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Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

TO-15

INVENTORY SHEET

Work Order #: 1701428B

	Page Nos. From	Page Nos. To
1. Work Order Cover Page & Laboratory Narrative	1	4
a. Lumen Validation Report	--	--
2. Sample Results and Raw Data (Organized by Sample)	5	90
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)	91	107
b. Surrogate Recover Summary Form (If Applicable)	108	108
c. Internal Standard Summary Form (If Applicable)	109	111
d. Duplicate Results Summary Sheet	112	115
e. Matrix Spike/Matrix Spike Duplicate (Results + Raw Data	--	--
f. Initial Calibration Data (Summary Sheet + Raw Data)	116	397
g. MDL Study (If Applicable)	398	469
h. Continuing Calibration Verification Data (Summary Sheet	470	500
i. Second Source LCS(Summary + Raw Data)	501	556
j. Extraction Logs	--	--
k. Instrument Run Logs/Software Verification	557	559
l. GC/MS Tune (Results + Raw Data)	560	587
4. Shipping/Receiving Documents		
a. Login Receipt Summary Sheet	588	589
b. Chain-of-Custody Records	590	590
c. Sample Log-In Sheet	591	591
d. Misc Shipping/Receiving Records (list of individual records)		
Sample Receipt Discrepancy Report	--	--
5. Other Records (describe or list)		
a. Manual Spectral Defense	--	--
b. Manual Integrations	--	--
c. Manual Calculations	--	--
d. Canister Dilution Factors	592	594
e. Laboratory Corrective Action Request	--	--
f. CAS Number Reference	595	596
g. Variance Table	--	--
h. Canister Certification	--	--
i. Data Review Check Sheet	597	598

Comments:

Completed by:

Vera Belitsky	Vera Belitsky / Document Control	2/20/17
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 1701428B

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 #**	BMS VI
DATE RECEIVED:	01/30/2017	**CONTACT:**	Brian Whittaker
DATE COMPLETED:	02/09/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
16A	B8SS-2-012417	TO-15	5.7 "Hg	14.9 psi
17A	B8SS-2D-012417	TO-15	4.9 "Hg	15.1 psi
18A	B18SS-1-012617	TO-15	5.5 "Hg	15.3 psi
19A	B18SS-1Dup-012617	TO-15	5.5 "Hg	14.8 psi
20A	Lab Blank	TO-15	NA	NA
20B	Lab Blank	TO-15	NA	NA
21A	CCV	TO-15	NA	NA
21B	CCV	TO-15	NA	NA
22A	LCS	TO-15	NA	NA
22AA	LCSD	TO-15	NA	NA
22B	LCS	TO-15	NA	NA
22BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Mayo

Technical Director

DATE: 02/09/17

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

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
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LABORATORY NARRATIVE
EPA Method TO-15
Anderson Mulholland & Associates, Inc.
Workorder# 1701428B

Four 1 Liter Summa Canister (100% Certified) samples were received on January 30, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

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. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

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

Dilution was performed on samples B8SS-2-012417 and B8SS-2D-012417 due to the presence of high level non-target species.

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
B8SS-2-012417	1701428B-16A	1/24/2017	1/30/2017	NA	13	2/ 6/2017	NA	Good
B8SS-2D-012417	1701428B-17A	1/24/2017	1/30/2017	NA	13	2/ 6/2017	NA	Good
B18SS-1-012617	1701428B-18A	1/26/2017	1/30/2017	NA	8	2/ 3/2017	NA	Good
B18SS-1Dup-012617	1701428B-19A	1/26/2017	1/30/2017	NA	8	2/ 3/2017	NA	Good
Lab Blank	1701428B-20A	NA	NA	NA	NA	2/ 3/2017	NA	Good
Lab Blank	1701428B-20B	NA	NA	NA	NA	2/ 6/2017	NA	Good
CCV	1701428B-21A	NA	NA	NA	NA	2/ 2/2017	NA	Good
CCV	1701428B-21B	NA	NA	NA	NA	2/ 6/2017	NA	Good
LCS	1701428B-22A	NA	NA	NA	NA	2/ 2/2017	NA	Good
LCSD	1701428B-22AA	NA	NA	NA	NA	2/ 2/2017	NA	Good
LCS	1701428B-22B	NA	NA	NA	NA	2/ 6/2017	NA	Good
LCSD	1701428B-22BB	NA	NA	NA	NA	2/ 6/2017	NA	Good

