.890	97.80	70-130
160 Dibromochlorometha	5.000	5.089	101.78	70-130
161 1,2-Dibromoethane	5.000	4.975	99.51	70-130
165 Chlorobenzene	5.000	4.950	99.01	70-130
167 Ethyl Benzene	5.000	5.055	101.10	70-130
169 m,p-Xylene	5.000	5.063	101.25	70-130
171 o-Xylene	5.000	4.990	99.81	70-130
172 Styrene	5.000	5.013	100.27	70-130
174 Bromoform	6.500	6.877	105.80	70-130
175 Cumene	5.000	4.545	90.91	70-130
181 1,1,2,2-Tetrachlor	5.000	3.793	75.85	70-130
182 Propylbenzene	5.000	4.318	86.37	70-130
188 4-Ethyltoluene	5.000	4.485	89.70	70-130
190 1,3,5-Trimethylben	5.000	4.003	80.05	70-130
196 1,2,4-Trimethylben	5.000	3.699	73.98	70-130
208 1,3-Dichlorobenzen	5.000	4.034	80.68	70-130
209 1,4-Dichlorobenzen	5.000	4.152	83.05	70-130
212 alpha-Chlorotoluen	5.000	4.456	89.13	70-130
214 1,2-Dichlorobenzen	5.000	4.257	85.13	70-130
226 1,2,4-Trichloroben	5.000	4.480	89.59	70-130
227 Hexachlorobutadien	5.000	4.564	91.29	70-130
228 Naphthalene	0.5000	0.3946	78.93	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	5.000	5.230	104.60	70-130
$ 146 Toluene-d8	5.000	4.825	96.51	70-130
$ 177 4-Bromofluorobenze	5.000	4.938	98.77	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/14Jul2016.b/e071403.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 14-JUL-2016 09:19
Operator : ef Inst ID: msde.i
Smp Info : 25mL# 2789-165
Misc Info : 5.0ppbv (50ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/14Jul2016.b/e16l0317f.m
Meth Date : 14-Jul-2016 09:16 efinn Quant Type: ISTD
Cal Date : 24-MAY-2016 10:14 Cal File: e052406.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
9 Propylene					CAS #: 115-07-1		
4.714	4.738 (0.306)	41	68579	4.46716	4.467	80.00- 120.00	100.00
4.763	4.738 (0.309)	42	41184			38.73- 98.73	60.05
4.738	4.762 (0.308)	39	57476			55.81- 115.81	83.81
11 Freon 12					CAS #: 75-71-8		
5.221	5.220 (0.339)	85	507184	5.10129	5.101	80.00- 120.00	100.00
5.221	5.196 (0.339)	87	165641			2.00- 62.00	32.66
15 Freon 114					CAS #: 76-14-2		
6.594	6.594 (0.428)	135	377670	5.19029	5.190	80.00- 120.00	100.00
6.619	6.618 (0.430)	137	116841			1.31- 61.31	30.94
6.594	6.594 (0.428)	85	416399			93.88- 153.88	110.25
17 Chloromethane					CAS #: 74-87-3		
6.932	6.932 (0.450)	50	84076	4.45689	4.457	80.00- 120.00	100.00
6.932	6.932 (0.450)	52	27416			5.50- 65.50	32.61
23 Butane					CAS #: 106-97-8		
7.658	7.675 (0.498)	58	23429	4.79483	4.795	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
23 Butane (continued)							
7.658	7.658 (0.498)	43	140333			588.57- 648.57	598.97
25 Vinyl Chloride					CAS #: 75-01-4		
7.779	7.797 (0.505)	62	124014	4.67278	4.673	80.00- 120.00	100.00
7.797	7.797 (0.507)	64	39855			3.14- 63.14	32.14
26 1,3-Butadiene					CAS #: 106-99-0		
8.040	8.040 (0.522)	54	76825	4.30388	4.304	80.00- 120.00	100.00
8.040	8.022 (0.522)	39	77715			65.21- 125.21	101.16
29 Bromomethane					CAS #: 74-83-9		
9.510	9.510 (0.618)	94	150012	5.17999	5.180	80.00- 120.00	100.00
9.510	9.510 (0.618)	96	147192			64.16- 124.16	98.12
30 Chloroethane					CAS #: 75-00-3		
9.986	9.986 (0.649)	64	71265	5.68370	5.684	80.00- 120.00	100.00
9.986	9.986 (0.649)	49	16283			0.00- 54.91	22.85
10.005	10.005 (0.650)	66	22576			3.62- 63.62	31.68
31 Isopentane					CAS #: 78-78-4		
10.119	10.119 (0.657)	57	88675	4.87854	4.878	80.00- 120.00	100.00
10.119	10.138 (0.657)	43	110165			82.69- 142.69	124.23
10.119	10.138 (0.657)	42	91911			68.65- 128.65	103.65
35 Freon 11					CAS #: 75-69-4		
10.747	10.747 (0.698)	101	560442	5.23502	5.235	80.00- 120.00	100.00
10.747	10.747 (0.698)	103	378543			37.17- 97.17	67.54
42 Ethanol					CAS #: 64-17-5		
11.681	11.680 (0.759)	45	45548	5.87151	5.872	80.00- 120.00	100.00
11.681	11.680 (0.759)	46	16615			6.61- 66.61	36.48
11.662	11.680 (0.758)	43	14551			0.00- 54.66	31.95
49 Freon 113					CAS #: 76-13-1		
12.081	12.080 (0.785)	151	351885	4.38609	4.386	80.00- 120.00	100.00
12.081	12.080 (0.785)	153	224410			33.64- 93.64	63.77
12.081	12.080 (0.785)	101	376298			80.40- 140.40	106.94
50 1,1-Dichloroethene					CAS #: 75-35-4		
12.100	12.099 (0.786)	98	104264	4.66041	4.660	80.00- 120.00	100.00
12.100	12.099 (0.786)	61	241504			204.89- 264.89	231.63
12.100	12.099 (0.786)	96	164281			127.69- 187.69	157.56
52 Acetone					CAS #: 67-64-1		
12.366	12.366 (0.803)	58	53841	4.11562	4.116	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
52 Acetone (continued)							
12.366	12.366 (0.803)	43	194326			321.47- 381.47	360.93
56 Carbon Disulfide					CAS #: 75-15-0		
12.443	12.442 (0.808)	76	431924	4.33192	4.332	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
12.728	12.728 (0.827)	45	178517	4.46077	4.461	80.00- 120.00	100.00
12.728	12.728 (0.827)	43	48510			0.00- 54.09	27.17
12.728	12.728 (0.827)	59	8024			0.00- 34.43	4.49
58 3-Chloropropene					CAS #: 107-05-1		
12.881	12.880 (0.837)	76	84215	5.65026	5.650	80.00- 120.00	100.00
12.881	12.880 (0.837)	41	153212			163.76- 223.76	181.93
66 Methylene Chloride					CAS #: 75-09-2		
13.149	13.176 (0.854)	84	136605	4.35773	4.358	80.00- 120.00	100.00
13.149	13.176 (0.854)	49	127590			63.99- 123.99	93.40
13.149	13.176 (0.854)	51	36954			0.29- 60.29	27.05
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
13.479	13.478 (0.876)	73	457016	4.55918	4.559	80.00- 120.00	100.00
13.479	13.478 (0.876)	57	77462			0.00- 48.26	16.95
13.479	13.478 (0.876)	41	74162			0.00- 45.58	16.23
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.533	13.533 (0.879)	98	98151	4.31937	4.319	80.00- 120.00	100.00
13.533	13.533 (0.879)	61	183183			155.28- 215.28	186.63
13.533	13.533 (0.879)	96	147739			126.18- 186.18	150.52
78 Hexane					CAS #: 110-54-3		
13.835	13.835 (0.899)	57	170482	4.35979	4.360	80.00- 120.00	100.00
13.835	13.835 (0.899)	43	93309			21.48- 81.48	54.73
13.835	13.835 (0.899)	86	38659			0.00- 51.51	22.68
82 1,1-Dichloroethane					CAS #: 75-34-3		
14.247	14.247 (0.926)	63	274068	4.60853	4.608	80.00- 120.00	100.00
14.247	14.247 (0.926)	65	87838			1.78- 61.78	32.05
86 Vinyl Acetate					CAS #: 108-05-4		
14.247	14.247 (0.926)	86	42173	4.55836	4.558	80.00- 120.00	100.00
14.247	14.247 (0.926)	42	31942			44.70- 104.70	75.74
14.247	14.247 (0.926)	43	286922			757.33- 817.33	680.35
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.047	15.066 (0.978)	98	126909	5.10565	5.106	80.00- 120.00	100.00

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

   91 cis-1,2-Dichloroethene (continued)
 15.047  15.047 (0.978)    61    212818                   145.90- 205.90   167.69
 15.066  15.066 (0.979)    96    192125                   125.53- 185.53   151.39
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
 15.047  15.047 (0.978)    72     70213 4.45570    4.456  80.00- 120.00   100.00
 15.047  15.047 (0.978)    43    196503                   262.26- 322.26   279.87
 15.047  15.047 (0.978)    57     19602                     0.00-  55.71    27.92
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                              CAS #: 109-99-9
 15.391  15.391 (1.000)    42    103964 3.59516    3.595  80.00- 120.00   100.00
 15.391  15.391 (1.000)    71     62357                    26.85-  86.85    59.98
 15.391  15.391 (1.000)    72     61806                    32.22-  92.22    59.45
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.391  15.391 (1.000)   130    118208 5.00000            80.00- 120.00   100.00
 15.391  15.391 (1.000)   128     95861                    52.25- 112.25    81.10
 15.391  15.391 (1.000)    49     89985                    89.81- 149.81    76.12
-------------------------------------------------------------------------------
  100 Chloroform                                  CAS #: 67-66-3
 15.453  15.453 (1.004)    83    390826 4.57937    4.579  80.00- 120.00   100.00
 15.453  15.453 (1.004)    85    258538                    33.97-  93.97    66.15
-------------------------------------------------------------------------------
  102 Cyclohexane                                 CAS #: 110-82-7
 15.669  15.669 (1.018)    84    215058 4.85574    4.856  80.00- 120.00   100.00
 15.669  15.669 (1.018)    56    167773                    58.69- 118.69    78.01
 15.669  15.669 (1.018)    41     94582                    18.98-  78.98    43.98
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                       CAS #: 71-55-6
 15.669  15.669 (1.018)    97    476688 4.80170    4.802  80.00- 120.00   100.00
 15.669  15.669 (1.018)    99    300713                    34.21-  94.21    63.08
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                        CAS #: 56-23-5
 15.885  15.854 (1.032)   119    480796 4.94520    4.945  80.00- 120.00   100.00
 15.885  15.854 (1.032)   117    504406                    74.09- 134.09   104.91
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                      CAS #: 540-84-1
 16.111  16.111 (1.047)    56    232219 4.68977    4.690  80.00- 120.00   100.00
 16.111  16.111 (1.047)    57    766434                   306.64- 366.64   330.05
 16.111  16.111 (1.047)    41    235625                    64.14- 124.14   101.47
-------------------------------------------------------------------------------
  116 Benzene                                     CAS #: 71-43-2
 16.183  16.183 (0.967)    78    469622 4.38338    4.383  80.00- 120.00   100.00
 16.183  16.207 (0.967)    77    111660                     0.00-  53.97    23.78
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                       CAS #: 17060-07-0
 16.183  16.207 (1.051)    65    177486 5.23017    5.230  80.00- 120.00   100.00
```

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

$ 117 1,2-Dichloroethane-d4 (continued)
 16.183  16.207 (1.051)    67     83512                    21.16-  81.16    47.05
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                           CAS #: 107-06-2
 16.304  16.303 (0.974)    62    268806 4.81375    4.814  80.00- 120.00   100.00
 16.304  16.303 (0.974)    64     95202                     1.03-  61.03    35.42
-------------------------------------------------------------------------------
  121 Heptane                                      CAS #: 142-82-5
 16.352  16.352 (0.977)    57    111775 4.40140    4.401  80.00- 120.00   100.00
 16.352  16.352 (0.977)   100     69562                    28.67-  88.67    62.23
 16.352  16.352 (0.977)    43    171350                   128.92- 188.92   153.30
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                          CAS #: 540-36-3
 16.737  16.737 (1.000)   114    447084 5.00000           80.00- 120.00   100.00
 16.737  16.737 (1.000)    88     64467                     0.00-  45.20    14.42
-------------------------------------------------------------------------------
  125 Trichloroethene                              CAS #: 79-01-6
 17.123  17.123 (1.023)   130    270814 4.87330    4.873  80.00- 120.00   100.00
 17.123  17.123 (1.023)    95    234011                    63.99- 123.99    86.41
 17.123  17.123 (1.023)    97    158194                    29.21-  89.21    58.41
-------------------------------------------------------------------------------
  127 Methylcyclohexane                            CAS #: 108-87-2
 17.340  17.363 (1.036)    83    270652 4.53744    4.537  80.00- 120.00   100.00
 17.340  17.339 (1.036)    55    169871                    31.29-  91.29    62.76
 17.364  17.339 (1.037)    56     50427                     0.00-  48.78    18.63
-------------------------------------------------------------------------------
  132 1,2-Dichloropropane                          CAS #: 78-87-5
 17.581  17.580 (1.050)    63    148567 4.30685    4.307  80.00- 120.00   100.00
 17.581  17.580 (1.050)    62    101204                    34.19-  94.19    68.12
 17.556  17.580 (1.049)    41     93794                    27.38-  87.38    63.13
-------------------------------------------------------------------------------
  136 1,4-Dioxane                                  CAS #: 123-91-1
 17.701  17.701 (1.058)    88    113459 4.39180    4.392  80.00- 120.00   100.00
 17.701  17.701 (1.058)    58     62840                    25.03-  85.03    55.39
 17.701  17.701 (1.058)    57     23181                     0.00-  50.67    20.43
-------------------------------------------------------------------------------
  138 Bromodichloromethane                         CAS #: 75-27-4
 17.990  17.990 (1.075)    83    443062 4.98332    4.983  80.00- 120.00   100.00
 17.990  17.990 (1.075)    85    288230                    35.15-  95.15    65.05
-------------------------------------------------------------------------------
  144 cis-1,3-Dichloropropene                      CAS #: 10061-01-5
 18.805  18.805 (1.124)    75    279735 4.22218    4.222  80.00- 120.00   100.00
 18.805  18.805 (1.124)    77     84805                     0.45-  60.45    30.32
 18.805  18.805 (1.124)    39    123540                    13.69-  73.69    44.16
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                         CAS #: 108-10-1
 18.984  18.984 (1.134)    43    255756 4.62598    4.626  80.00- 120.00   100.00
```

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

  145 4-Methyl-2-pentanone (continued)
 18.984  18.984 (1.134)    58    109448                    15.64-  75.64    42.79
 18.984  19.006 (1.134)    85     63698                     0.00-  56.71    24.91
-------------------------------------------------------------------------------
$ 146 Toluene-d8                                   CAS #: 2037-26-5
 19.276  19.275 (1.152)    98    423693 4.82536    4.825  80.00- 120.00   100.00
 19.276  19.275 (1.152)    70     44866                     0.00-  40.11    10.59
 19.276  19.275 (1.152)   100    283480                    37.58-  97.58    66.91
-------------------------------------------------------------------------------
  147 Toluene                                      CAS #: 108-88-3
 19.432  19.432 (1.161)    91    591223 4.63290    4.633  80.00- 120.00   100.00
 19.432  19.432 (1.161)    92    349483                    28.92-  88.92    59.11
-------------------------------------------------------------------------------
  150 trans-1,3-Dichloropropene                    CAS #: 10061-02-6
 19.998  19.998 (0.902)    75    285984 4.68942    4.689  80.00- 120.00   100.00
 19.998  19.998 (0.902)    77     96106                     0.55-  60.55    33.61
 19.998  19.998 (0.902)    39    121628                     8.25-  68.25    42.53
-------------------------------------------------------------------------------
  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
 20.438  20.438 (0.922)    97    210714 4.43850    4.438  80.00- 120.00   100.00
 20.438  20.438 (0.922)    99    132495                    32.91-  92.91    62.88
 20.438  20.438 (0.922)    83    170038                    47.93- 107.93    80.70
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
 20.603  20.602 (0.929)   166    384698 5.25891    5.259  80.00- 120.00   100.00
 20.603  20.602 (0.929)   129    269633                    42.31- 102.31    70.09
 20.603  20.602 (0.929)   131    257717                    40.11- 100.11    66.99
-------------------------------------------------------------------------------
  158 2-Hexanone                                   CAS #: 591-78-6
 20.795  20.795 (0.938)    58    149394 4.88987    4.890  80.00- 120.00   100.00
 20.795  20.795 (0.938)    43    252292                   140.44- 200.44   168.88
 20.795  20.795 (0.938)   100     45665                     0.00-  59.62    30.57
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
 21.207  21.207 (0.956)   129    490449 5.08901    5.089  80.00- 120.00   100.00
 21.207  21.207 (0.956)   127    374414                    46.82- 106.82    76.34
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
 21.482  21.481 (0.969)   107    362472 4.97539    4.975  80.00- 120.00   100.00
 21.482  21.481 (0.969)   109    331361                    65.45- 125.45    91.42
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                             CAS #: 3114-55-4
 22.177  22.177 (1.000)   117    393867 5.00000            80.00- 120.00   100.00
 22.177  22.177 (1.000)    82    196731                    20.64-  80.64    49.95
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
 22.219  22.218 (1.002)   112    527535 4.95042    4.950  80.00- 120.00   100.00
```

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

  165 Chlorobenzene (continued)
 22.219  22.218 (1.002)   114    167570                     2.42-  62.42    31.76
 22.219  22.218 (1.002)    77    262925                    23.54-  83.54    49.84
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
 22.302  22.301 (1.006)   106    262361 5.05519    5.055  80.00- 120.00   100.00
 22.302  22.301 (1.006)    91    761128                  282.51- 342.51   290.11
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
 22.467  22.467 (1.013)   106    305225 5.06261    5.063  80.00- 120.00   100.00
 22.467  22.467 (1.013)    91    608044                  166.46- 226.46   199.21
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
 23.089  23.089 (1.041)   106    275970 4.99042    4.990  80.00- 120.00   100.00
 23.089  23.089 (1.041)    91    586615                  184.01- 244.01   212.56
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
 23.110  23.110 (1.042)   104    469129 5.01331    5.013  80.00- 120.00   100.00
 23.110  23.110 (1.042)    78    244303                    20.27-  80.27    52.08
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
 23.452  23.452 (1.057)   173    656614 6.87668    6.877  80.00- 120.00   100.00
 23.452  23.452 (1.057)   171    339225                    20.88-  80.88    51.66
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
 23.564  23.564 (1.063)   105    854624 4.54543    4.545  80.00- 120.00   100.00
 23.564  23.564 (1.063)   120    235313                     0.00-  57.47    27.53
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                         CAS #: 460-00-4
 23.856  23.856 (1.076)   174    266894 4.93843    4.938  80.00- 120.00   100.00
 23.856  23.856 (1.076)    95    270089                    77.42- 137.42   101.20
 23.856  23.856 (1.076)   176    250921                    65.38- 125.38    94.02
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
 24.035  24.035 (1.084)    83    332093 3.79267    3.793  80.00- 120.00   100.00
 24.035  24.035 (1.084)    85    224629                    35.73-  95.73    67.64
-------------------------------------------------------------------------------
  182 Propylbenzene                                CAS #: 103-65-1
 24.103  24.102 (1.087)    91    855193 4.31846    4.318  80.00- 120.00   100.00
 24.103  24.102 (1.087)   120    215975                     0.00-  55.24    25.25
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                               CAS #: 622-96-8
 24.237  24.237 (1.093)   105    752813 4.48513    4.485  80.00- 120.00   100.00
 24.237  24.237 (1.093)   120    218675                     1.08-  61.08    29.05
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 24.304  24.304 (1.096)   105    521729 4.00266    4.003  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
190 1,3,5-Trimethylbenzene (continued)							
24.304	24.304 (1.096)	120	274911			18.44- 78.44	52.69
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.775	24.775 (1.117)	105	417736	3.69905	3.699	80.00- 120.00	100.00
24.775	24.775 (1.117)	120	199101			16.20- 76.20	47.66
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.157	25.156 (1.134)	146	430200	4.03408	4.034	80.00- 120.00	100.00
25.157	25.156 (1.134)	148	271016			35.51- 95.51	63.00
25.157	25.156 (1.134)	111	160276			9.35- 69.35	37.26
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.269	25.268 (1.139)	146	415267	4.15245	4.152	80.00- 120.00	100.00
25.269	25.268 (1.139)	148	275149			32.61- 92.61	66.26
25.269	25.268 (1.139)	111	146919			6.90- 66.90	35.38
212 alpha-Chlorotoluene					CAS #: 100-44-7		
25.403	25.403 (1.145)	91	560781	4.45652	4.456	80.00- 120.00	100.00
25.403	25.403 (1.145)	126	126990			0.00- 51.82	22.65
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.695	25.694 (1.159)	146	389396	4.25666	4.257	80.00- 120.00	100.00
25.695	25.694 (1.159)	148	258875			33.69- 93.69	66.48
25.695	25.694 (1.159)	111	153794			8.96- 68.96	39.50
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.398	27.398 (1.235)	180	185817	4.47962	4.480	80.00- 120.00	100.00
27.398	27.398 (1.235)	182	178141			66.05- 126.05	95.87
227 Hexachlorobutadiene					CAS #: 87-68-3		
27.488	27.488 (1.239)	225	257439	4.56447	4.564	80.00- 120.00	100.00
27.488	27.488 (1.239)	223	163147			33.78- 93.78	63.37
228 Naphthalene					CAS #: 91-20-3		
27.712	27.712 (1.250)	128	23904	0.39464	0.3946	80.00- 120.00	100.00(a)
27.712	27.734 (1.250)	127	3669			0.00- 46.39	15.35

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: e071403.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/14Jul2016.b/e16l0317f.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 14-JUL-2016
Calibration Time: 08:35
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	131815	79089	184541	118208	-10.32
123 1,4-Difluorobenze	469034	281420	656648	447084	-4.68
163 Chlorobenzene-d5	419401	251641	587161	393867	-6.09

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/14Jul2016.b/e071403.d

Date : 14-JUL-2016 09:19

Client ID: LCS

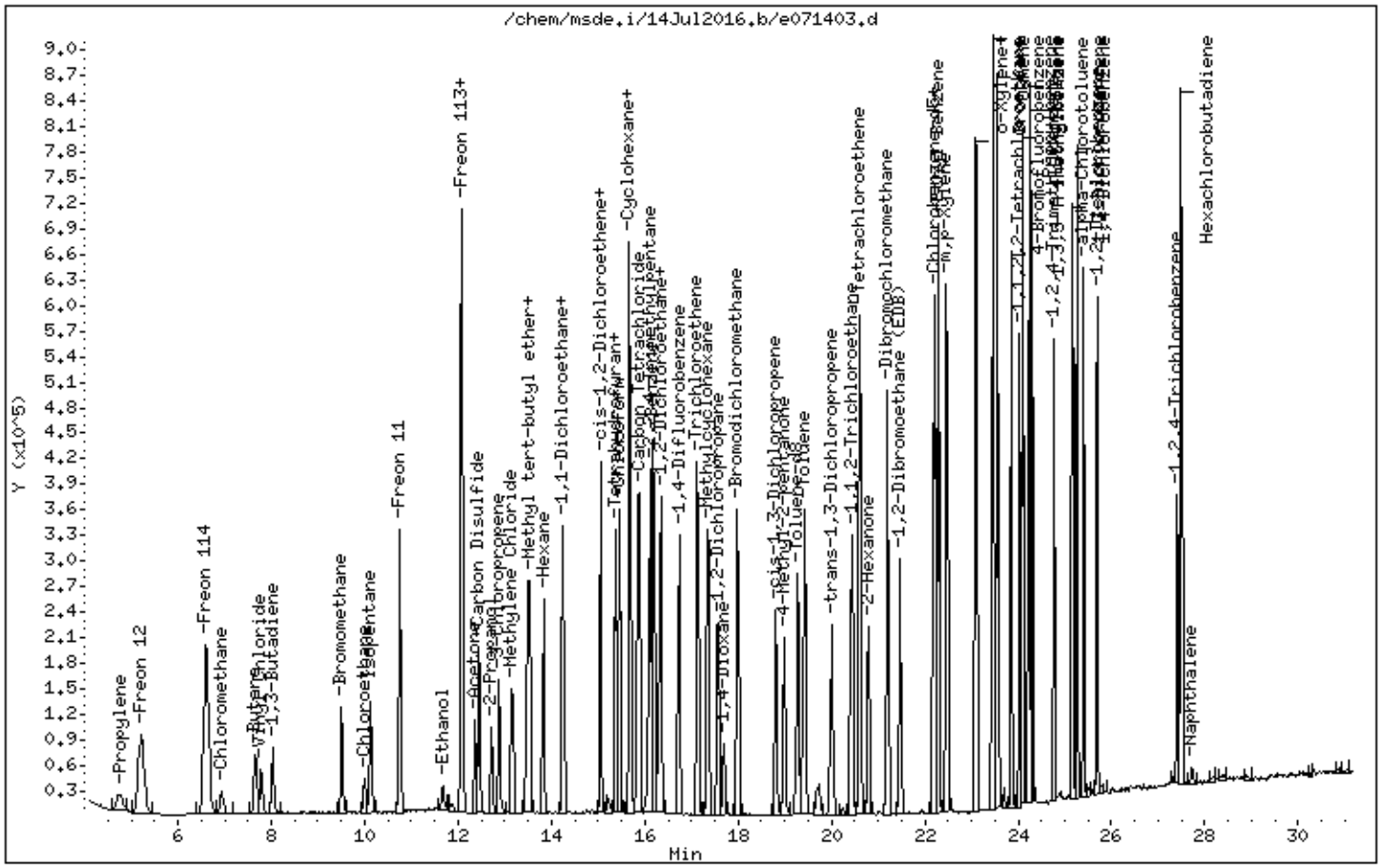
Instrument: msde.i

Sample Info: 25mL# 2789-165

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1607235A-10AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e071404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/14/16 10:02 AM**	

Compound	%Recovery	Method Limits
Freon 12	105	70-130
Freon 114	105	70-130
Chloromethane	88	70-130
Vinyl Chloride	93	70-130
1,3-Butadiene	86	70-130
Bromomethane	106	70-130
Chloroethane	113	70-130
Freon 11	110	70-130
Ethanol	116	70-130
Freon 113	89	70-130
1,1-Dichloroethene	96	70-130
Acetone	88	70-130
2-Propanol	93	70-130
Carbon Disulfide	85	70-130
3-Chloropropene	124	70-130
Methylene Chloride	89	70-130
Methyl tert-butyl ether	90	70-130
trans-1,2-Dichloroethene	98	70-130
Hexane	88	70-130
1,1-Dichloroethane	92	70-130
2-Butanone (Methyl Ethyl Ketone)	90	70-130
cis-1,2-Dichloroethene	92	70-130
Tetrahydrofuran	70	70-130
Chloroform	95	70-130
1,1,1-Trichloroethane	97	70-130
Cyclohexane	95	70-130
Carbon Tetrachloride	101	70-130
2,2,4-Trimethylpentane	91	70-130
Benzene	87	70-130
1,2-Dichloroethane	95	70-130
Heptane	89	70-130
Trichloroethene	98	70-130
1,2-Dichloropropane	88	70-130
1,4-Dioxane	91	70-130
Bromodichloromethane	102	70-130
cis-1,3-Dichloropropene	85	70-130
4-Methyl-2-pentanone	91	70-130
Toluene	92	70-130
trans-1,3-Dichloropropene	94	70-130
1,1,2-Trichloroethane	90	70-130
Tetrachloroethene	103	70-130
2-Hexanone	95	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1607235A-10AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e071404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/14/16 10:02 AM**	

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	103	70-130
1,2-Dibromoethane (EDB)	96	70-130
Chlorobenzene	99	70-130
Ethyl Benzene	95	70-130
m,p-Xylene	98	70-130
o-Xylene	102	70-130
Styrene	100	70-130
Bromoform	107	70-130
Cumene	91	70-130
1,1,2,2-Tetrachloroethane	80	70-130
Propylbenzene	89	70-130
4-Ethyltoluene	89	70-130
1,3,5-Trimethylbenzene	82	70-130
1,2,4-Trimethylbenzene	77	70-130
1,3-Dichlorobenzene	81	70-130
1,4-Dichlorobenzene	84	70-130
alpha-Chlorotoluene	88	70-130
1,2-Dichlorobenzene	90	70-130
1,2,4-Trichlorobenzene	113	70-130
Hexachlorobutadiene	113	70-130
Naphthalene	102	60-140

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130

Report Date: 14-Jul-2016 10:44

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 14Jul2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCSD
Client Smp ID: LCSD
Level: LOW
Operator: ef
Data Type: MS DATA
SampleType: LCSD
SpikeList File: AT09Bromo.spk
Quant Type: ISTD
Sublist File: AT09.sub
Method File: /chem/msde.i/14Jul2016.b/e16l0317f.m
Misc Info: 5.0ppbv (50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	5.000	4.327	86.54	60-140
11 Freon 12	5.000	5.253	105.06	70-130
15 Freon 114	5.000	5.247	104.94	70-130
17 Chloromethane	5.000	4.413	88.26	70-130
23 Butane	5.000	4.834	96.69	60-140
25 Vinyl Chloride	5.000	4.651	93.02	70-130
26 1,3-Butadiene	5.000	4.322	86.45	70-130
29 Bromomethane	5.000	5.304	106.08	70-130
30 Chloroethane	5.000	5.655	113.10	70-130
31 Isopentane	5.000	5.290	105.81	60-140
35 Freon 11	5.000	5.504	110.08	70-130
42 Ethanol	5.000	5.796	115.92	70-130
49 Freon 113	5.000	4.473	89.46	70-130
50 1,1-Dichloroethene	5.000	4.800	96.01	70-130
52 Acetone	5.000	4.390	87.80	70-130
56 Carbon Disulfide	5.000	4.240	84.80	70-130
57 2-Propanol	5.000	4.671	93.41	70-130
58 3-Chloropropene	5.000	6.179	123.57	70-130
66 Methylene Chloride	5.000	4.443	88.86	70-130
72 Methyl tert-butyl	5.000	4.480	89.60	70-130
73 trans-1,2-Dichloro	4.250	4.190	98.58	70-130
78 Hexane	5.000	4.391	87.81	70-130
82 1,1-Dichloroethane	5.000	4.607	92.15	70-130
86 Vinyl Acetate	5.000	4.290	85.81	60-140
91 cis-1,2-Dichloroet	5.650	5.204	92.10	70-130
92 2-Butanone	5.000	4.526	90.52	70-130
99 Tetrahydrofuran	5.000	3.503	70.07	70-130
100 Chloroform	5.000	4.743	94.87	70-130
103 1,1,1-Trichloroeth	5.000	4.835	96.70	70-130
106 Carbon Tetrachlori	5.000	5.034	100.69	70-130
102 Cyclohexane	5.000	4.740	94.81	70-130
113 2,2,4-Trimethylpen	5.000	4.531	90.63	70-130
116 Benzene	5.000	4.345	86.90	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	5.000	4.769	95.38	70-130
121 Heptane	5.000	4.461	89.23	70-130
125 Trichloroethene	5.000	4.925	98.50	70-130
127 Methylcyclohexane	5.000	4.640	92.79	60-140
132 1,2-Dichloropropan	5.000	4.385	87.69	70-130
136 1,4-Dioxane	5.000	4.566	91.32	70-130
138 Bromodichlorometha	5.000	5.084	101.67	70-130
144 cis-1,3-Dichloropr	5.000	4.259	85.18	70-130
145 4-Methyl-2-pentano	5.000	4.540	90.81	70-130
147 Toluene	5.000	4.620	92.40	70-130
150 trans-1,3-Dichloro	5.000	4.729	94.58	70-130
155 1,1,2-Trichloroeth	5.000	4.496	89.93	70-130
156 Tetrachloroethene	5.000	5.142	102.85	70-130
158 2-Hexanone	5.000	4.754	95.08	70-130
160 Dibromochlorometha	5.000	5.162	103.24	70-130
161 1,2-Dibromoethane	5.000	4.824	96.48	70-130
165 Chlorobenzene	5.000	4.948	98.95	70-130
167 Ethyl Benzene	5.000	4.757	95.13	70-130
169 m,p-Xylene	5.000	4.877	97.54	70-130
171 o-Xylene	5.000	5.128	102.56	70-130
172 Styrene	5.000	5.016	100.32	70-130
174 Bromoform	6.500	6.940	106.77	70-130
175 Cumene	5.000	4.564	91.29	70-130
181 1,1,2,2-Tetrachlor	5.000	4.024	80.49	70-130
182 Propylbenzene	5.000	4.456	89.11	70-130
188 4-Ethyltoluene	5.000	4.459	89.19	70-130
190 1,3,5-Trimethylben	5.000	4.083	81.66	70-130
196 1,2,4-Trimethylben	5.000	3.866	77.31	70-130
208 1,3-Dichlorobenzen	5.000	4.073	81.46	70-130
209 1,4-Dichlorobenzen	5.000	4.222	84.44	70-130
212 alpha-Chlorotoluen	5.000	4.417	88.34	70-130
214 1,2-Dichlorobenzen	5.000	4.489	89.78	70-130
226 1,2,4-Trichloroben	5.000	5.644	112.87	70-130
227 Hexachlorobutadien	5.000	5.658	113.16	70-130
228 Naphthalene	0.5000	0.5087	101.74	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	5.000	5.018	100.37	70-130
$ 146 Toluene-d8	5.000	4.879	97.58	70-130
$ 177 4-Bromofluorobenze	5.000	4.802	96.05	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msde.i/14Jul2016.b/e071404.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 14-JUL-2016 10:02
Operator : ef Inst ID: msde.i
Smp Info : 25mL# 2789-165
Misc Info : 5.0ppbv (50ppbv)
Comment : LOW LEVEL - GC/MS
Method : /chem/msde.i/14Jul2016.b/e16l0317f.m
Meth Date : 14-Jul-2016 09:16 efinn Quant Type: ISTD
Cal Date : 24-MAY-2016 10:14 Cal File: e052406.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
9 Propylene					CAS #: 115-07-1		
4.738	4.738 (0.308)	41	65682	4.32697	4.327	80.00- 120.00	100.00
4.738	4.738 (0.308)	42	48050			38.73- 98.73	73.16
4.762	4.762 (0.309)	39	56136			55.81- 115.81	85.47
11 Freon 12					CAS #: 75-71-8		
5.220	5.220 (0.339)	85	516391	5.25279	5.253	80.00- 120.00	100.00
5.220	5.196 (0.339)	87	163929			2.00- 62.00	31.75
15 Freon 114					CAS #: 76-14-2		
6.594	6.594 (0.428)	135	377520	5.24705	5.247	80.00- 120.00	100.00
6.618	6.618 (0.430)	137	119382			1.31- 61.31	31.62
6.594	6.594 (0.428)	85	410534			93.88- 153.88	108.74
17 Chloromethane					CAS #: 74-87-3		
6.932	6.932 (0.450)	50	82311	4.41281	4.413	80.00- 120.00	100.00
6.932	6.932 (0.450)	52	25175			5.50- 65.50	30.59
23 Butane					CAS #: 106-97-8		
7.658	7.675 (0.498)	58	23357	4.83444	4.834	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
23 Butane (continued)							
7.658	7.658 (0.498)	43	138935			588.57- 648.57	594.82
25 Vinyl Chloride					CAS #: 75-01-4		
7.779	7.797 (0.505)	62	122048	4.65085	4.651	80.00- 120.00	100.00
7.779	7.797 (0.505)	64	40054			3.14- 63.14	32.82
26 1,3-Butadiene					CAS #: 106-99-0		
8.022	8.040 (0.521)	54	76288	4.32229	4.322	80.00- 120.00	100.00
8.022	8.022 (0.521)	39	75746			65.21- 125.21	99.29
29 Bromomethane					CAS #: 74-83-9		
9.510	9.510 (0.618)	94	151885	5.30414	5.304	80.00- 120.00	100.00
9.510	9.510 (0.618)	96	137539			64.16- 124.16	90.56
30 Chloroethane					CAS #: 75-00-3		
9.986	9.986 (0.649)	64	70112	5.65522	5.655	80.00- 120.00	100.00
9.986	9.986 (0.649)	49	16869			0.00- 54.91	24.06
10.005	10.005 (0.650)	66	24490			3.62- 63.62	34.93
31 Isopentane					CAS #: 78-78-4		
10.119	10.119 (0.657)	57	95084	5.29047	5.290	80.00- 120.00	100.00
10.138	10.138 (0.659)	43	108074			82.69- 142.69	113.66
10.138	10.138 (0.659)	42	88342			68.65- 128.65	92.91
35 Freon 11					CAS #: 75-69-4		
10.747	10.747 (0.698)	101	582618	5.50387	5.504	80.00- 120.00	100.00
10.747	10.747 (0.698)	103	381925			37.17- 97.17	65.55
42 Ethanol					CAS #: 64-17-5		
11.662	11.680 (0.758)	45	44458	5.79600	5.796	80.00- 120.00	100.00
11.681	11.680 (0.759)	46	16796			6.61- 66.61	37.78
11.662	11.680 (0.758)	43	14433			0.00- 54.66	32.47
49 Freon 113					CAS #: 76-13-1		
12.081	12.080 (0.785)	151	354836	4.47302	4.473	80.00- 120.00	100.00
12.081	12.080 (0.785)	153	227299			33.64- 93.64	64.06
12.081	12.080 (0.785)	101	375363			80.40- 140.40	105.78
50 1,1-Dichloroethene					CAS #: 75-35-4		
12.100	12.099 (0.786)	98	106189	4.80027	4.800	80.00- 120.00	100.00
12.081	12.099 (0.785)	61	241280			204.89- 264.89	227.22
12.081	12.099 (0.785)	96	163098			127.69- 187.69	153.59
52 Acetone					CAS #: 67-64-1		
12.366	12.366 (0.803)	58	56785	4.38990	4.390	80.00- 120.00	100.00

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

   52 Acetone (continued)
 12.366  12.366 (0.803)    43    201697                   321.47- 381.47   355.19
-------------------------------------------------------------------------------
   56 Carbon Disulfide                                CAS #: 75-15-0
 12.443  12.442 (0.808)    76    418031 4.24013    4.240  80.00- 120.00   100.00
-------------------------------------------------------------------------------
   57 2-Propanol                                      CAS #: 67-63-0
 12.728  12.728 (0.827)    45    184819 4.67063    4.671  80.00- 120.00   100.00
 12.728  12.728 (0.827)    43     48649                    0.00-  54.09    26.32
 12.728  12.728 (0.827)    59      7194                    0.00-  34.43     3.89
-------------------------------------------------------------------------------
   58 3-Chloropropene                                 CAS #: 107-05-1
 12.881  12.880 (0.837)    76     91059 6.17874    6.179  80.00- 120.00   100.00
 12.881  12.880 (0.837)    41    156110                   163.76- 223.76   171.44
-------------------------------------------------------------------------------
   66 Methylene Chloride                              CAS #: 75-09-2
 13.149  13.176 (0.854)    84    137710 4.44281    4.443  80.00- 120.00   100.00
 13.149  13.176 (0.854)    49    119397                   63.99- 123.99    86.70
 13.149  13.176 (0.854)    51     36655                    0.29-  60.29    26.62
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                         CAS #: 1634-04-4
 13.478  13.478 (0.876)    73    444028 4.47984    4.480  80.00- 120.00   100.00
 13.478  13.478 (0.876)    57     74444                    0.00-  48.26    16.77
 13.478  13.478 (0.876)    41     74841                    0.00-  45.58    16.86
-------------------------------------------------------------------------------
   73 trans-1,2-Dichloroethene                        CAS #: 156-60-5
 13.533  13.533 (0.879)    98     94137 4.18971    4.190  80.00- 120.00   100.00
 13.533  13.533 (0.879)    61    176768                   155.28- 215.28   187.78
 13.533  13.533 (0.879)    96    149304                   126.18- 186.18   158.60
-------------------------------------------------------------------------------
   78 Hexane                                          CAS #: 110-54-3
 13.835  13.835 (0.899)    57    169767 4.39074    4.391  80.00- 120.00   100.00
 13.835  13.835 (0.899)    43     92837                   21.48-  81.48    54.68
 13.835  13.835 (0.899)    86     37905                    0.00-  51.51    22.33
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                              CAS #: 75-34-3
 14.247  14.247 (0.926)    63    270922 4.60729    4.607  80.00- 120.00   100.00
 14.247  14.247 (0.926)    65     88166                    1.78-  61.78    32.54
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                   CAS #: 108-05-4
 14.247  14.247 (0.926)    86     39247 4.29028    4.290  80.00- 120.00   100.00
 14.247  14.247 (0.926)    42     29916                   44.70- 104.70    76.22
 14.247  14.247 (0.926)    43    276138                   757.33- 817.33   703.58
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                          CAS #: 156-59-2
 15.066  15.066 (0.979)    98    127893 5.20360    5.204  80.00- 120.00   100.00
```

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

   91 cis-1,2-Dichloroethene (continued)
 15.047  15.047 (0.978)    61    215662                  145.90- 205.90   168.63
 15.047  15.066 (0.978)    96    196593                  125.53- 185.53   153.72
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
 15.047  15.047 (0.978)    72     70524 4.52622    4.526  80.00- 120.00   100.00
 15.047  15.047 (0.978)    43    201884                  262.26- 322.26   286.26
 15.047  15.047 (0.978)    57     18321                    0.00-  55.71    25.98
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                              CAS #: 109-99-9
 15.391  15.391 (1.000)    42    100172 3.50331    3.503  80.00- 120.00   100.00
 15.391  15.391 (1.000)    71     60004                   26.85-  86.85    59.90
 15.391  15.391 (1.000)    72     65528                   32.22-  92.22    65.42
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
 15.391  15.391 (1.000)   130    116882 5.00000           80.00- 120.00   100.00
 15.391  15.391 (1.000)   128     97278                   52.25- 112.25    83.23
 15.391  15.391 (1.000)    49    110723                   89.81- 149.81    94.73
-------------------------------------------------------------------------------
  100 Chloroform                                  CAS #: 67-66-3
 15.453  15.453 (1.004)    83    400295 4.74350    4.743  80.00- 120.00   100.00
 15.453  15.453 (1.004)    85    265245                   33.97-  93.97    66.26
-------------------------------------------------------------------------------
  102 Cyclohexane                                 CAS #: 110-82-7
 15.669  15.669 (1.018)    84    207594 4.74038    4.740  80.00- 120.00   100.00
 15.669  15.669 (1.018)    56    168025                   58.69- 118.69    80.94
 15.669  15.669 (1.018)    41    100093                   18.98-  78.98    48.22
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                       CAS #: 71-55-6
 15.669  15.669 (1.018)    97    474597 4.83483    4.835  80.00- 120.00   100.00
 15.669  15.669 (1.018)    99    304650                   34.21-  94.21    64.19
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                        CAS #: 56-23-5
 15.884  15.854 (1.032)   119    483967 5.03426    5.034  80.00- 120.00   100.00
 15.884  15.854 (1.032)   117    504136                   74.09- 134.09   104.17
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                      CAS #: 540-84-1
 16.111  16.111 (1.047)    56    221856 4.53129    4.531  80.00- 120.00   100.00
 16.111  16.111 (1.047)    57    745995                  306.64- 366.64   336.25
 16.111  16.111 (1.047)    41    222111                   64.14- 124.14   100.11
-------------------------------------------------------------------------------
  116 Benzene                                     CAS #: 71-43-2
 16.183  16.183 (0.967)    78    462911 4.34521    4.345  80.00- 120.00   100.00
 16.183  16.207 (0.967)    77    108705                    0.00-  53.97    23.48
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                       CAS #: 17060-07-0
 16.207  16.207 (1.053)    65    168387 5.01831    5.018  80.00- 120.00   100.00
```

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

$ 117 1,2-Dichloroethane-d4 (continued)
 16.207  16.207 (1.053)    67     82078                    21.16-  81.16    48.74
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                            CAS #: 107-06-2
 16.303  16.303 (0.974)    62    264819 4.76922    4.769  80.00- 120.00   100.00
 16.303  16.303 (0.974)    64     92901                     1.03-  61.03    35.08
-------------------------------------------------------------------------------
  121 Heptane                                       CAS #: 142-82-5
 16.352  16.352 (0.977)    57    112662 4.46146    4.461  80.00- 120.00   100.00
 16.352  16.352 (0.977)   100     69180                    28.67-  88.67    61.41
 16.352  16.352 (0.977)    43    165643                   128.92- 188.92   147.03
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                           CAS #: 540-36-3
 16.737  16.737 (1.000)   114    444566 5.00000           80.00- 120.00   100.00
 16.737  16.737 (1.000)    88     66193                     0.00-  45.20    14.89
-------------------------------------------------------------------------------
  125 Trichloroethene                               CAS #: 79-01-6
 17.123  17.123 (1.023)   130    272155 4.92518    4.925  80.00- 120.00   100.00
 17.123  17.123 (1.023)    95    237606                   63.99- 123.99    87.31
 17.123  17.123 (1.023)    97    158437                   29.21-  89.21    58.22
-------------------------------------------------------------------------------
  127 Methylcyclohexane                             CAS #: 108-87-2
 17.340  17.363 (1.036)    83    275191 4.63967    4.640  80.00- 120.00   100.00
 17.340  17.339 (1.036)    55    177711                   31.29-  91.29    64.58
 17.340  17.339 (1.036)    56     52629                    0.00-  48.78    19.12
-------------------------------------------------------------------------------
  132 1,2-Dichloropropane                           CAS #: 78-87-5
 17.581  17.580 (1.050)    63    150398 4.38463    4.385  80.00- 120.00   100.00
 17.581  17.580 (1.050)    62     96759                   34.19-  94.19    64.34
 17.556  17.580 (1.049)    41     94749                   27.38-  87.38    63.00
-------------------------------------------------------------------------------
  136 1,4-Dioxane                                   CAS #: 123-91-1
 17.701  17.701 (1.058)    88    117295 4.56600    4.566  80.00- 120.00   100.00
 17.701  17.701 (1.058)    58     60035                   25.03-  85.03    51.18
 17.701  17.701 (1.058)    57     23458                    0.00-  50.67    20.00
-------------------------------------------------------------------------------
  138 Bromodichloromethane                          CAS #: 75-27-4
 17.990  17.990 (1.075)    83    449434 5.08362    5.084  80.00- 120.00   100.00
 17.990  17.990 (1.075)    85    295328                   35.15-  95.15    65.71
-------------------------------------------------------------------------------
  144 cis-1,3-Dichloropropene                       CAS #: 10061-01-5
 18.805  18.805 (1.124)    75    280571 4.25879    4.259  80.00- 120.00   100.00
 18.805  18.805 (1.124)    77     87025                    0.45-  60.45    31.02
 18.805  18.805 (1.124)    39    122981                   13.69-  73.69    43.83
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                          CAS #: 108-10-1
 18.984  18.984 (1.134)    43    249615 4.54048    4.540  80.00- 120.00   100.00
```

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

  145 4-Methyl-2-pentanone (continued)
 18.984  18.984 (1.134)    58    110546                    15.64-  75.64    44.29
 18.984  19.006 (1.134)    85     66265                     0.00-  56.71    26.55
-------------------------------------------------------------------------------
$ 146 Toluene-d8                                   CAS #: 2037-26-5
 19.275  19.275 (1.152)    98    425976 4.87884    4.879  80.00- 120.00   100.00
 19.275  19.275 (1.152)    70     43831                     0.00-  40.11    10.29
 19.275  19.275 (1.152)   100    285315                    37.58-  97.58    66.98
-------------------------------------------------------------------------------
  147 Toluene                                      CAS #: 108-88-3
 19.432  19.432 (1.161)    91    586258 4.62001    4.620  80.00- 120.00   100.00
 19.432  19.432 (1.161)    92    348068                    28.92-  88.92    59.37
-------------------------------------------------------------------------------
  150 trans-1,3-Dichloropropene                    CAS #: 10061-02-6
 19.998  19.998 (0.902)    75    288650 4.72886    4.729  80.00- 120.00   100.00
 19.998  19.998 (0.902)    77     90781                     0.55-  60.55    31.45
 19.998  19.998 (0.902)    39    117770                     8.25-  68.25    40.80
-------------------------------------------------------------------------------
  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
 20.438  20.438 (0.922)    97    213650 4.49628    4.496  80.00- 120.00   100.00
 20.438  20.438 (0.922)    99    136279                    32.91-  92.91    63.79
 20.438  20.438 (0.922)    83    178387                    47.93- 107.93    83.50
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
 20.603  20.602 (0.929)   166    376526 5.14256    5.142  80.00- 120.00   100.00
 20.603  20.602 (0.929)   129    274474                    42.31- 102.31    72.90
 20.603  20.602 (0.929)   131    253883                    40.11- 100.11    67.43
-------------------------------------------------------------------------------
  158 2-Hexanone                                   CAS #: 591-78-6
 20.795  20.795 (0.938)    58    145369 4.75386    4.754  80.00- 120.00   100.00
 20.795  20.795 (0.938)    43    240147                   140.44- 200.44   165.20
 20.795  20.795 (0.938)   100     43966                     0.00-  59.62    30.24
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
 21.207  21.207 (0.956)   129    497933 5.16200    5.162  80.00- 120.00   100.00
 21.207  21.207 (0.956)   127    382532                    46.82- 106.82    76.82
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
 21.482  21.481 (0.969)   107    351778 4.82425    4.824  80.00- 120.00   100.00
 21.482  21.481 (0.969)   109    336612                    65.45- 125.45    95.69
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                             CAS #: 3114-55-4
 22.177  22.177 (1.000)   117    394223 5.00000           80.00- 120.00   100.00
 22.177  22.177 (1.000)    82    196275                    20.64-  80.64    49.79
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
 22.219  22.218 (1.002)   112    527722 4.94771    4.948  80.00- 120.00   100.00
```

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

  165 Chlorobenzene (continued)
 22.219  22.218 (1.002)   114    168400                     2.42-  62.42    31.91
 22.219  22.218 (1.002)    77    278571                    23.54-  83.54    52.79
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
 22.302  22.301 (1.006)   106    247087 4.75660    4.757  80.00- 120.00   100.00
 22.302  22.301 (1.006)    91    767876                  282.51- 342.51   310.77
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
 22.467  22.467 (1.013)   106    294300 4.87700    4.877  80.00- 120.00   100.00
 22.467  22.467 (1.013)    91    608537                  166.46- 226.46   206.77
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
 23.089  23.089 (1.041)   106    283827 5.12788    5.128  80.00- 120.00   100.00
 23.089  23.089 (1.041)    91    574904                  184.01- 244.01   202.55
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
 23.110  23.110 (1.042)   104    469793 5.01587    5.016  80.00- 120.00   100.00
 23.110  23.110 (1.042)    78    234896                    20.27-  80.27    50.00
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
 23.452  23.452 (1.057)   173    663233 6.93973    6.940  80.00- 120.00   100.00
 23.452  23.452 (1.057)   171    343375                    20.88-  80.88    51.77
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
 23.564  23.564 (1.063)   105    858986 4.56451    4.564  80.00- 120.00   100.00
 23.564  23.564 (1.063)   120    238360                     0.00-  57.47    27.75
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                         CAS #: 460-00-4
 23.856  23.856 (1.076)   174    259777 4.80240    4.802  80.00- 120.00   100.00
 23.856  23.856 (1.076)    95    265608                    77.42- 137.42   102.24
 23.856  23.856 (1.076)   176    266543                    65.38- 125.38   102.60
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
 24.035  24.035 (1.084)    83    352706 4.02445    4.024  80.00- 120.00   100.00
 24.035  24.035 (1.084)    85    224027                    35.73-  95.73    63.52
-------------------------------------------------------------------------------
  182 Propylbenzene                                CAS #: 103-65-1
 24.102  24.102 (1.087)    91    883173 4.45572    4.456  80.00- 120.00   100.00
 24.102  24.102 (1.087)   120    226651                     0.00-  55.24    25.66
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                               CAS #: 622-96-8
 24.237  24.237 (1.093)   105    749149 4.45927    4.459  80.00- 120.00   100.00
 24.237  24.237 (1.093)   120    216280                     1.08-  61.08    28.87
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 24.304  24.304 (1.096)   105    532673 4.08293    4.083  80.00- 120.00   100.00
```

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

  190 1,3,5-Trimethylbenzene (continued)
 24.304  24.304 (1.096)   120    289672                    18.44-  78.44    54.38
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.775  24.775 (1.117)   105    436940 3.86562    3.866  80.00- 120.00   100.00
 24.775  24.775 (1.117)   120    202708                    16.20-  76.20    46.39
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 25.156  25.156 (1.134)   146    434737 4.07295    4.073  80.00- 120.00   100.00
 25.156  25.156 (1.134)   148    284999                    35.51-  95.51    65.56
 25.156  25.156 (1.134)   111    166122                     9.35-  69.35    38.21
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 25.269  25.268 (1.139)   146    422616 4.22212    4.222  80.00- 120.00   100.00
 25.269  25.268 (1.139)   148    275185                    32.61-  92.61    65.11
 25.269  25.268 (1.139)   111    153225                     6.90-  66.90    36.26
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 25.403  25.403 (1.145)    91    556290 4.41684    4.417  80.00- 120.00   100.00
 25.403  25.403 (1.145)   126    130616                     0.00-  51.82    23.48
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.695  25.694 (1.159)   146    411042 4.48923    4.489  80.00- 120.00   100.00
 25.695  25.694 (1.159)   148    262535                    33.69-  93.69    63.87
 25.695  25.694 (1.159)   111    156957                     8.96-  68.96    38.19
-------------------------------------------------------------------------------
  226 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 27.398  27.398 (1.235)   180    234307 5.64350    5.644  80.00- 120.00   100.00
 27.398  27.398 (1.235)   182    224098                    66.05- 126.05    95.64
-------------------------------------------------------------------------------
  227 Hexachlorobutadiene                           CAS #: 87-68-3
 27.488  27.488 (1.239)   225    319409 5.65810    5.658  80.00- 120.00   100.00
 27.488  27.488 (1.239)   223    202772                    33.78-  93.78    63.48
-------------------------------------------------------------------------------
  228 Naphthalene                                   CAS #: 91-20-3
 27.712  27.712 (1.250)   128     30841 0.50872   0.5087  80.00- 120.00   100.00
 27.712  27.734 (1.250)   127      3887                     0.00-  46.39    12.61
-------------------------------------------------------------------------------
```

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e071404.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msde.i/14Jul2016.b/e16l0317f.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 14-JUL-2016
Calibration Time: 08:35
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	131815	79089	184541	116882	-11.33
123 1,4-Difluorobenze	469034	281420	656648	444566	-5.22
163 Chlorobenzene-d5	419401	251641	587161	394223	-6.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	15.39	15.06	15.72	15.39	0.00
123 1,4-Difluorobenze	16.74	16.41	17.07	16.74	0.00
163 Chlorobenzene-d5	22.18	21.85	22.51	22.18	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/14Jul2016.b/e071404.d

Date : 14-JUL-2016 10:02

Client ID: LCSD

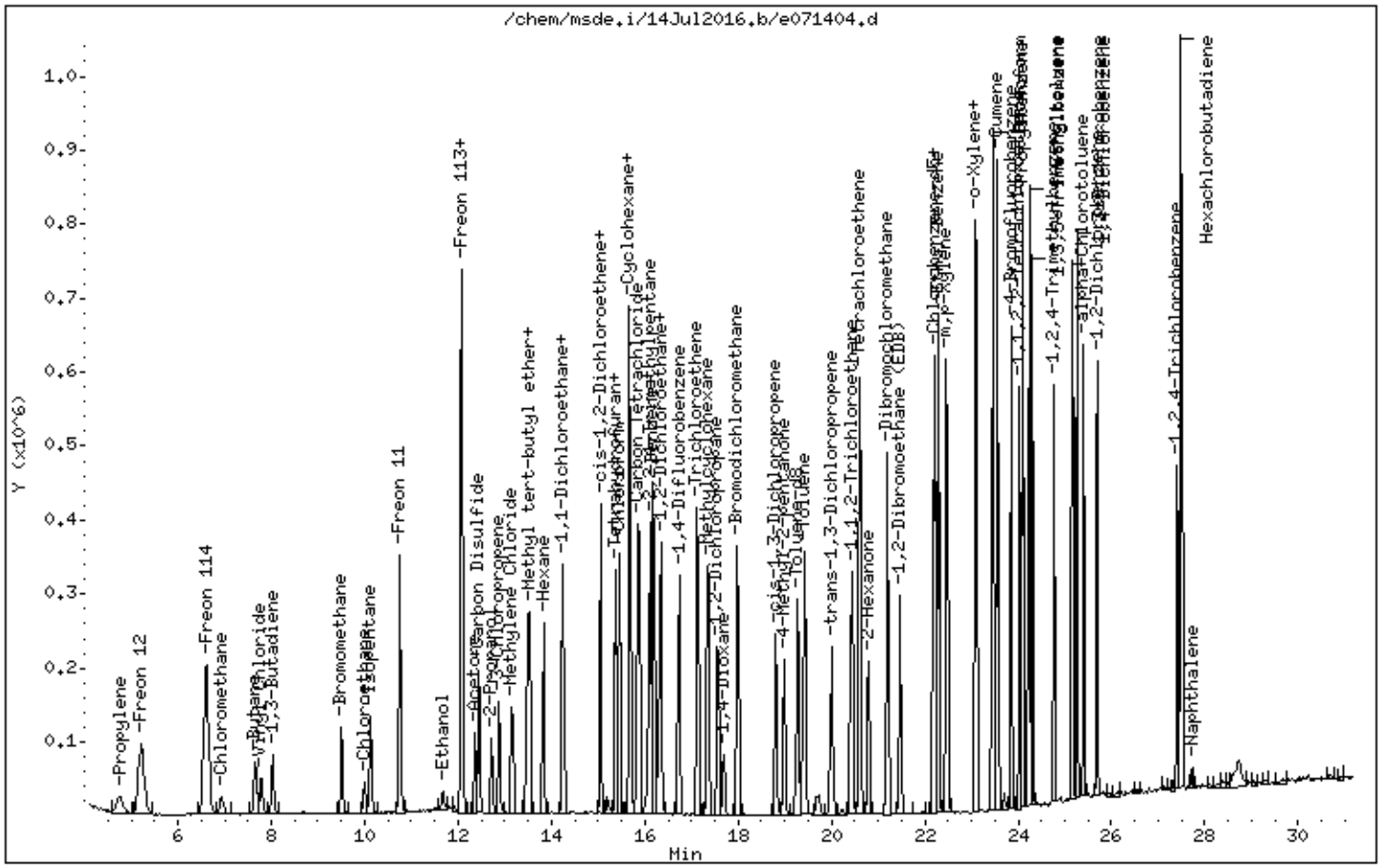
Instrument: msde.i

Sample Info: 25mL# 2789-165

Operator: ef

Column phase: RTX-624

Column diameter: 0.32



Eurofins Air Toxics, Inc. **MSD-E** **Logbook #2755**

BFB Verification of 176/174 m/z Ratio: (551168/566144) x 100 = 97.35	
Tekmar Purge Flow:	
Vacuum:	7/14/16

IS/S Std. #: 2789-150		Exp. Date: 8/19/16
BCM	LL: 1318115	SIM: 1300229
1,4-DFB	4690034	5447666
CB-d5	4192401	4600872

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

File ID:	E071402
Compound:	Toluene-d8
Initials:	✓

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (4644463) x (5.000) = 5.042
(4690034) (0.93198)

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

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

Reported Result: 5.042

Method Name: E16V0317F / E16S0317A

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	Verified Vol. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	E071401	BFB Tune check	2299-1484	50 psig	2.0mL	✓	1.00	✓	7/14/16	0815	✓	
2	✓	02	CCV (50ppbv)	2789-173	5.0ppbv	250mL	✓	1.00	✓		0855	✓	Exp. 9/9/16 SIM: 9/9/16
3	✓	03	LCS (50ppbv)	2789-105	5.0ppbv	250mL	✓	1.00	✓		0919	✓	Exp. 9/6/16
4	✓	04	LCSD (50ppbv)	2789-165	5.0ppbv	250mL	✓	1.00	✓		1000	✓	Exp. 9/6/16
5	✓	05	LCS 8p (5.0ppbv)	2789-106	1.0ppbv	50mL	✓	1.00	✓		1047	✓	Exp. 8/3/16 COMBO
6	✓	06	LAB BLANK	35248	Humid	250mL	✓	1.00	✓		N/A	N/A	Cryo Stir Bar
7	✓	07	System Blank	Humid 4hr	Dry	250mL	✓	1.00	✓		1258	✓	
8	✓	08	LAB Blank	35248	Humid	250mL	✓	1.00	✓		1347	✓	
9	✓	09	IC CCV	1415L	N/A	250mL	✓	1.00	✓		1432		03C0713201C
10	✓	10	1607164-01A	600711	6.0" Hg, 5.0psi	250mL	✓	1.03	✓		1520	GH	
11	✓	11	-02A	36035	6.5" Hg, 5.0psi	250mL	✓	1.71	✓		1601	GH	
12	✓	12	-03A	00148	7.0" Hg-5psi	250mL	GH	1.75	GH		1657	GH	
13	✓	13	Manifold Cert	1560	M10101-071416-1645	250mL	GH	1.00	GH		1749	GH	CRL
14	✗	14	1607164-04A	00141	7.0" Hg-5psi	250mL	GH	1.75	GH		1839	GH	E EtOH

Reviewed

7/14/16
Date

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	Verified Vol. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
15	✓	E071415	1607166-01A	25262	11.2psi - 11.2psi	250mL	GH	1.00	GH	7-14-16	1925	GH	4E'2prep.
16	✓	16	↓ -02A	33930	13.1psi - 13.1psi	250mL	GH	1.00	GH	7-14-16	2014	GH	
17	✓	17	1607164-04A	00141	7.0"Hg - 5psi	75mL	GH	5.97	GH	↓	2057	GH	dilTC
18	✓	18	1607235A-07A	66493	5.7"Hg - 4.8psi	250mL	GH	1.64	GH	↓	2154	GH	
19		19	1607193-01A	N0001	10.0"Hg - 5.0psi	250mL	GH	2.01	GH				
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36						GH 7/14/16							

Reviewed

7/14/16
Date

Eurofins Air Toxics Inc.

Data file : /var/chem/msde.i/17Mar2016.b/e031701.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 17-MAR-2016 10:47
Operator : ef Inst ID: msde.i
Smp Info : 2.0uL #2299-1484; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msde.i/17Mar2016.b/bfb60.m
Meth Date : 17-Mar-2016 11:03 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	703018			100.00- 100.00	100.00
6.204	6.235	-0.031	50	113232			8.00- 40.00	16.11
6.204	6.235	-0.031	75	351481			30.00- 66.00	50.00
6.204	6.235	-0.031	96	46382			5.00- 9.00	6.60
6.204	6.235	-0.031	173	4154			0.00- 1.99	0.64
6.204	6.235	-0.031	174	649216			50.00- 120.00	92.35
6.204	6.235	-0.031	175	48733			4.00- 9.00	7.51
6.204	6.235	-0.031	176	627466			93.00- 101.00	96.65
6.204	6.235	-0.031	177	40597			5.00- 9.00	6.47

Data File: /var/chem/msde.i/17Mar2016.b/e031701.d

Date : 17-MAR-2016 10:47

Client ID: BFB

Instrument: msde.i

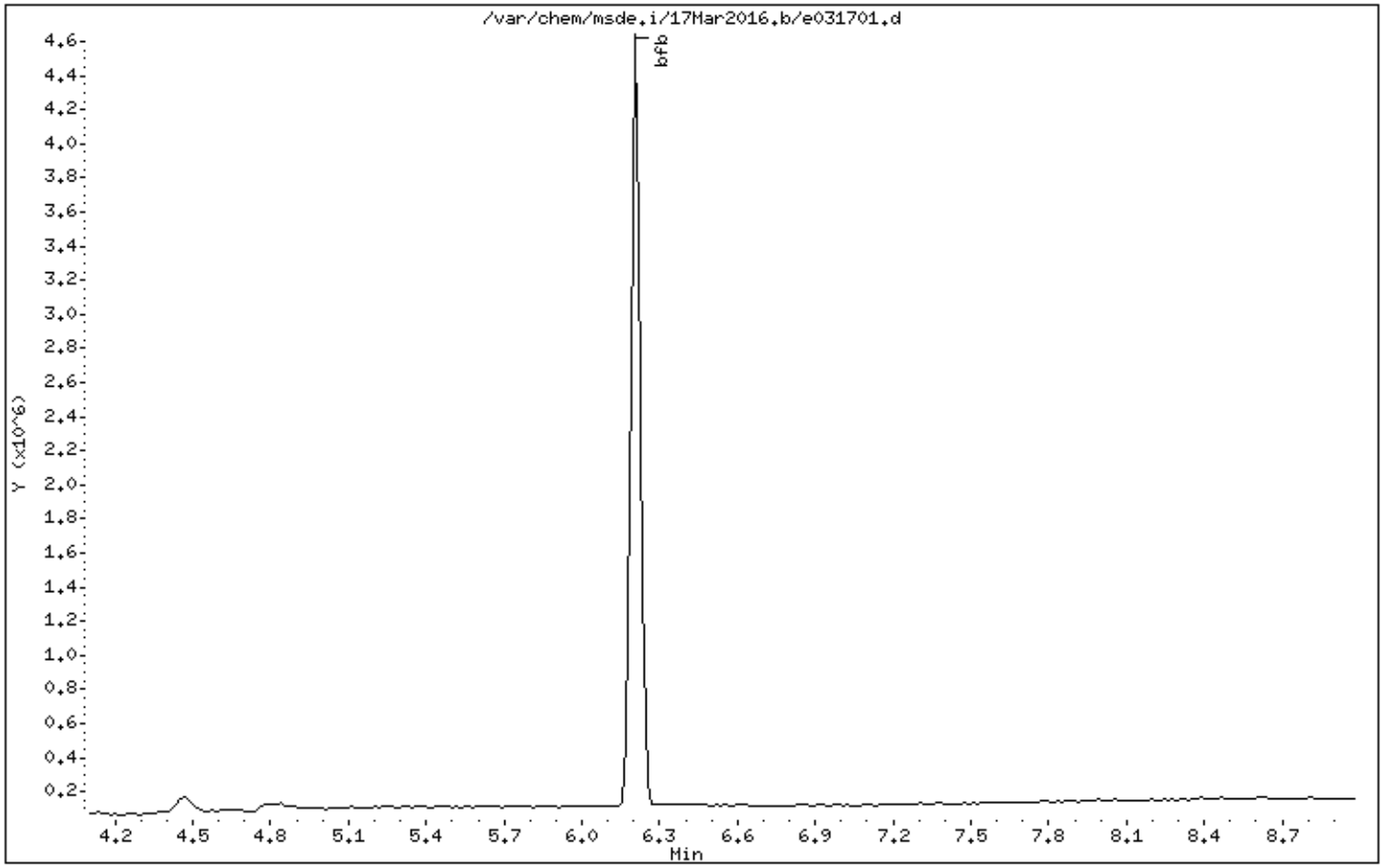
Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00



Data File: /var/chem/msde.i/17Mar2016.b/e031701.d

Date : 17-MAR-2016 10:47

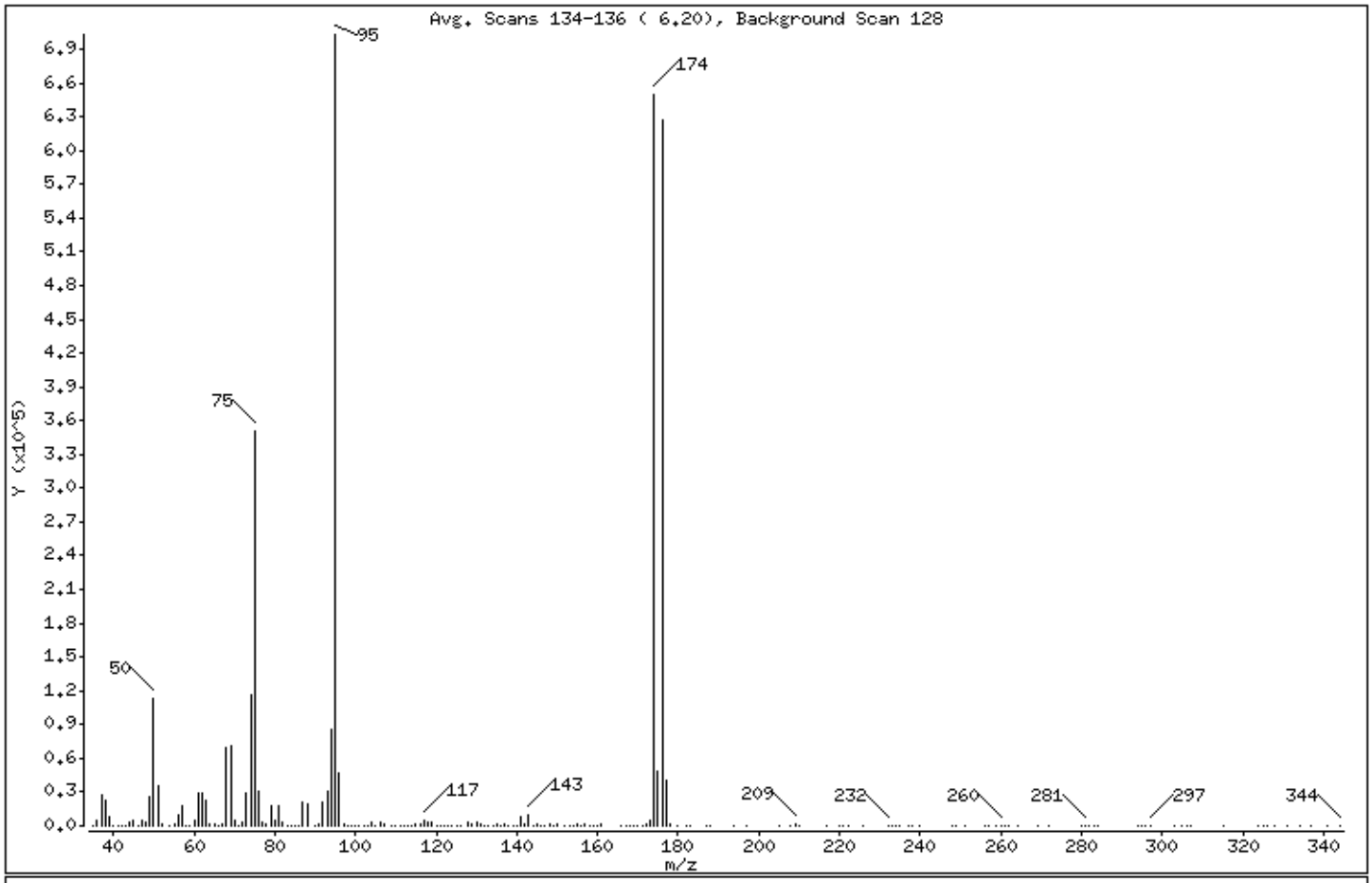
Client ID: BFB Instrument: msde.i

Sample Info: 2.0uL #2299-1484; 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	16.11
75	30.00 - 66.00% of mass 95	50.00
96	5.00 - 9.00% of mass 95	6.60
173	Less than 1.99% of mass 174	0.59 (0.64)
174	50.00 - 120.00% of mass 95	92.35
175	4.00 - 9.00% of mass 174	6.93 (7.51)
176	93.00 - 101.00% of mass 174	89.25 (96.65)
177	5.00 - 9.00% of mass 176	5.77 (6.47)

Data File: /var/chem/msde.i/17Mar2016.b/e031701.d

Date : 17-MAR-2016 10:47

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e031701.d
Spectrum: Avg. Scans 134-136 (6.20), Background Scan 128
Location of Maximum: 95.00
Number of points: 193

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	41	85.00	549	137.00	1190	220.00	59
36.00	4253	86.00	563	138.00	193	221.00	149
37.00	26736	87.00	20696	139.00	322	222.00	106
38.00	23192	88.00	19648	140.00	602	226.00	52
39.00	8791	90.00	61	141.00	8559	232.00	663
40.00	82	91.00	2353	142.00	1116	233.00	215
41.00	298	92.00	20304	143.00	8906	234.00	254
42.00	392	93.00	30728	144.00	696	235.00	245
43.00	717	94.00	85000	145.00	1387	237.00	145
44.00	2676	95.00	702976	146.00	707	238.00	176
45.00	5031	96.00	46376	147.00	293	240.00	45
46.00	531	97.00	1640	148.00	2237	248.00	155
47.00	4560	98.00	135	149.00	178	249.00	214
48.00	3475	99.00	246	150.00	1028	251.00	46
49.00	25368	100.00	44	152.00	536	256.00	5
50.00	113232	101.00	217	153.00	611	257.00	99
51.00	36000	102.00	190	154.00	646	259.00	45
52.00	1438	103.00	677	155.00	1917	260.00	776
54.00	195	104.00	2695	156.00	85	261.00	28
55.00	1716	105.00	590	157.00	1591	262.00	132
56.00	9255	106.00	2892	158.00	267	264.00	44
57.00	18064	107.00	922	159.00	799	269.00	37
58.00	733	109.00	464	160.00	178	272.00	3
59.00	322	110.00	603	161.00	1203	280.00	43
60.00	5505	111.00	513	166.00	121	281.00	599
61.00	29368	112.00	536	167.00	86	282.00	149
62.00	29112	113.00	413	168.00	50	283.00	129
63.00	23232	114.00	154	169.00	46	284.00	58
64.00	2007	115.00	990	170.00	499	294.00	39
65.00	901	116.00	2391	171.00	602	295.00	185
66.00	46	117.00	4315	172.00	997	296.00	44
67.00	1454	118.00	2681	173.00	4154	297.00	233
68.00	68856	119.00	3451	174.00	649216	303.00	44
69.00	71408	120.00	325	175.00	48728	305.00	50
70.00	5417	121.00	178	176.00	627456	306.00	97

Data File: /var/chem/msde.i/17Mar2016.b/e031701.d

Date : 17-MAR-2016 10:47

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e031701.d
Spectrum: Avg. Scans 134-136 (6.20), Background Scan 128
Location of Maximum: 95.00
Number of points: 193

m/z	Y	m/z	Y	m/z	Y	m/z	Y
71.00	575	122.00	380	177.00	40592	307.00	88
72.00	3739	123.00	369	178.00	976	315.00	18
73.00	28920	124.00	734	180.00	19	324.00	74
74.00	117080	125.00	508	182.00	38	325.00	219
75.00	351424	126.00	740	183.00	61	326.00	60
76.00	30496	128.00	3148	187.00	54	328.00	3
77.00	3650	129.00	1205	188.00	176	331.00	6
78.00	2210	130.00	2821	194.00	57	334.00	30
79.00	17272	131.00	999	197.00	37	337.00	92
80.00	4999	132.00	252	205.00	49	341.00	48
81.00	16976	133.00	152	208.00	37	344.00	265
82.00	3403	134.00	309	209.00	919		
83.00	645	135.00	1548	210.00	39		
84.00	242	136.00	203	217.00	107		

Eurofins Air Toxics Inc.

Data file : /var/chem/msde.i/22Mar2016.b/e032201.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 22-MAR-2016 09:24
Operator : ef Inst ID: msde.i
Smp Info : 2.0uL #2299-1484; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msde.i/22Mar2016.b/bfb60.m
Meth Date : 22-Mar-2016 09:45 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	
6.189	6.235	-0.046	95	749880			100.00- 100.00	100.00
6.189	6.235	-0.046	50	119669			8.00- 40.00	15.96
6.189	6.235	-0.046	75	380507			30.00- 66.00	50.74
6.189	6.235	-0.046	96	50043			5.00- 9.00	6.67
6.189	6.235	-0.046	173	6598			0.00- 1.99	0.95
6.189	6.235	-0.046	174	692096			50.00- 120.00	92.29
6.189	6.235	-0.046	175	51082			4.00- 9.00	7.38
6.189	6.235	-0.046	176	669859			93.00- 101.00	96.79
6.189	6.235	-0.046	177	43218			5.00- 9.00	6.45

Data File: /var/chem/msde.i/22Mar2016.b/e032201.d

Date : 22-MAR-2016 09:24

Client ID: BFB

Instrument: msde.i

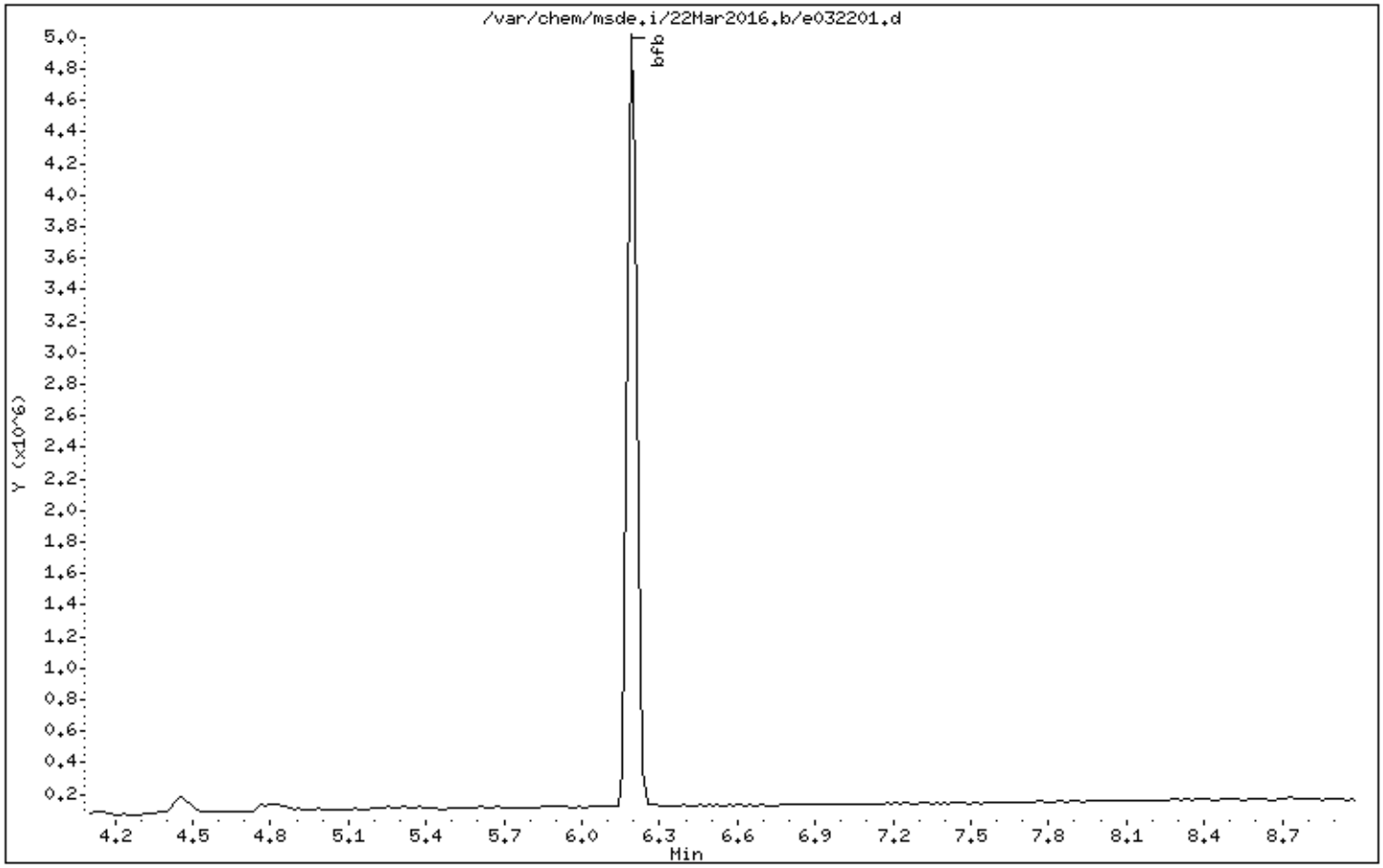
Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00



Data File: /var/chem/msde.i/22Mar2016.b/e032201.d

Date : 22-MAR-2016 09:24

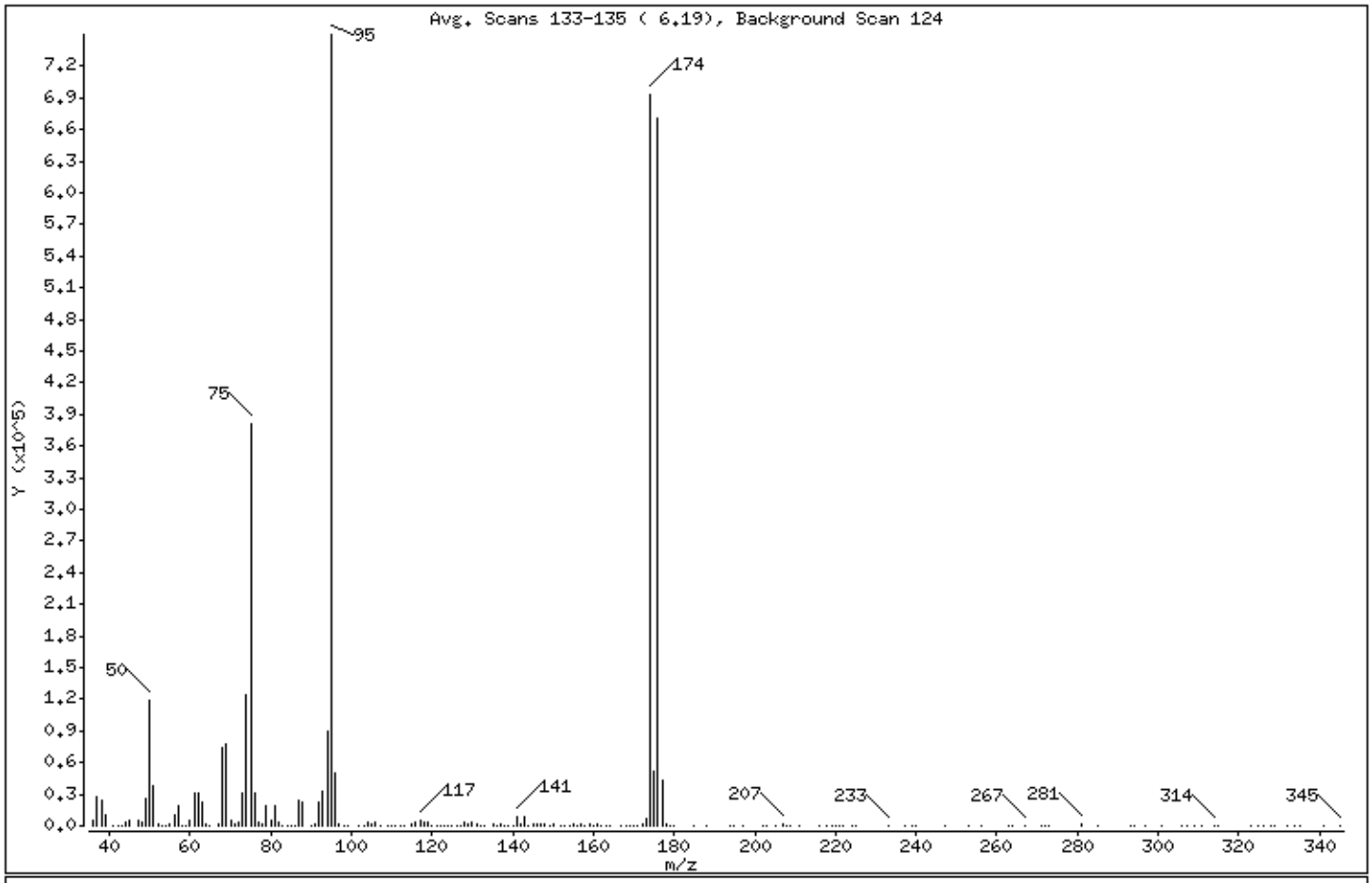
Client ID: BFB Instrument: msde.i

Sample Info: 2.0uL #2299-1484; 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	15.96
75	30.00 - 66.00% of mass 95	50.74
96	5.00 - 9.00% of mass 95	6.67
173	Less than 1.99% of mass 174	0.88 (0.95)
174	50.00 - 120.00% of mass 95	92.29
175	4.00 - 9.00% of mass 174	6.81 (7.38)
176	93.00 - 101.00% of mass 174	89.33 (96.79)
177	5.00 - 9.00% of mass 176	5.76 (6.45)

Data File: /var/chem/msde.i/22Mar2016.b/e032201.d

Date : 22-MAR-2016 09:24

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e032201.d
Spectrum: Avg. Scans 133-135 (6.19), Background Scan 124
Location of Maximum: 95.00
Number of points: 188

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5221	87.00	24312	141.00	8861	211.00	216
37.00	28264	88.00	22496	142.00	1144	216.00	332
38.00	24872	90.00	206	143.00	8494	218.00	272
39.00	9657	91.00	2067	144.00	312	219.00	117
41.00	761	92.00	22000	145.00	1085	220.00	136
42.00	332	93.00	33352	146.00	1087	221.00	357
43.00	767	94.00	89360	147.00	870	222.00	87
44.00	2866	95.00	749824	148.00	2067	224.00	108
45.00	5265	96.00	50040	149.00	391	225.00	30
47.00	5037	97.00	1512	150.00	1122	233.00	549
48.00	3729	98.00	107	152.00	562	237.00	217
49.00	25408	99.00	137	153.00	665	239.00	145
50.00	119664	102.00	107	154.00	465	240.00	112
51.00	37208	103.00	197	155.00	2220	247.00	112
52.00	1821	104.00	3048	156.00	172	253.00	25
53.00	110	105.00	901	157.00	1033	256.00	40
54.00	134	106.00	2888	158.00	187	263.00	218
55.00	1800	107.00	604	159.00	1103	264.00	55
56.00	9860	109.00	95	160.00	129	267.00	254
57.00	18192	110.00	354	161.00	1171	271.00	251
58.00	638	111.00	633	162.00	93	272.00	194
59.00	100	112.00	708	163.00	115	273.00	42
60.00	6007	113.00	593	164.00	193	281.00	940
61.00	31512	115.00	1165	167.00	51	285.00	219
62.00	31240	116.00	3000	168.00	50	293.00	90
63.00	23184	117.00	4423	169.00	172	294.00	30
64.00	2195	118.00	2703	170.00	440	297.00	34
65.00	491	119.00	3872	171.00	385	301.00	38
67.00	1856	120.00	325	172.00	1279	306.00	51
68.00	74976	121.00	68	173.00	6598	307.00	41
69.00	78344	122.00	442	174.00	692096	309.00	79
70.00	5330	123.00	268	175.00	51080	311.00	40
71.00	961	124.00	427	176.00	669824	314.00	138
72.00	4015	125.00	368	177.00	43216	315.00	15
73.00	31184	126.00	440	178.00	892	323.00	286

Data File: /var/chem/msde.i/22Mar2016.b/e032201.d

Date : 22-MAR-2016 09:24

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e032201.d
Spectrum: Avg. Scans 133-135 (6.19), Background Scan 124
Location of Maximum: 95.00
Number of points: 188

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	123696	127.00	163	179.00	296	325.00	226
75.00	380480	128.00	2805	180.00	107	326.00	44
76.00	31144	129.00	1474	185.00	42	328.00	74
77.00	3589	130.00	3028	188.00	94	329.00	132
78.00	2451	131.00	1029	194.00	23	332.00	193
79.00	18216	132.00	239	195.00	457	334.00	209
80.00	5413	133.00	524	197.00	153	335.00	49
81.00	19272	135.00	1682	202.00	110	341.00	98
82.00	3568	136.00	24	203.00	9	345.00	516
83.00	587	137.00	1806	205.00	275		
84.00	303	138.00	262	207.00	2572		
85.00	690	139.00	176	208.00	462		
86.00	599	140.00	675	209.00	129		

Eurofins Air Toxics Inc.

Data file : /var/chem/msde.i/25Mar2016.b/e032501.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 25-MAR-2016 09:02
Operator : ef Inst ID: msde.i
Smp Info : 2.0uL #2299-1484; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msde.i/25Mar2016.b/bfb60.m
Meth Date : 25-Mar-2016 09:18 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

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

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

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
6.204	6.235	-0.031	95	747861			100.00- 100.00	100.00
6.204	6.235	-0.031	50	114889			8.00- 40.00	15.36
6.204	6.235	-0.031	75	366501			30.00- 66.00	49.01
6.204	6.235	-0.031	96	49258			5.00- 9.00	6.59
6.204	6.235	-0.031	173	7075			0.00- 1.99	0.97
6.204	6.235	-0.031	174	728106			50.00- 120.00	97.36
6.204	6.235	-0.031	175	56144			4.00- 9.00	7.71
6.204	6.235	-0.031	176	705132			93.00- 101.00	96.84
6.204	6.235	-0.031	177	46645			5.00- 9.00	6.62

Data File: /chem/msde.i/25Mar2016.b/e032501.d

Date : 25-MAR-2016 09:02

Client ID: BFB

Instrument: msde.i

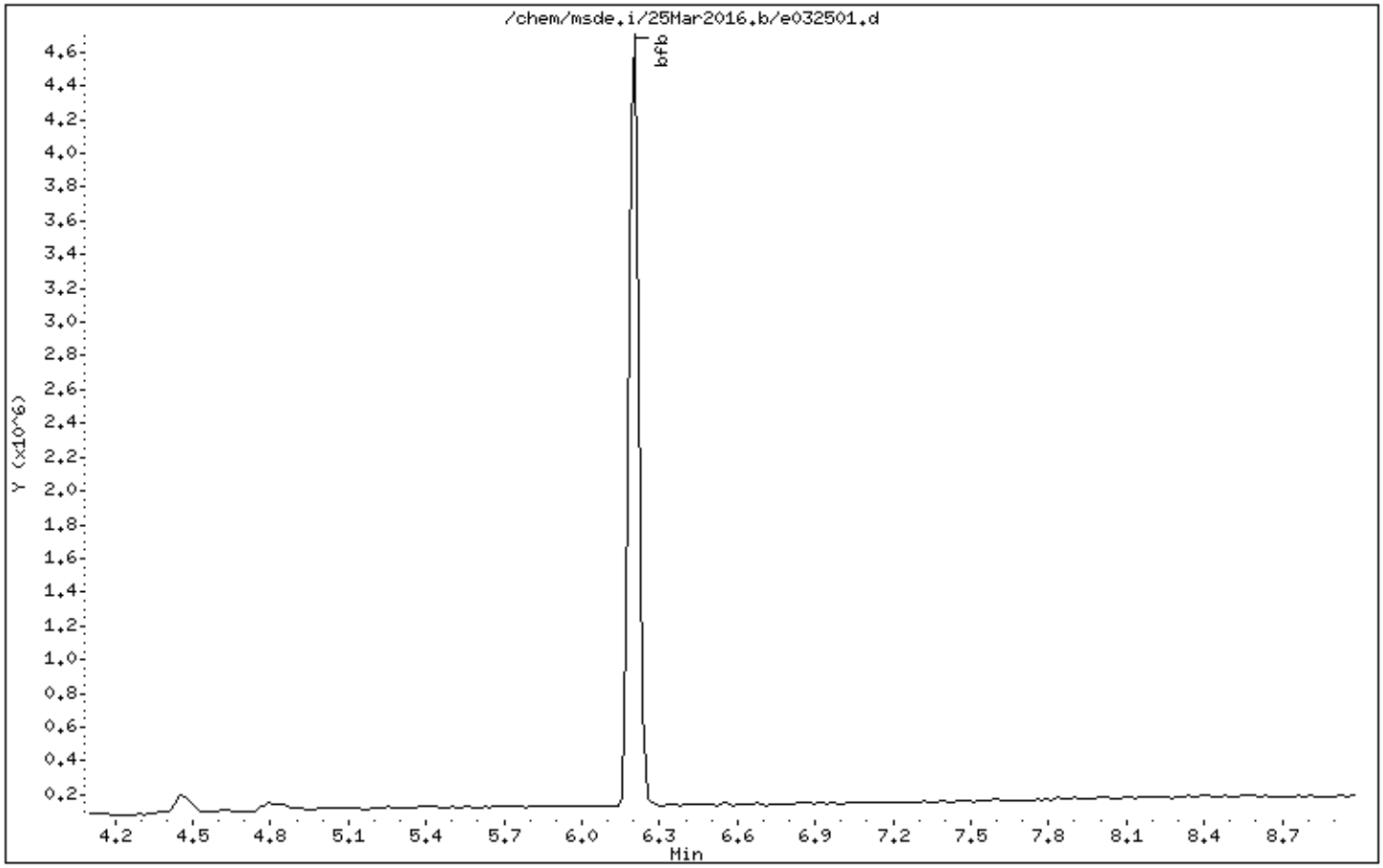
Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00



Data File: /chem/msde.i/25Mar2016.b/e032501.d

Date : 25-MAR-2016 09:02

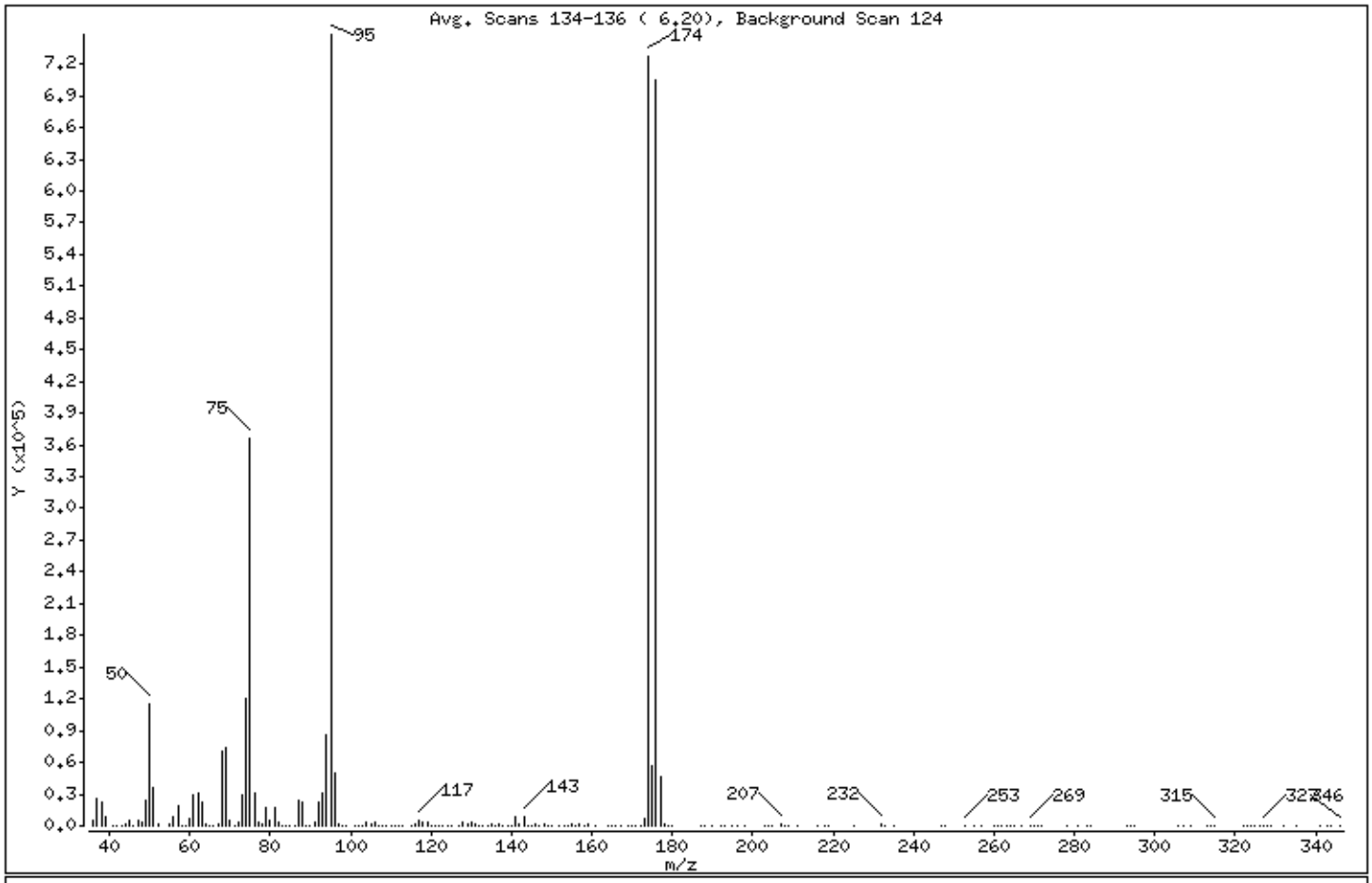
Client ID: BFB | Instrument: msde.i

Sample Info: 2.0uL #2299-1484; 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	15.36
75	30.00 - 66.00% of mass 95	49.01
96	5.00 - 9.00% of mass 95	6.59
173	Less than 1.99% of mass 174	0.95 (0.97)
174	50.00 - 120.00% of mass 95	97.36
175	4.00 - 9.00% of mass 174	7.51 (7.71)
176	93.00 - 101.00% of mass 174	94.29 (96.84)
177	5.00 - 9.00% of mass 176	6.24 (6.62)

Data File: /chem/msde.i/25Mar2016.b/e032501.d

Date : 25-MAR-2016 09:02

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e032501.d
Spectrum: Avg. Scans 134-136 (6.20), Background Scan 124
Location of Maximum: 95.00
Number of points: 199

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5323	89.00	40	142.00	1138	218.00	156
37.00	26432	90.00	110	143.00	8689	219.00	183
38.00	23064	91.00	2642	144.00	597	225.00	84
39.00	8546	92.00	21680	145.00	789	232.00	868
41.00	642	93.00	31384	146.00	1577	233.00	35
42.00	130	94.00	86296	147.00	368	235.00	67
43.00	714	95.00	747840	148.00	1508	247.00	73
44.00	2571	96.00	49256	149.00	700	248.00	149
45.00	4676	97.00	1106	150.00	622	253.00	802
46.00	528	98.00	64	152.00	732	255.00	90
47.00	4846	99.00	118	153.00	688	257.00	42
48.00	3888	101.00	250	154.00	588	260.00	442
49.00	24176	102.00	99	155.00	2393	261.00	29
50.00	114888	103.00	613	156.00	367	262.00	181
51.00	36136	104.00	3044	157.00	1454	263.00	102
52.00	1525	105.00	1157	158.00	369	264.00	138
55.00	1572	106.00	2849	159.00	1162	265.00	84
56.00	8138	107.00	815	161.00	728	267.00	302
57.00	18816	108.00	93	164.00	814	269.00	411
58.00	371	109.00	25	165.00	84	270.00	238
59.00	390	110.00	347	166.00	13	271.00	391
60.00	6128	111.00	550	167.00	51	272.00	162
61.00	29280	112.00	479	169.00	207	278.00	51
62.00	30560	113.00	811	170.00	344	281.00	232
63.00	21616	115.00	494	171.00	572	283.00	338
64.00	2304	116.00	2169	172.00	390	284.00	15
65.00	540	117.00	4467	173.00	7075	293.00	201
66.00	171	118.00	3277	174.00	728064	294.00	321
67.00	1897	119.00	3962	175.00	56144	295.00	87
68.00	70376	120.00	130	176.00	705088	306.00	33
69.00	74480	121.00	91	177.00	46640	307.00	148
70.00	5510	122.00	504	178.00	1390	309.00	41
71.00	388	123.00	166	179.00	134	313.00	18
72.00	4214	124.00	656	180.00	215	314.00	85
73.00	28616	125.00	273	187.00	216	315.00	203

Data File: /chem/msde.i/25Mar2016.b/e032501.d

Date : 25-MAR-2016 09:02

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e032501.d
Spectrum: Avg. Scans 134-136 (6.20), Background Scan 124
Location of Maximum: 95.00
Number of points: 199

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	120280	127.00	362	188.00	56	322.00	261
75.00	366464	128.00	3362	190.00	33	323.00	132
76.00	30824	129.00	1247	192.00	256	324.00	181
77.00	3053	130.00	3431	193.00	321	325.00	262
78.00	2578	131.00	1021	195.00	250	326.00	72
79.00	16416	132.00	209	196.00	256	327.00	359
80.00	5185	133.00	27	198.00	33	328.00	31
81.00	17920	134.00	627	203.00	64	329.00	93
82.00	3370	135.00	2077	204.00	41	332.00	33
83.00	451	136.00	252	205.00	54	335.00	44
84.00	80	137.00	1282	207.00	1681	341.00	224
85.00	640	138.00	194	208.00	138	343.00	78
86.00	826	139.00	258	209.00	177	344.00	212
87.00	23608	140.00	574	211.00	287	346.00	36
88.00	22752	141.00	8243	216.00	82		

Eurofins Air Toxics Inc.

Data file : /var/chem/msde.i/30Mar2016.b/e033001.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 30-MAR-2016 10:46
Operator : ef Inst ID: msde.i
Smp Info : 2.0uL #2299-1484; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msde.i/30Mar2016.b/bfb60.m
Meth Date : 30-Mar-2016 11:02 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	972288			100.00- 100.00	100.00
6.204	6.235	-0.031	50	151554			8.00- 40.00	15.59
6.204	6.235	-0.031	75	482262			30.00- 66.00	49.60
6.204	6.235	-0.031	96	65046			5.00- 9.00	6.69
6.204	6.235	-0.031	173	9030			0.00- 1.99	0.98
6.204	6.235	-0.031	174	916943			50.00- 120.00	94.31
6.204	6.235	-0.031	175	67176			4.00- 9.00	7.33
6.204	6.235	-0.031	176	890170			93.00- 101.00	97.08
6.204	6.235	-0.031	177	58210			5.00- 9.00	6.54

Data File: /chem/msde.i/30Mar2016.b/e033001.d

Date : 30-MAR-2016 10:46

Client ID: BFB

Instrument: msde.i

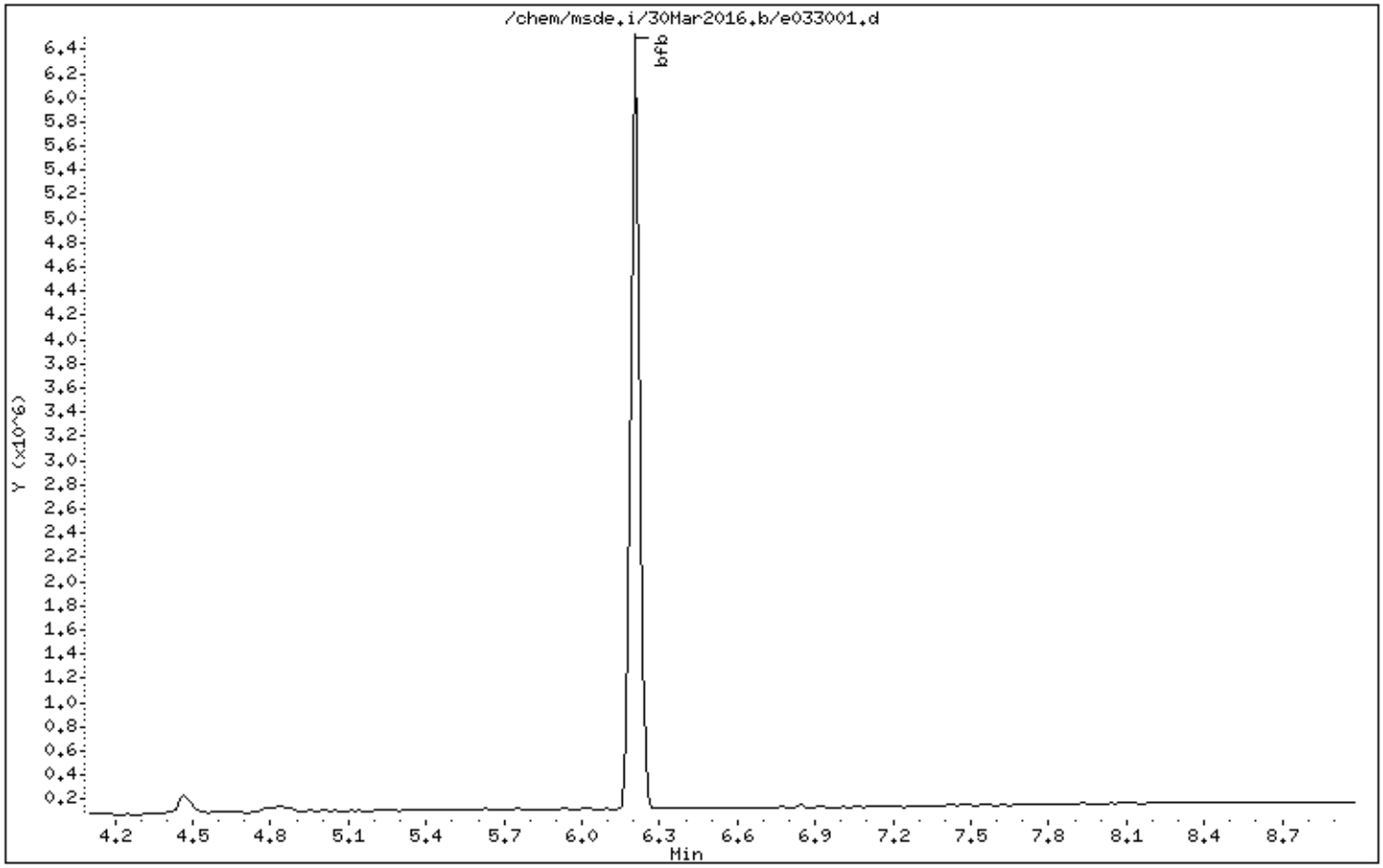
Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00



Data File: /chem/msde.i/30Mar2016.b/e033001.d

Date : 30-MAR-2016 10:46

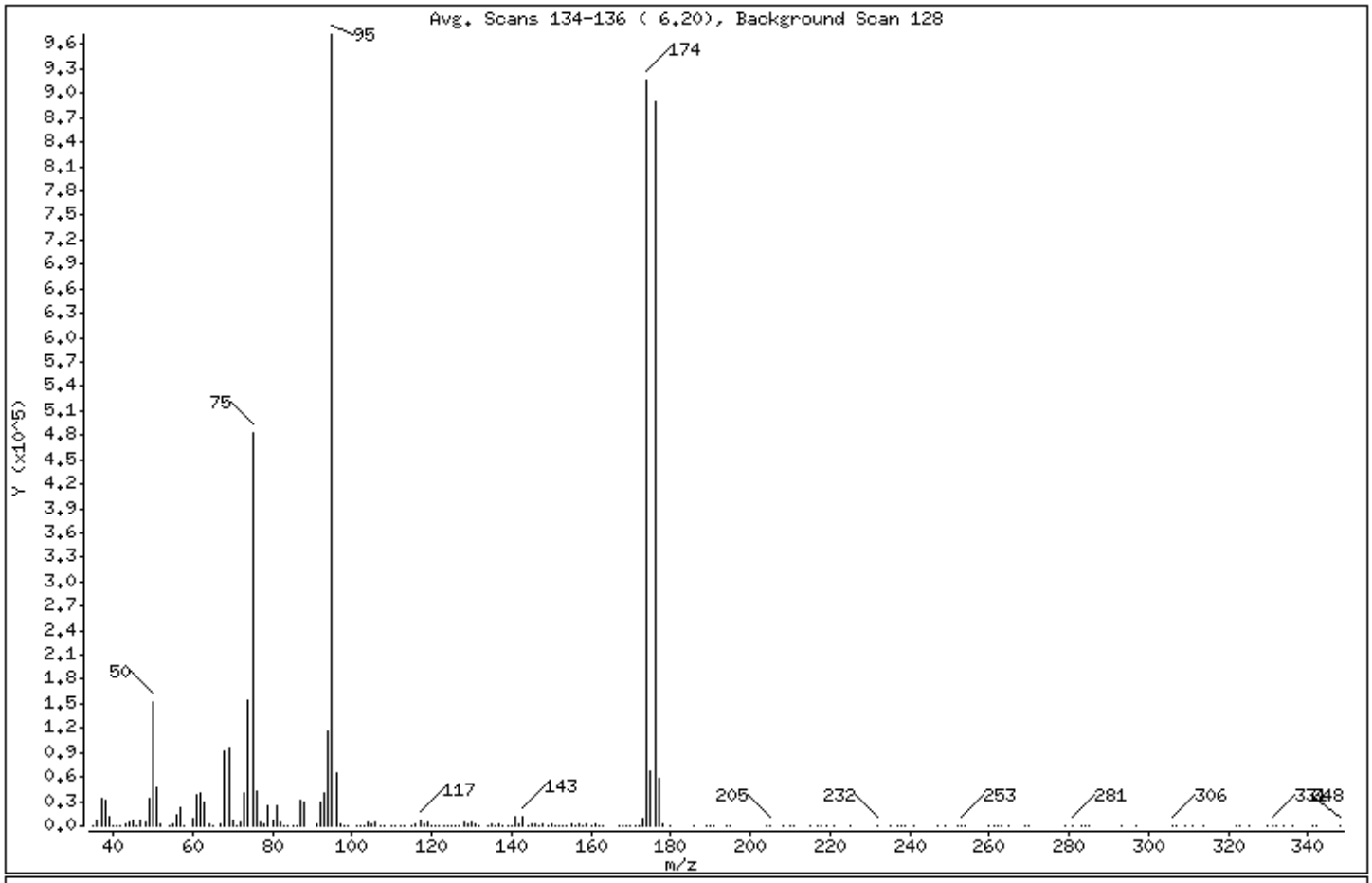
Client ID: BFB Instrument: msde.i

Sample Info: 2.0uL #2299-1484; 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	15.59
75	30.00 - 66.00% of mass 95	49.60
96	5.00 - 9.00% of mass 95	6.69
173	Less than 1.99% of mass 174	0.93 (0.98)
174	50.00 - 120.00% of mass 95	94.31
175	4.00 - 9.00% of mass 174	6.91 (7.33)
176	93.00 - 101.00% of mass 174	91.55 (97.08)
177	5.00 - 9.00% of mass 176	5.99 (6.54)

Data File: /chem/msde.i/30Mar2016.b/e033001.d

Date : 30-MAR-2016 10:46

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e033001.d
Spectrum: Avg. Scans 134-136 (6.20), Background Scan 128
Location of Maximum: 95.00
Number of points: 191

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	111	86.00	791	140.00	884	215.00	33
36.00	6808	87.00	30552	141.00	10602	217.00	1
37.00	34280	88.00	29488	142.00	1490	218.00	53
38.00	30208	91.00	3339	143.00	11542	219.00	151
39.00	11615	92.00	28296	144.00	586	221.00	133
40.00	140	93.00	40584	145.00	1147	225.00	174
41.00	649	94.00	115848	146.00	1390	232.00	402
42.00	186	95.00	972288	147.00	730	235.00	142
43.00	1292	96.00	65040	148.00	2715	237.00	209
44.00	3766	97.00	1509	149.00	627	238.00	54
45.00	6670	98.00	29	150.00	1411	239.00	106
46.00	259	99.00	140	151.00	320	241.00	55
47.00	6163	101.00	13	152.00	772	247.00	58
48.00	4547	102.00	10	153.00	755	249.00	110
49.00	33288	103.00	287	154.00	647	252.00	14
50.00	151552	104.00	3763	155.00	2906	253.00	450
51.00	46912	105.00	1608	156.00	407	254.00	25
52.00	2291	106.00	4223	157.00	2213	260.00	62
54.00	126	107.00	916	158.00	20	261.00	276
55.00	2343	108.00	256	159.00	1553	262.00	87
56.00	12530	110.00	562	160.00	119	263.00	103
57.00	23208	111.00	730	161.00	1424	265.00	135
58.00	1087	112.00	721	162.00	53	269.00	430
60.00	8099	113.00	877	163.00	251	270.00	225
61.00	38832	115.00	839	167.00	179	279.00	45
62.00	40968	116.00	2845	168.00	222	281.00	607
63.00	29992	117.00	6208	169.00	250	283.00	307
64.00	2676	118.00	3149	170.00	454	284.00	40
65.00	853	119.00	4303	171.00	259	285.00	34
67.00	2452	120.00	171	172.00	495	293.00	80
68.00	91672	121.00	363	173.00	9030	297.00	118
69.00	95256	122.00	240	174.00	916928	306.00	208
70.00	6893	123.00	415	175.00	67176	307.00	115
71.00	657	124.00	727	176.00	890112	309.00	52
72.00	4793	125.00	274	177.00	58208	311.00	125

Data File: /chem/msde.i/30Mar2016.b/e033001.d

Date : 30-MAR-2016 10:46

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e033001.d
Spectrum: Avg. Scans 134-136 (6.20), Background Scan 128
Location of Maximum: 95.00
Number of points: 191

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	40808	126.00	171	178.00	1395	314.00	35
74.00	154688	127.00	55	180.00	127	322.00	102
75.00	482240	128.00	3945	186.00	46	323.00	101
76.00	41392	129.00	1703	189.00	298	325.00	112
77.00	4878	130.00	4144	190.00	70	330.00	37
78.00	2851	131.00	1834	191.00	663	331.00	359
79.00	23688	132.00	523	194.00	38	332.00	153
80.00	6065	134.00	81	195.00	104	334.00	29
81.00	23712	135.00	2404	204.00	44	336.00	68
82.00	4553	136.00	121	205.00	189	341.00	62
83.00	580	137.00	1329	208.00	42	342.00	352
84.00	298	138.00	238	210.00	66	348.00	51
85.00	640	139.00	474	211.00	104		

Eurofins Air Toxics Inc.

Data file : /var/chem/msde.i/09May2016.b/e050901.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 09-MAY-2016 06:45
Operator : act Inst ID: msde.i
Smp Info : 2.0uL #2299-1484; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msde.i/09May2016.b/bfb60.m
Meth Date : 09-May-2016 07:01 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	
6.063	6.235	-0.172	95	693402			100.00- 100.00	100.00
6.063	6.235	-0.172	50	101354			8.00- 40.00	14.62
6.063	6.235	-0.172	75	329892			30.00- 66.00	47.58
6.063	6.235	-0.172	96	44685			5.00- 9.00	6.44
6.063	6.235	-0.172	173	6907			0.00- 1.99	1.00
6.063	6.235	-0.172	174	693098			50.00- 120.00	99.96
6.063	6.235	-0.172	175	51520			4.00- 9.00	7.43
6.063	6.235	-0.172	176	677226			93.00- 101.00	97.71
6.063	6.235	-0.172	177	43672			5.00- 9.00	6.45

Data File: /chem/msde.i/09May2016.b/e050901.d

Date : 09-MAY-2016 06:45

Client ID: BFB

Instrument: msde.i

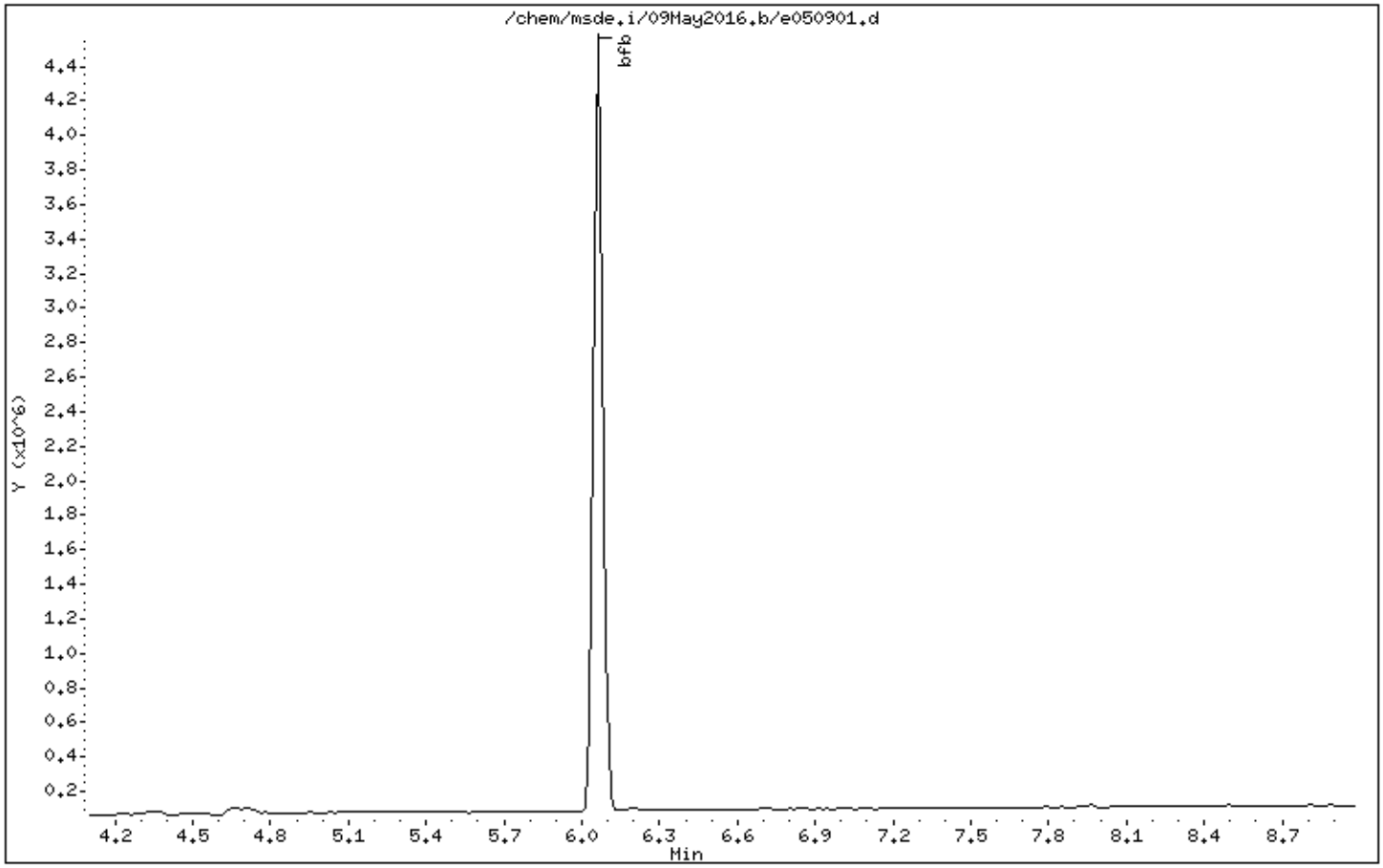
Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase: Rtx-624

Column diameter: 2.00



Data File: /chem/msde.i/09May2016.b/e050901.d

Date : 09-MAY-2016 06:45

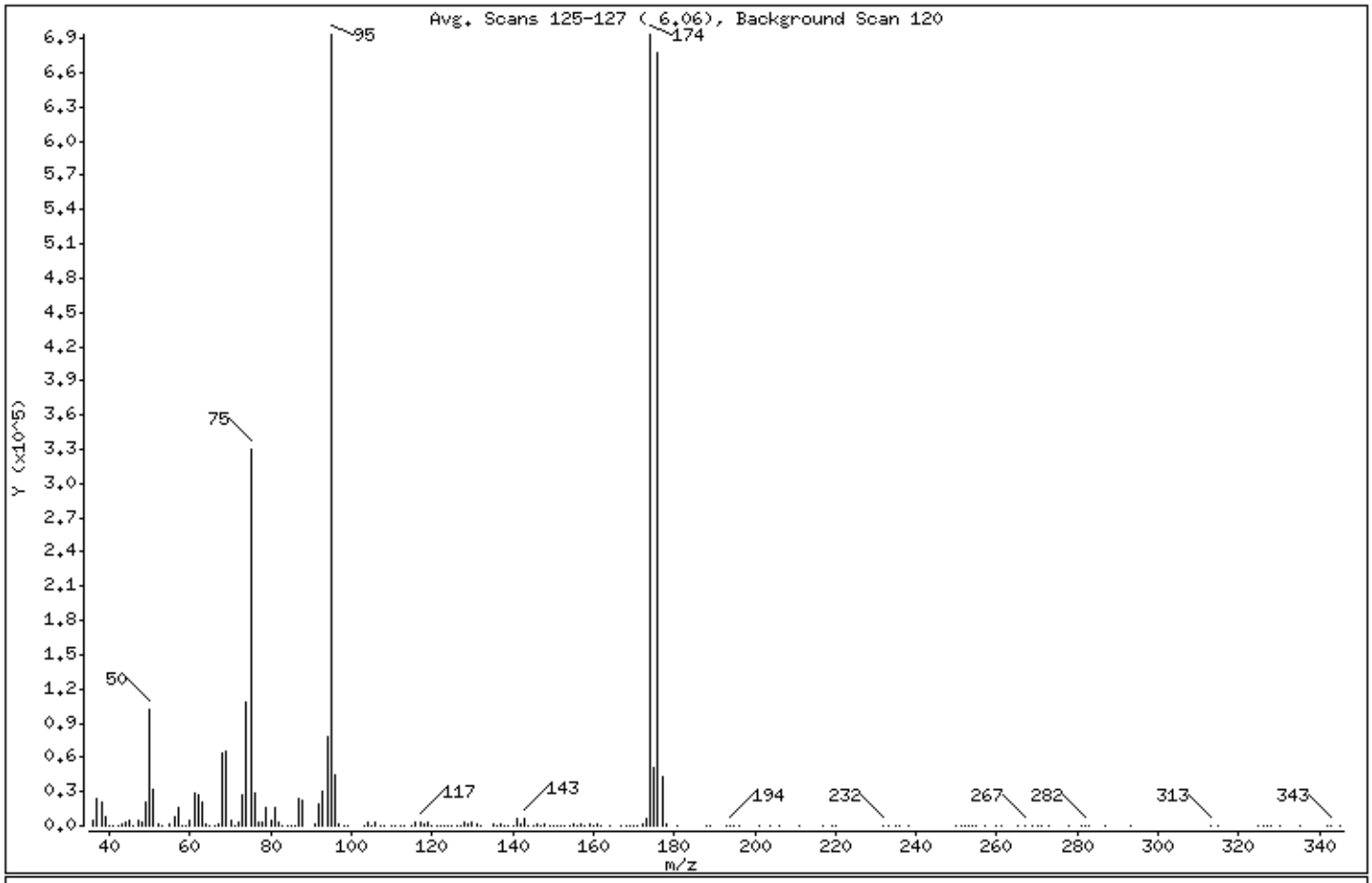
Client ID: BFB Instrument: msde.i

Sample Info: 2.0uL #2299-1484; 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	14.62
75	30.00 - 66.00% of mass 95	47.58
96	5.00 - 9.00% of mass 95	6.44
173	Less than 1.99% of mass 174	1.00 (1.00)
174	50.00 - 120.00% of mass 95	99.96
175	4.00 - 9.00% of mass 174	7.43 (7.43)
176	93.00 - 101.00% of mass 174	97.67 (97.71)
177	5.00 - 9.00% of mass 176	6.30 (6.45)

Data File: /chem/msde.i/09May2016.b/e050901.d

Date : 09-MAY-2016 06:45

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase: Rtx-624

Column diameter: 2.00

Data File: e050901.d
Spectrum: Avg. Scans 125-127 (6.06), Background Scan 120
Location of Maximum: 95.00
Number of points: 181

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4782	83.00	642	138.00	236	204.00	225
37.00	23360	84.00	235	139.00	185	206.00	24
38.00	20216	85.00	428	140.00	617	211.00	112
39.00	8065	86.00	640	141.00	6814	217.00	134
40.00	554	87.00	24320	142.00	1015	219.00	25
41.00	222	88.00	21720	143.00	7098	220.00	46
42.00	236	91.00	2052	144.00	624	232.00	412
43.00	918	92.00	19408	145.00	722	233.00	87
44.00	2632	93.00	29808	146.00	1167	235.00	75
45.00	4346	94.00	77440	147.00	766	236.00	36
46.00	357	95.00	693376	148.00	2208	238.00	40
47.00	5026	96.00	44680	149.00	426	250.00	128
48.00	3105	97.00	1059	150.00	707	251.00	153
49.00	20936	98.00	197	151.00	247	252.00	143
50.00	101352	99.00	132	152.00	388	253.00	9
51.00	32400	103.00	455	153.00	760	254.00	88
52.00	1388	104.00	2535	154.00	635	255.00	70
53.00	207	105.00	249	155.00	2281	257.00	85
55.00	1596	106.00	2647	156.00	135	260.00	30
56.00	8044	107.00	748	157.00	1725	261.00	217
57.00	15975	108.00	344	158.00	324	265.00	204
58.00	700	110.00	298	159.00	1034	267.00	395
59.00	194	111.00	508	160.00	51	269.00	118
60.00	5391	112.00	576	161.00	947	270.00	129
61.00	28184	113.00	597	162.00	144	271.00	103
62.00	26976	115.00	552	164.00	219	273.00	47
63.00	20688	116.00	2714	167.00	204	278.00	36
64.00	1562	117.00	3876	168.00	181	281.00	276
65.00	689	118.00	2360	169.00	208	282.00	442
66.00	163	119.00	3202	170.00	438	283.00	122
67.00	1566	120.00	29	171.00	394	287.00	38
68.00	63496	121.00	175	172.00	1477	293.00	46
69.00	64728	122.00	152	173.00	6907	313.00	292
70.00	4395	123.00	234	174.00	693056	315.00	92
71.00	525	124.00	513	175.00	51520	325.00	5

Data File: /chem/msde.i/09May2016.b/e050901.d

Date : 09-MAY-2016 06:45

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase: Rtx-624

Column diameter: 2.00

Data File: e050901.d
Spectrum: Avg. Scans 125-127 (6.06), Background Scan 120
Location of Maximum: 95.00
Number of points: 181

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	3525	125.00	272	176.00	677184	326.00	62
73.00	27784	126.00	342	177.00	43672	327.00	129
74.00	108408	127.00	230	178.00	1479	328.00	33
75.00	329856	128.00	2559	181.00	156	330.00	84
76.00	28128	129.00	1277	188.00	64	335.00	100
77.00	3601	130.00	2663	189.00	82	342.00	101
78.00	2436	131.00	1239	193.00	90	343.00	500
79.00	15669	132.00	129	194.00	289	345.00	47
80.00	4285	135.00	1345	195.00	76		
81.00	16109	136.00	283	196.00	42		
82.00	3238	137.00	1305	201.00	44		

Eurofins Air Toxics Inc.

Data file : /var/chem/msde.i/19May2016.b/e051901.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 19-MAY-2016 09:32
Operator : ef Inst ID: msde.i
Smp Info : 2.0uL #2299-1484; BFB; BFB
Misc Info : 50ng
Comment :
Method : /chem/msde.i/19May2016.b/bfb60.m
Meth Date : 03-Oct-2014 15:46 ejakob 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	
6.063	6.235	-0.172	95	686762			100.00- 100.00	100.00
6.063	6.235	-0.172	50	105809			8.00- 40.00	15.41
6.063	6.235	-0.172	75	330628			30.00- 66.00	48.14
6.063	6.235	-0.172	96	43817			5.00- 9.00	6.38
6.063	6.235	-0.172	173	6081			0.00- 1.99	0.93
6.063	6.235	-0.172	174	653845			50.00- 120.00	95.21
6.063	6.235	-0.172	175	47714			4.00- 9.00	7.30
6.063	6.235	-0.172	176	633858			93.00- 101.00	96.94
6.063	6.235	-0.172	177	42471			5.00- 9.00	6.70

Data File: /chem/msde.i/19May2016.b/e051901.d

Date : 19-MAY-2016 09:32

Client ID: BFB

Instrument: msde.i

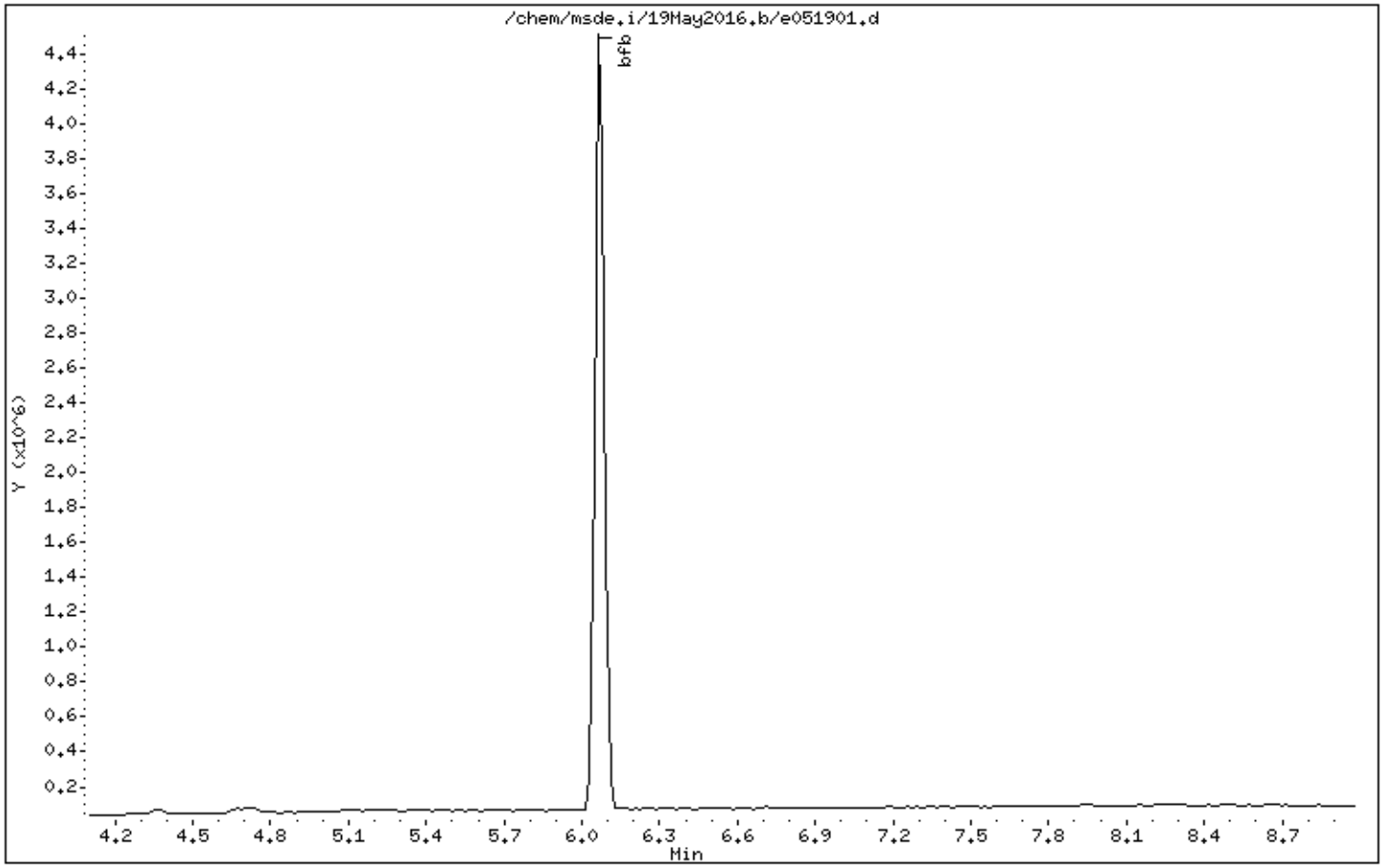
Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00



Data File: /chem/msde.i/19May2016.b/e051901.d

Date : 19-MAY-2016 09:32

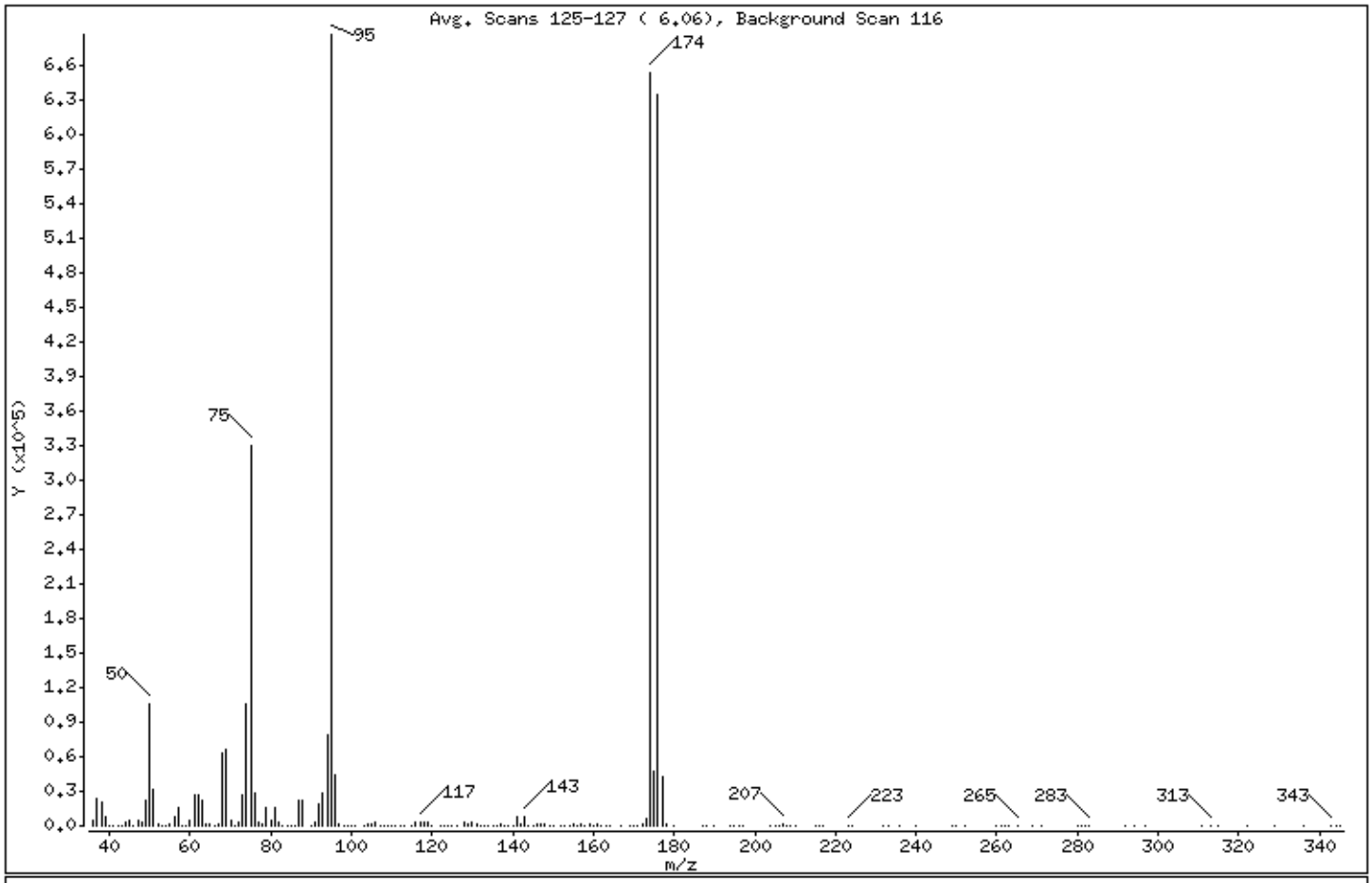
Client ID: BFB | Instrument: msde.i

Sample Info: 2.0uL #2299-1484; 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	15.41
75	30.00 - 66.00% of mass 95	48.14
96	5.00 - 9.00% of mass 95	6.38
173	Less than 1.99% of mass 174	0.89 (0.93)
174	50.00 - 120.00% of mass 95	95.21
175	4.00 - 9.00% of mass 174	6.95 (7.30)
176	93.00 - 101.00% of mass 174	92.30 (96.94)
177	5.00 - 9.00% of mass 176	6.18 (6.70)

Data File: /chem/msde.i/19May2016.b/e051901.d

Date : 19-MAY-2016 09:32

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e051901.d
Spectrum: Avg. Scans 125-127 (6.06), Background Scan 116
Location of Maximum: 95.00
Number of points: 184

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4729	83.00	353	135.00	515	197.00	41
37.00	24384	84.00	196	136.00	474	204.00	50
38.00	21008	85.00	648	137.00	910	205.00	220
39.00	7630	86.00	378	138.00	187	206.00	97
40.00	411	87.00	22688	139.00	513	207.00	1447
41.00	56	88.00	21968	140.00	104	208.00	351
42.00	87	90.00	54	141.00	7112	209.00	178
43.00	721	91.00	2613	142.00	1158	210.00	11
44.00	2549	92.00	19600	143.00	7567	215.00	57
45.00	4548	93.00	28848	144.00	472	216.00	72
46.00	285	94.00	78752	145.00	471	217.00	107
47.00	4144	95.00	686720	146.00	1234	223.00	221
48.00	3421	96.00	43816	147.00	805	224.00	79
49.00	21824	97.00	1178	148.00	1636	232.00	76
50.00	105808	98.00	110	149.00	572	233.00	2
51.00	31280	99.00	56	150.00	762	236.00	39
52.00	1601	100.00	56	152.00	556	240.00	39
53.00	239	101.00	160	153.00	657	249.00	240
54.00	100	103.00	779	154.00	572	250.00	27
55.00	1439	104.00	2361	155.00	2154	252.00	73
56.00	8284	105.00	1080	156.00	449	260.00	11
57.00	15268	106.00	2634	157.00	1440	261.00	63
58.00	668	107.00	632	158.00	229	262.00	38
59.00	372	108.00	315	159.00	1471	263.00	48
60.00	5191	109.00	271	160.00	164	265.00	271
61.00	26176	110.00	500	161.00	891	269.00	142
62.00	27584	111.00	510	162.00	213	271.00	215
63.00	21320	112.00	232	163.00	497	280.00	38
64.00	2324	113.00	500	164.00	271	281.00	71
65.00	791	115.00	668	167.00	43	282.00	23
66.00	143	116.00	2789	169.00	130	283.00	289
67.00	2058	117.00	3942	170.00	540	292.00	40
68.00	63184	118.00	2755	171.00	595	294.00	41
69.00	66104	119.00	2966	172.00	1641	297.00	80
70.00	4569	120.00	91	173.00	6081	311.00	62

Data File: /chem/msde.i/19May2016.b/e051901.d

Date : 19-MAY-2016 09:32

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e051901.d
Spectrum: Avg. Scans 125-127 (6.06), Background Scan 116
Location of Maximum: 95.00
Number of points: 184

m/z	Y	m/z	Y	m/z	Y	m/z	Y
71.00	493	122.00	100	174.00	653824	313.00	208
72.00	3865	123.00	378	175.00	47712	315.00	45
73.00	27472	124.00	411	176.00	633856	322.00	193
74.00	106104	125.00	525	177.00	42464	329.00	141
75.00	330624	126.00	347	178.00	1045	336.00	104
76.00	28320	128.00	2519	180.00	57	343.00	276
77.00	3473	129.00	1384	187.00	34	344.00	117
78.00	2093	130.00	2579	188.00	82	345.00	60
79.00	15370	131.00	1253	190.00	43		
80.00	4316	132.00	364	194.00	132		
81.00	15964	133.00	269	195.00	23		
82.00	2988	134.00	40	196.00	94		

Eurofins Air Toxics Inc.

Data file : /var/chem/msde.i/24May2016.b/e052401.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 24-MAY-2016 06:55
Operator : act Inst ID: msde.i
Smp Info : 2.0uL #2299-1484; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msde.i/24May2016.b/bfb60.m
Meth Date : 24-May-2016 07:11 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	
6.063	6.235	-0.172	95	670422			100.00- 100.00	97.31
6.063	6.235	-0.172	50	100133			8.00- 40.00	14.94
6.063	6.235	-0.172	75	318233			30.00- 66.00	47.47
6.063	6.235	-0.172	96	43612			5.00- 9.00	6.51
6.063	6.235	-0.172	173	6380			0.00- 1.99	0.93
6.063	6.235	-0.172	174	688960			50.00- 120.00	102.77
6.063	6.235	-0.172	175	52490			4.00- 9.00	7.62
6.063	6.235	-0.172	176	667641			93.00- 101.00	96.91
6.063	6.235	-0.172	177	44606			5.00- 9.00	6.68

Data File: /chem/msde.i/24May2016.b/e052401.d

Date : 24-MAY-2016 06:55

Client ID: BFB

Instrument: msde.i

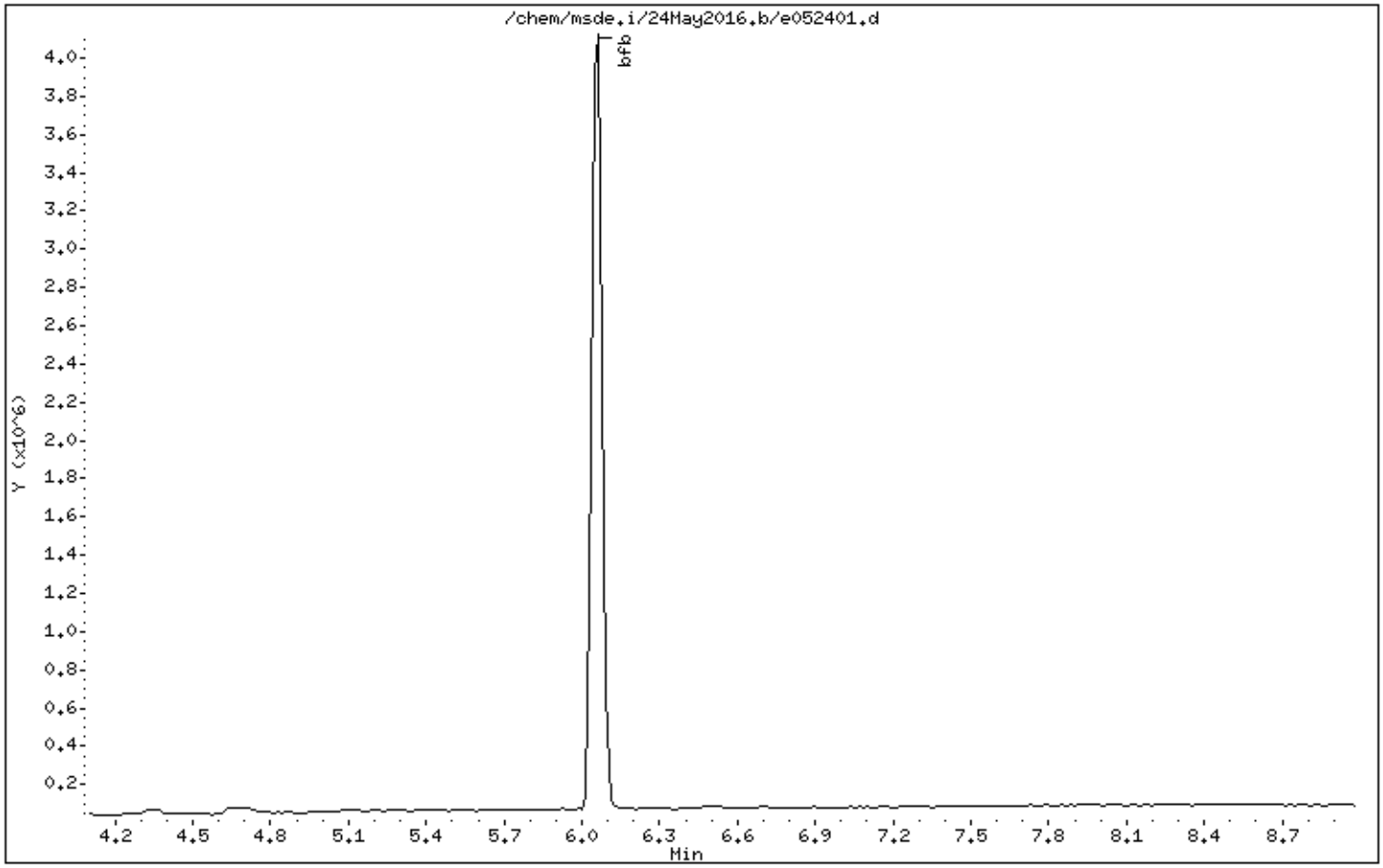
Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase: Rtx-624

Column diameter: 2.00



Data File: /chem/msde.i/24May2016.b/e052401.d

Date : 24-MAY-2016 06:55

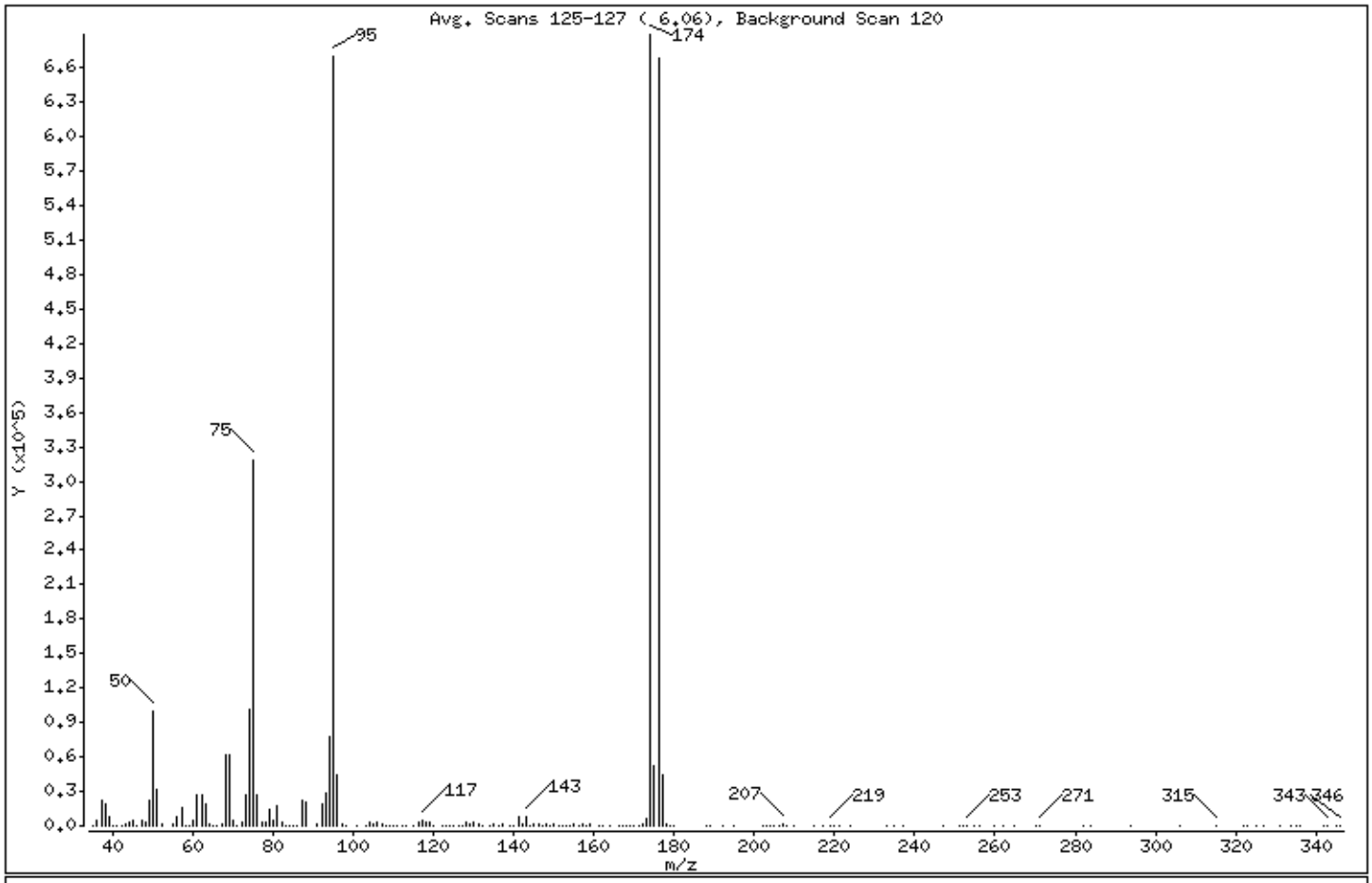
Client ID: BFB | Instrument: msde.i

Sample Info: 2.0uL #2299-1484; 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	14.94
75	30.00 - 66.00% of mass 95	47.47
96	5.00 - 9.00% of mass 95	6.51
173	Less than 1.99% of mass 174	0.95 (0.93)
174	50.00 - 120.00% of mass 95	102.77
175	4.00 - 9.00% of mass 174	7.83 (7.62)
176	93.00 - 101.00% of mass 174	99.59 (96.91)
177	5.00 - 9.00% of mass 176	6.65 (6.68)

Data File: /chem/msde.i/24May2016.b/e052401.d

Date : 24-MAY-2016 06:55

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase: Rtx-624

Column diameter: 2.00

Data File: e052401.d
Spectrum: Avg. Scans 125-127 (6.06), Background Scan 120
Location of Maximum: 174.00
Number of points: 181

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	34	83.00	443	137.00	1355	204.00	33
36.00	4087	84.00	170	139.00	441	205.00	200
37.00	22832	85.00	344	140.00	421	206.00	76
38.00	19248	86.00	523	141.00	7623	207.00	810
39.00	7418	87.00	22464	142.00	890	208.00	534
40.00	380	88.00	21376	143.00	7763	210.00	40
41.00	629	91.00	2040	144.00	464	215.00	75
42.00	318	92.00	19392	145.00	923	217.00	94
43.00	812	93.00	28496	146.00	1043	219.00	307
44.00	2582	94.00	77352	147.00	581	220.00	72
45.00	4234	95.00	670400	148.00	2023	221.00	47
46.00	265	96.00	43608	149.00	627	224.00	35
47.00	4691	97.00	1296	150.00	1082	233.00	17
48.00	3225	98.00	70	151.00	118	235.00	51
49.00	21728	101.00	61	152.00	495	237.00	117
50.00	100128	103.00	173	153.00	473	247.00	158
51.00	31056	104.00	2676	154.00	752	251.00	29
52.00	1666	105.00	1062	155.00	1977	252.00	72
55.00	1583	106.00	2723	156.00	310	253.00	271
56.00	7961	107.00	889	157.00	1614	255.00	103
57.00	16007	108.00	12	158.00	356	256.00	33
58.00	776	109.00	67	159.00	1032	260.00	225
59.00	164	110.00	518	161.00	767	262.00	111
60.00	5468	111.00	168	162.00	228	265.00	47
61.00	26656	112.00	448	164.00	232	270.00	175
62.00	27088	113.00	483	166.00	111	271.00	217
63.00	19432	115.00	464	167.00	144	282.00	91
64.00	2041	116.00	2882	168.00	36	284.00	69
65.00	652	117.00	4075	169.00	119	294.00	81
66.00	180	118.00	2772	170.00	433	306.00	135
67.00	1582	119.00	3426	171.00	320	315.00	177
68.00	61944	120.00	126	172.00	972	322.00	234
69.00	61384	122.00	341	173.00	6380	323.00	138
70.00	4642	123.00	225	174.00	688960	325.00	48
71.00	480	124.00	386	175.00	52488	327.00	59

Data File: /chem/msde.i/24May2016.b/e052401.d

Date : 24-MAY-2016 06:55

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL #2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase: Rtx-624

Column diameter: 2.00

Data File: e052401.d
Spectrum: Avg. Scans 125-127 (6.06), Background Scan 120
Location of Maximum: 174.00
Number of points: 181

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	3238	125.00	506	176.00	667584	331.00	57
73.00	26920	126.00	544	177.00	44600	334.00	132
74.00	101120	127.00	187	178.00	1244	335.00	87
75.00	318208	128.00	2470	179.00	103	336.00	204
76.00	27296	129.00	1376	180.00	22	342.00	129
77.00	3410	130.00	2662	188.00	39	343.00	758
78.00	2714	131.00	1448	189.00	47	345.00	141
79.00	14814	132.00	244	192.00	20	346.00	36
80.00	4191	134.00	75	195.00	277		
81.00	16800	135.00	983	202.00	48		
82.00	3040	136.00	460	203.00	29		

Eurofins Air Toxics Inc.

Data file : /var/chem/msde.i/14Jul2016.b/e071401.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 14-JUL-2016 08:15
Operator : ef Inst ID: msde.i
Smp Info : 2.0uL# 2299-1484; BFB; BFB
Misc Info : 50ng
Comment :
Method : /chem/msde.i/14Jul2016.b/bfb60.m
Meth Date : 03-Oct-2014 15:46 ejakob 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	
6.063	6.235	-0.172	95	579370			100.00- 100.00	100.00
6.063	6.235	-0.172	50	96013			8.00- 40.00	16.57
6.063	6.235	-0.172	75	299708			30.00- 66.00	51.73
6.063	6.235	-0.172	96	37169			5.00- 9.00	6.42
6.063	6.235	-0.172	173	5339			0.00- 1.99	0.94
6.063	6.235	-0.172	174	566194			50.00- 120.00	97.73
6.063	6.235	-0.172	175	41650			4.00- 9.00	7.36
6.063	6.235	-0.172	176	551210			93.00- 101.00	97.35
6.063	6.235	-0.172	177	36301			5.00- 9.00	6.59

Data File: /chem/msde.i/14Jul2016.b/e071401.d

Date : 14-JUL-2016 08:15

Client ID: BFB

Instrument: msde.i

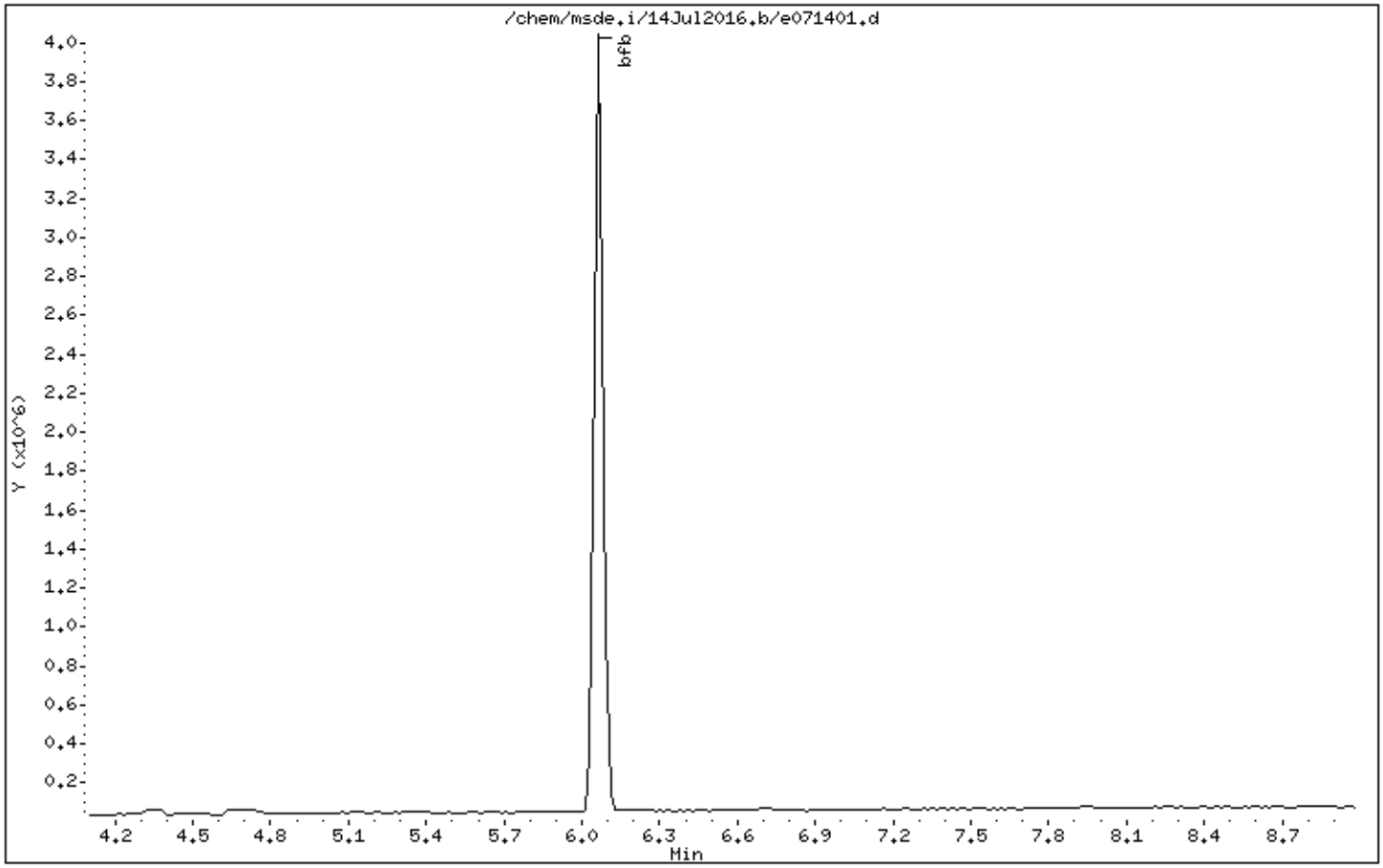
Sample Info: 2.0uL# 2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00



Data File: /chem/msde.i/14Jul2016.b/e071401.d

Date : 14-JUL-2016 08:15

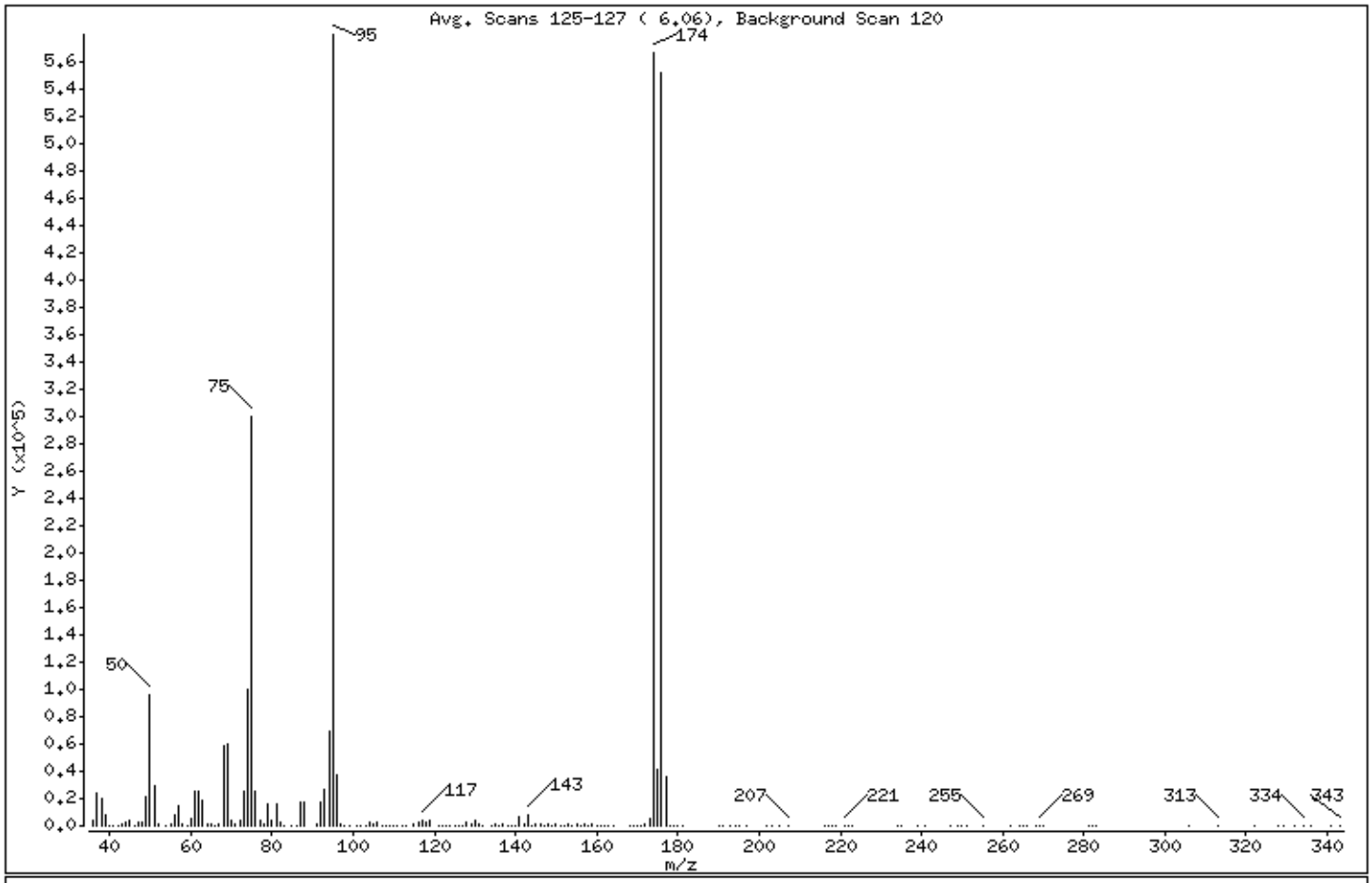
Client ID: BFB Instrument: msde.i

Sample Info: 2.0uL# 2299-1484; 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	16.57
75	30.00 - 66.00% of mass 95	51.73
96	5.00 - 9.00% of mass 95	6.42
173	Less than 1.99% of mass 174	0.92 (0.94)
174	50.00 - 120.00% of mass 95	97.73
175	4.00 - 9.00% of mass 174	7.19 (7.36)
176	93.00 - 101.00% of mass 174	95.14 (97.35)
177	5.00 - 9.00% of mass 176	6.27 (6.59)

Data File: /chem/msde.i/14Jul2016.b/e071401.d

Date : 14-JUL-2016 08:15

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL# 2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e071401.d
Spectrum: Avg. Scans 125-127 (6.06), Background Scan 120
Location of Maximum: 95.00
Number of points: 181

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4335	83.00	411	136.00	74	194.00	184
37.00	23520	85.00	467	137.00	980	195.00	94
38.00	19528	86.00	581	138.00	133	197.00	34
39.00	7814	87.00	17248	139.00	399	202.00	193
40.00	589	88.00	16656	140.00	332	203.00	133
41.00	402	91.00	1777	141.00	6845	205.00	4
42.00	283	92.00	17248	142.00	1006	207.00	463
43.00	710	93.00	26472	143.00	7623	216.00	77
44.00	2444	94.00	69024	144.00	380	217.00	87
45.00	3843	95.00	579328	145.00	883	218.00	56
46.00	386	96.00	37168	146.00	1087	219.00	51
47.00	3125	97.00	790	147.00	341	221.00	175
48.00	3026	98.00	87	148.00	1654	222.00	94
49.00	21008	99.00	40	149.00	458	223.00	8
50.00	96008	101.00	135	150.00	875	234.00	39
51.00	29728	102.00	163	151.00	165	235.00	35
52.00	1349	103.00	386	152.00	510	239.00	116
54.00	148	104.00	2770	153.00	706	241.00	35
55.00	1571	105.00	1177	154.00	334	247.00	26
56.00	7461	106.00	2650	155.00	1905	249.00	22
57.00	14382	107.00	630	156.00	523	250.00	87
58.00	772	108.00	4	157.00	1245	251.00	31
59.00	167	109.00	43	158.00	226	255.00	135
60.00	5215	110.00	460	159.00	961	262.00	109
61.00	24944	111.00	578	160.00	42	264.00	39
62.00	25528	112.00	620	161.00	498	265.00	60
63.00	19216	113.00	492	162.00	228	266.00	108
64.00	1870	115.00	761	163.00	272	268.00	83
65.00	1157	116.00	2235	164.00	64	269.00	483
66.00	137	117.00	3857	168.00	185	270.00	82
67.00	1355	118.00	2630	169.00	457	281.00	351
68.00	58400	119.00	3671	170.00	285	282.00	233
69.00	60584	121.00	27	171.00	495	283.00	341
70.00	4131	122.00	276	172.00	1945	306.00	36
71.00	696	123.00	172	173.00	5339	313.00	80

Data File: /chem/msde.i/14Jul2016.b/e071401.d

Date : 14-JUL-2016 08:15

Client ID: BFB

Instrument: msde.i

Sample Info: 2.0uL# 2299-1484; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e071401.d
Spectrum: Avg. Scans 125-127 (6.06), Background Scan 120
Location of Maximum: 95.00
Number of points: 181

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	3358	124.00	434	174.00	566144	322.00	132
73.00	25032	125.00	318	175.00	41648	328.00	208
74.00	99848	126.00	469	176.00	551168	329.00	54
75.00	299648	127.00	521	177.00	36296	332.00	38
76.00	25432	128.00	2390	178.00	563	334.00	411
77.00	3439	129.00	1168	179.00	31	336.00	43
78.00	1373	130.00	3364	180.00	36	341.00	214
79.00	15768	131.00	1016	181.00	111	343.00	219
80.00	4157	132.00	368	190.00	58		
81.00	15870	134.00	409	191.00	353		
82.00	3296	135.00	1111	193.00	288		

Shipping/ Receiving Documents

eurofins | Air Toxics

Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

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

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

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

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

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

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

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

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

Project Manager Terry Taylor
Collected by: (Print and Sign) R. O'Reilly, D. Lindstrand, T. Taylor
Company AMAI Email ttaylor@amaiconsult.com
Address 2800 Westchester Ave City Purchase State NY Zip 10577
Phone 914-251-0400 x309 Fax 914-251-1286

Project Info:
P.O. #
Project # Building 18 VI
Project Name

Turn Around Time: ☒ Normal ☒ Rush * specify

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

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
	B18IA-1 ~~(070816)~~	33531	7/9/16	1902	TO-15	-30"+	-6.5"		
	B18IA-2 ~~(070816)~~	6L0015	7/9/16	1849	TO-15	-30"+	-7"		
	B18IA-3 ~~(070816)~~	0174	7/9/16	1827	TO-15	-30"+	-5.5"		
	B18IA-4 ~~(070816)~~	12082	7/9/16	1835	TO-15	-30"+	-5"		
	B18IA-5 ~~(070816)~~	31146	7/9/16	1844	TO-15	-30"+	-6.5"		
	B18IA-1D ~~(070816)~~	21011	7/9/16	1902	TO-15	-30"+	-6.5"		
	~~B18AA (070816) (070816)~~	~~31346~~	~~7/9/16~~	~~1912~~	~~TO-15~~	~~30"+~~	~~"~~		
07A	* B30IA-1 (070816) *	0152	7/9/16	1812	TO-15	-30"+	-6.5"		
	B18SS-1 ~~(070816)~~	36376	7/10/16	1800	TO-15	-28"	-5"		
	B18SS-2 ~~(070816)~~	3043	7/10/16	1937	TO-15	-30"	-5"		

Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time
[signature] 07-13-16 1[illegible]	Fed EX
Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time
	[signature] EATL 7/14/16 10:20
Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time

Notes:
* Sample B30IA-1 (070816) a 24-hour TAT is requested. All other samples are a normal TAT. Report Results to MDL

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex		N/A	good	Yes No (None)	1607235

Form 1293 rev.11

Operating Report

Run Information

Machine ID:	10101	Sample ID:	;%1607235-07A;6L0493
Operator:	EA	Date:	2016 07 14
Run Mode:	Running sample dilution	Start Time:	18:33:01
Inlet Position:	Sample	Elapsed Time:	00:00:46
Execute State:	Completed successfully!		

Parameter Information

Sample	Set	Actual
P_ini:	11.9PSI	11.9PSI
P_fin:	19.7PSI	19.5PSI
DF:	1.7	1.6

Nutech/GD Environmental Supplies, All Rights Reserved

eurofins | Air Toxics

SAMPLE RECEIPT SUMMARY

WORKORDER 1607235A

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: 07/15/16 2:00 pm
Date Completed: 7/15/16
Date Received: 7/14/16
PO#:
Project#: Building 18 VI

Total $: $ 1,842.21
Logged By: JCW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
07A	B30IA-1 (070816)	Modified TO-15	7/9/2016	5.7 "Hg	$270.00
08A	Lab Blank	Modified TO-15	NA	4.7 "Hg	$0.00
09A	CCV	Modified TO-15	NA	4.7 "Hg	$0.00
10A	LCS	Modified TO-15	NA	4.7 "Hg	$0.00
10AA	LCSD	Modified TO-15	NA	4.7 "Hg	$0.00

Misc. Charges	1 Liter Summa Canister (100% Certified) (8) @ $40.00 each., Shipme	$320.00
	6 Liter Summa Canister (100% Certified) (9) @ $55.00 each., Shipme	$495.00
	Blue Body Flow Controller (100% Certified) (8) @ $10.00 each., Ship	$80.00
	Flow Controller-24 hr (100% Certified) (9) @ $25.00 each., Shipment	$225.00
	eCVP (1) @ $5.00 each.	$5.00
	Shipping Charges (Shipped Via DHL DHL EXPRESS WORLDWIDE	$431.21
	Duplicate Sampling T (2) @ $8.00 each.	$16.00

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 100% surcharge is applied for a 24 hour turnaround time.

TERMS:

Reporting Method: Modified TO-15-LL + Naph

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

Other Records

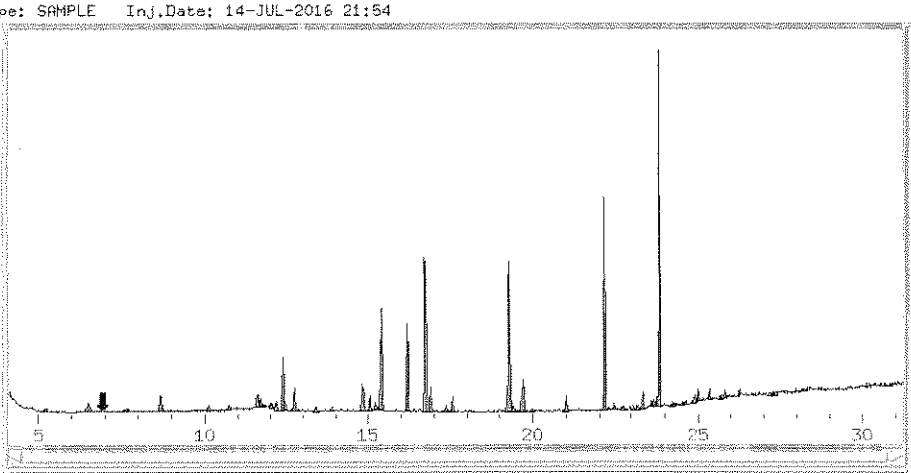
TargetReview: eeyore: 1607235A-07A: /chem/msde.i/14.Jul2016.b/e071418.d

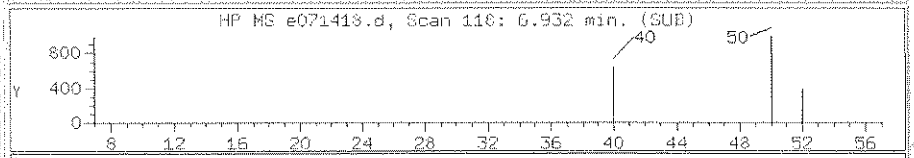
File Security Edit Display Process Spectra Help

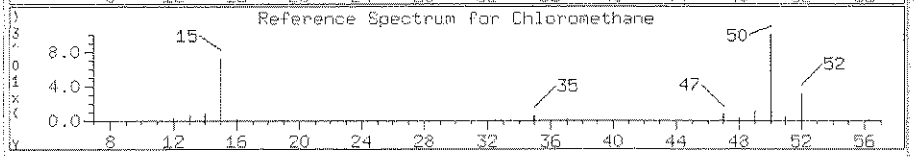
Sample: 1607235A-07A Type: SAMPLE Inj.Date: 14-JUL-2016 21:54

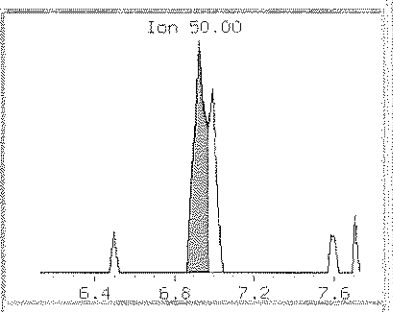
- + 11 Freon 12
- 15 Freon 114
- + 17 Chloromethane
- 25 Vinyl Chloride
- 26 1,3-Butadiene
- 29 Bromomethane
- 30 Chloroethane
- + 35 Freon 11
- + 42 Ethanol
- + 49 Freon 113
- 50 1,1-Dichloroetl
- + 52 Acetone
- + 56 Carbon Disulfi
- + 57 2-Propanol
- 58 3-Chloropropen
- + 66 Methylene Chlo
- 72 Methyl tert-bu
- 73 trans-1,2-Dich.
- 78 Hexane
- 82 1,1-Dichloroetl
- 91 cis-1,2-Dichlo
- + 92 2-Butanone
- 99 Tetrahydrofura
- ** 98 Bromochlorometl
- 100 Chloroform

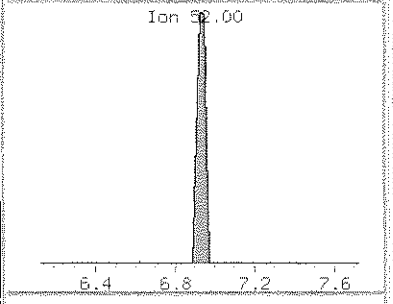
e071418.d











Hit#	RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
1	6.932	4826	0.2747	0.4505	100	a	
	6.932	1349			28		
2	7.004	2494	0.1420	0.2328	100	a	
	6.932	1349			54		

- Mark Chloromethane Undetected.

Analyze Peak

Compound: Chloromethane

Update Method Expected RTs

Time	New Time
6.932	

Before

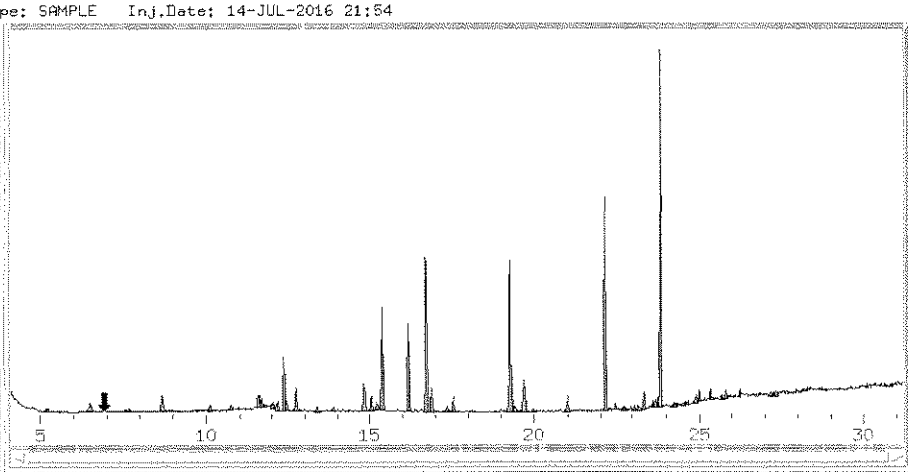
TargetReview: eeyore: 1607235A-07A: /chem/msde.i/14Jul2016.b/e071418.d

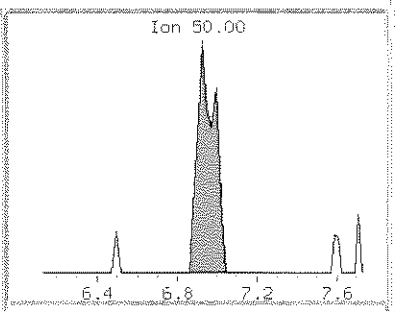
File Security Edit Display Process Spectra Help

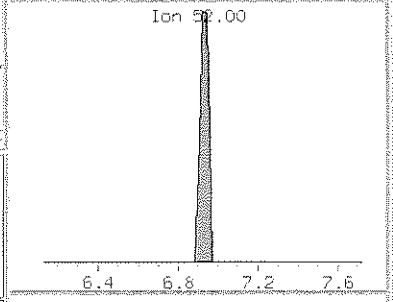
Sample: 1607235A-07A Type: SAMPLE Inj.Date: 14-JUL-2016 21:54

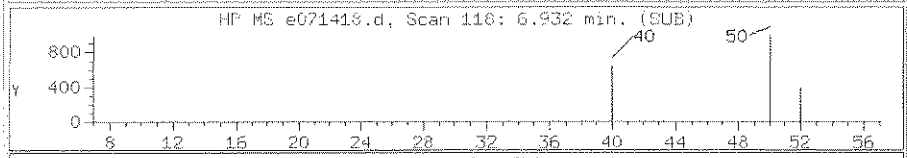
- + 11 Freon 12
- 15 Freon 114
- *! 17 Chloromethane
- 25 Vinyl Chloride
- 26 1,3-Butadiene
- 29 Bromomethane
- 30 Chloroethane
- + 35 Freon 11
- + 42 Ethanol
- + 49 Freon 113
- 50 1,1-Dichloroetl
- + 52 Acetone
- + 56 Carbon Disulfi
- + 57 2-Propanol
- 58 3-Chloropropen
- + 66 Methylene Chlo
- 72 Methyl tert-bu
- 73 trans-1,2-Dich.
- 78 Hexane
- 82 1,1-Dichloroetl
- 91 cis-1,2-Dichlo
- + 92 2-Butanone
- 99 Tetrahydrofura
- ** 98 Bromochlorometl
- 100 Chloroform

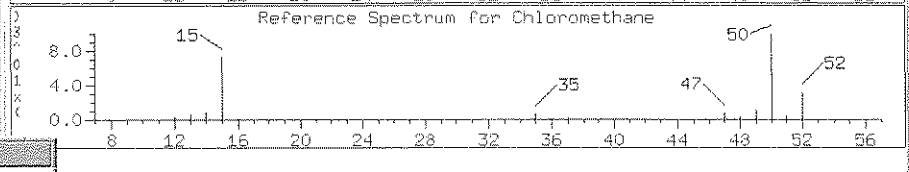
e071418.d











Manual Int.

Time: 6.932

Area: 6430

Height: 990

Done

Help

- Snap to Data
- Snap to Int Marks
- Overlap Peaks
- Assign Baseline
- Split Peak

RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
6.932	6430	0.3659	0.6001	100	aM	
6.932	1349			21		

Mark Chloromethane Undetected.

Assign Peak

Compound: Chloromethane

Update Method Expected RTs

Time	New Time
6.932	

After MC 7/15/16

Correct Baseline	
Split Peak	✓
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

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

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

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

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

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

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

Compound List

Modified TO-15-LL + Naph

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

Compound List

Modified TO-15-LL + Naph

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

eurofins | Air Toxics

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

Media Certification Report

Canister Number: 6L# 33531
Can#: 108154-33531
Date : 06/29/16 22:31
Data File: d062917.d

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon 113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		100.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	100.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	108.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	108.00	% Recovery
Toluene-d8	2037-26-5	0.050	102.00	% Recovery
Toluene-d8	2037-26-5	0.250	102.00	% Recovery

eurofins | Air Toxics

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

Media Certification Report

Canister Number: 6L# 6L0015
Can#: 108154-6L0015
Date : 06/30/16 6:31
Data File: d062930.d

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon 113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		103.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	103.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	104.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	104.00	% Recovery
Toluene-d8	2037-26-5	0.050	100.00	% Recovery
Toluene-d8	2037-26-5	0.250	100.00	% Recovery

eurofins | Air Toxics

Media Certification Report

Canister Number: 6L# 0174
Can#: 108154-0174
Date : 06/29/16 21:54
Data File: d062916.d

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

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon 113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		100.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	100.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	106.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	106.00	% Recovery
Toluene-d8	2037-26-5	0.050	103.00	% Recovery
Toluene-d8	2037-26-5	0.250	103.00	% Recovery

eurofins | Air Toxics

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

Media Certification Report

Canister Number: 6L# 12082
Can#: 108154-12082
Date : 06/29/16 23:08
Data File: d062918.d

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon 113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		99.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	99.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	107.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	107.00	% Recovery
Toluene-d8	2037-26-5	0.050	100.00	% Recovery
Toluene-d8	2037-26-5	0.250	100.00	% Recovery

eurofins | Air Toxics

Media Certification Report

Canister Number: 6L# 31146
Can#: 108154-31146
Date : 06/30/16 0:59
Data File: d062921.d

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

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon 113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		101.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	101.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	107.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	107.00	% Recovery
Toluene-d8	2037-26-5	0.050	102.00	% Recovery
Toluene-d8	2037-26-5	0.250	102.00	% Recovery

eurofins | Air Toxics

Media Certification Report

Canister Number: 6L# 21011
Can#: 108154-21011
Date : 06/30/16 0:22
Data File: d062920.d

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

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon.113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		100.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	100.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	104.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	104.00	% Recovery
Toluene-d8	2037-26-5	0.050	102.00	% Recovery
Toluene-d8	2037-26-5	0.250	102.00	% Recovery

eurofins | Air Toxics

Media Certification Report

Canister Number: 6L# 0152
Can#: 108154-0152
Date : 06/29/16 21:17
Data File: d062915.d

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

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon 113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		101.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	101.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	108.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	108.00	% Recovery
Toluene-d8	2037-26-5	0.050	102.00	% Recovery
Toluene-d8	2037-26-5	0.250	102.00	% Recovery

eurofins | Air Toxics

Media Certification Report

Canister Number: 1L# 36376
Can#: 108154-36376
Date : 06/30/16 2:49
Data File: i062927.d

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

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon 113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		97.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	97.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	118.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	118.00	% Recovery
Toluene-d8	2037-26-5	0.050	104.00	% Recovery
Toluene-d8	2037-26-5	0.250	104.00	% Recovery

eurofins | Air Toxics

Media Certification Report

Canister Number: 1L# 3043
Can#: 108154-3043
Date : 06/30/16 1:09
Data File: i062924.d

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

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon 113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		99.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	99.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	110.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	110.00	% Recovery
Toluene-d8	2037-26-5	0.050	104.00	% Recovery
Toluene-d8	2037-26-5	0.250	104.00	% Recovery

eurofins | Air Toxics

Media Certification Report

Canister Number: 1L# 8031
Can#: 108154-8031
Date : 06/30/16 0:36
Data File: i062923.d

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

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon 113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		100.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	100.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	107.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	107.00	% Recovery
Toluene-d8	2037-26-5	0.050	104.00	% Recovery
Toluene-d8	2037-26-5	0.250	104.00	% Recovery

eurofins | Air Toxics

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

Media Certification Report

Canister Number: 1L# 1025
Can#: 108154-1025
Date : 06/30/16 1:43
Data File: i062925.d

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon 113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		97.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	97.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	116.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	116.00	% Recovery
Toluene-d8	2037-26-5	0.050	104.00	% Recovery
Toluene-d8	2037-26-5	0.250	104.00	% Recovery

eurofins | Air Toxics

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

Media Certification Report

Canister Number: 1L# 36525
Can#: 108154-36525
Date : 06/29/16 17:37
Data File: i062910.d

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon 113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		94.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	94.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	113.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	113.00	% Recovery
Toluene-d8	2037-26-5	0.050	103.00	% Recovery
Toluene-d8	2037-26-5	0.250	103.00	% Recovery

eurofins | Air Toxics

Media Certification Report

Canister Number: 1L# 1L1663
Can#: 108154-30832
Date : 06/29/16 18:09
Data File: i062911.d

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

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon 113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		94.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	94.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	112.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	112.00	% Recovery
Toluene-d8	2037-26-5	0.050	104.00	% Recovery
Toluene-d8	2037-26-5	0.250	104.00	% Recovery

eurofins | Air Toxics

Media Certification Report

Canister Number: 6L# 12947
Can#: 108154-12947
Date : 06/29/16 20:40
Data File: d062914.d

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

Name	CAS	Cert RL	Conc.	Units
1,1,1-Trichloroethane	71-55-6	0.050	ND	ppbv
1,1,1-Trichloroethane	71-55-6	0.250	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.050	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	0.250	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.050	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.250	ND	ppbv
1,1-Dichloroethane	75-34-3	0.050	ND	ppbv
1,1-Dichloroethane	75-34-3	0.250	ND	ppbv
1,1-Dichloroethene	75-35-4	0.050	ND	ppbv
1,1-Dichloroethene	75-35-4	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	0.250	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	1.000	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.050	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.250	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.050	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	0.250	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.050	ND	ppbv
1,2-Dichlorobenzene	95-50-1	0.250	ND	ppbv
1,2-Dichloroethane	107-06-2	0.050	ND	ppbv
1,2-Dichloroethane	107-06-2	0.250	ND	ppbv
1,2-Dichloropropane	78-87-5	0.050	ND	ppbv
1,2-Dichloropropane	78-87-5	0.250	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.050	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	0.250	ND	ppbv
1,3-Butadiene	106-99-0	0.050	ND	ppbv
1,3-Butadiene	106-99-0	0.250	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.050	ND	ppbv
1,3-Dichlorobenzene	541-73-1	0.250	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.050	ND	ppbv
1,4-Dichlorobenzene	106-46-7	0.250	ND	ppbv
1,4-Dioxane	123-91-1	0.050	ND	ppbv
1,4-Dioxane	123-91-1	1.000	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.250	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.000	ND	ppbv
2-Hexanone	591-78-6	0.250	ND	ppbv
2-Hexanone	591-78-6	1.000	ND	ppbv
2-Propanol	67-63-0	0.250	ND	ppbv
2-Propanol	67-63-0	1.000	ND	ppbv
3-Chloropropene	107-05-1	0.250	ND	ppbv
3-Chloropropene	107-05-1	1.000	ND	ppbv
4-Ethyltoluene	622-96-8	0.050	ND	ppbv
4-Ethyltoluene	622-96-8	0.250	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
4-Methyl-2-pentanone	108-10-1	0.050	ND	ppbv
4-Methyl-2-pentanone	108-10-1	0.250	ND	ppbv
Acetone	67-64-1	0.250	ND	ppbv
Acetone	67-64-1	2.500	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.050	ND	ppbv
alpha-Chlorotoluene	100-44-7	0.250	ND	ppbv
Benzene	71-43-2	0.050	ND	ppbv
Benzene	71-43-2	0.250	ND	ppbv
Bromodichloromethane	75-27-4	0.050	ND	ppbv
Bromodichloromethane	75-27-4	0.250	ND	ppbv
Bromoform	75-25-2	0.050	ND	ppbv
Bromoform	75-25-2	0.250	ND	ppbv
Bromomethane	74-83-9	0.250	ND	ppbv
Bromomethane	74-83-9	2.500	ND	ppbv
Carbon Disulfide	75-15-0	0.250	ND	ppbv
Carbon Disulfide	75-15-0	1.000	ND	ppbv
Carbon Tetrachloride	56-23-5	0.050	ND	ppbv
Carbon Tetrachloride	56-23-5	0.250	ND	ppbv
Chlorobenzene	108-90-7	0.050	ND	ppbv
Chlorobenzene	108-90-7	0.250	ND	ppbv
Chloroethane	75-00-3	0.250	ND	ppbv
Chloroethane	75-00-3	1.000	ND	ppbv
Chloroform	67-66-3	0.050	ND	ppbv
Chloroform	67-66-3	0.250	ND	ppbv
Chloromethane	74-87-3	0.250	ND	ppbv
Chloromethane	74-87-3	2.500	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.050	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.250	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.050	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	0.250	ND	ppbv
Cumene	98-82-8	0.050	ND	ppbv
Cumene	98-82-8	0.250	ND	ppbv
Cyclohexane	110-82-7	0.050	ND	ppbv
Cyclohexane	110-82-7	0.250	ND	ppbv
Dibromochloromethane	124-48-1	0.050	ND	ppbv
Dibromochloromethane	124-48-1	0.250	ND	ppbv
Ethanol	64-17-5	0.250	ND	ppbv
Ethanol	64-17-5	1.000	ND	ppbv
Ethyl Benzene	100-41-4	0.050	ND	ppbv
Ethyl Benzene	100-41-4	0.250	ND	ppbv
Freon 11	75-69-4	0.050	ND	ppbv
Freon 11	75-69-4	0.250	ND	ppbv
Freon 113	76-13-1	0.050	ND	ppbv
Freon 113	76-13-1	0.250	ND	ppbv
Freon 114	76-14-2	0.050	ND	ppbv
Freon 114	76-14-2	0.250	ND	ppbv
Freon 12	75-71-8	0.050	ND	ppbv
Freon 12	75-71-8	0.250	ND	ppbv
Heptane	142-82-5	0.050	ND	ppbv
Heptane	142-82-5	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	0.250	ND	ppbv
Hexachlorobutadiene	87-68-3	1.000	ND	ppbv
Hexane	110-54-3	0.050	ND	ppbv

Name	CAS	Cert RL	Conc.	Units
Hexane	110-54-3	0.250	ND	ppbv
m,p-Xylene	108-38-3	0.050	ND	ppbv
m,p-Xylene	108-38-3	0.250	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.050	ND	ppbv
Methyl tert-butyl ether	1634-04-4	0.250	ND	ppbv
Methylene Chloride	75-09-2	0.100	ND	ppbv
Methylene Chloride	75-09-2	2.500	ND	ppbv
Naphthalene	91-20-3	0.250	ND	ppbv
Naphthalene	91-20-3	0.500	ND	ppbv
o-Xylene	95-47-6	0.050	ND	ppbv
o-Xylene	95-47-6	0.250	ND	ppbv
Propylbenzene	103-65-1	0.050	ND	ppbv
Propylbenzene	103-65-1	0.250	ND	ppbv
Styrene	100-42-5	0.050	ND	ppbv
Styrene	100-42-5	0.250	ND	ppbv
Tetrachloroethene	127-18-4	0.050	ND	ppbv
Tetrachloroethene	127-18-4	0.250	ND	ppbv
Tetrahydrofuran	109-99-9	0.250	ND	ppbv
Toluene	108-88-3	0.050	ND	ppbv
Toluene	108-88-3	0.250	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.050	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.250	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.050	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	0.250	ND	ppbv
Trichloroethene	79-01-6	0.050	ND	ppbv
Trichloroethene	79-01-6	0.250	ND	ppbv
Vinyl Chloride	75-01-4	0.050	ND	ppbv
Vinyl Chloride	75-01-4	0.250	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		101.00	% Recovery
1,2-Dichloroethane-d4	17060-07-0	0.250	101.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.050	106.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.250	106.00	% Recovery
Toluene-d8	2037-26-5	0.050	102.00	% Recovery
Toluene-d8	2037-26-5	0.250	102.00	% Recovery

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 02/23/16
Workorder # 1607235A	Form F1.27	Revision #13	Revision Date: 02/23/16	Page 1 of 2

S1	S2	S3	S4	D	Section 1 – Spec Out				
					Initials/Instrument/Date	S1: GH 7/14/16	S2:	S3:	S4:
✓					Project Identification (PID), Project Requirements Table (PRT), Daily QC and ICAL met Criteria				
✓					Lumen QC and ICAL evaluation (ref. SOP/Method) report initialed and in folder				
✓					Manual Integrations included and approved				
✓				✓	Chain of Custody verified for special comments (add comments below)				
✓					Non-standard Target sublist verified (MDL, LOD, RL, control limits, etc.)				

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

CCV-low LCS/LCSD - low in RPD J Flag to MDL

A1	A2	A3	A4	D	Section 2 – Sample Analysis				
					Initials/Date	A1: GH 7/14/16	A2:	A3:	A4:
✓				✓	IS/Surr Recoveries, Dilution Factors, Load Volumes, leg(s) of instrument, Initial/Final Pressures, and Canister #s Verified				
✓				NA	a) Tedlar Bag IDs verified against COC b) Tedlar Bag ID confirmed with loading sequence/leg(s) of instrument				
✓				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) has been evaluated for comparability and/or sample(s) has/have been checked for trends (Inf/Eff), field dups/trip blanks, samples following bad loads on CIAAs have been verified (system blks, confirmation runs).				
				✓	All runs have been evaluated for potential carry-over (TPHg/non-Target/over-range compounds/ etc.)				

Analytical and special notes:

DFA=full load

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction	Technical Review Needed? Circle one: Yes/No		T:	
						Initials/Instrument/ Date	D1: MC 7/15/16	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: ϕ on RPD (LCS/LCSD)

A	3T	Section 4- Atlas Data Entry	Lumen verified and included in folder	Circle one: Yes/No
		Initials/Date: MC 7/15/16	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

Workorder # :				Reason for Reissue:
W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director

Additional Comments:

Write Up (Initials/Date)	Tech Review (Initials/Date)	*3rd Tier Review ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	QA Review (Initials/Date)

Workorder # :				Reason for Reissue:
W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director

Additional Comments:

Write Up (Initials/Date)	Tech Review (Initials/Date)	*3rd Tier Review ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	QA Review (Initials/Date)

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

Not Applicable