Sample Results and Raw Data

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

Client Sample ID: B8SS-2-012417

Lab ID#: 1701428B-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	120	250	450	920
Hexane	120	360	440	1300
Cyclohexane	120	1000	430	3600
Heptane	120	480	510	2000
m,p-Xylene	120	52 J	540	220 J
Cumene	120	130	610	640

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Client Sample ID: B8SS-2-012417

Lab ID#: 1701428B-16A

EPA METHOD TO-15 GC/MS

File Name:	**14020610**	**Date of Collection:**	**1/24/17 3:35:00 PM**
Dil. Factor:	**24.9**	**Date of Analysis:**	**2/6/17 02:24 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	120	Not Detected	620	Not Detected
Freon 114	120	Not Detected	870	Not Detected
Chloromethane	500	Not Detected	1000	Not Detected
Vinyl Chloride	120	Not Detected	320	Not Detected
1,3-Butadiene	120	Not Detected	280	Not Detected
Bromomethane	500	Not Detected	1900	Not Detected
Chloroethane	500	Not Detected	1300	Not Detected
Freon 11	120	Not Detected	700	Not Detected
Ethanol	500	Not Detected	940	Not Detected
Freon 113	120	Not Detected	950	Not Detected
1,1-Dichloroethene	120	Not Detected	490	Not Detected
Acetone	500	Not Detected	1200	Not Detected
2-Propanol	500	Not Detected	1200	Not Detected
Carbon Disulfide	500	Not Detected	1600	Not Detected
3-Chloropropene	500	Not Detected	1600	Not Detected
Methylene Chloride	500	Not Detected	1700	Not Detected
Methyl tert-butyl ether	120	250	450	920
trans-1,2-Dichloroethene	120	Not Detected	490	Not Detected
Hexane	120	360	440	1300
1,1-Dichloroethane	120	Not Detected	500	Not Detected
2-Butanone (Methyl Ethyl Ketone)	500	Not Detected	1500	Not Detected
cis-1,2-Dichloroethene	120	Not Detected	490	Not Detected
Tetrahydrofuran	120	Not Detected	370	Not Detected
Chloroform	120	Not Detected	610	Not Detected
1,1,1-Trichloroethane	120	Not Detected	680	Not Detected
Cyclohexane	120	1000	430	3600
Carbon Tetrachloride	120	Not Detected	780	Not Detected
2,2,4-Trimethylpentane	120	Not Detected	580	Not Detected
Benzene	120	Not Detected	400	Not Detected
1,2-Dichloroethane	120	Not Detected	500	Not Detected
Heptane	120	480	510	2000
Trichloroethene	120	Not Detected	670	Not Detected
1,2-Dichloropropane	120	Not Detected	580	Not Detected
1,4-Dioxane	500	Not Detected	1800	Not Detected
Bromodichloromethane	120	Not Detected	830	Not Detected
cis-1,3-Dichloropropene	120	Not Detected	560	Not Detected
4-Methyl-2-pentanone	120	Not Detected	510	Not Detected
Toluene	120	Not Detected	470	Not Detected
trans-1,3-Dichloropropene	120	Not Detected	560	Not Detected
1,1,2-Trichloroethane	120	Not Detected	680	Not Detected
Tetrachloroethene	120	Not Detected	840	Not Detected
2-Hexanone	500	Not Detected	2000	Not Detected

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Client Sample ID: B8SS-2-012417

Lab ID#: 1701428B-16A

EPA METHOD TO-15 GC/MS

File Name:	**14020610**	**Date of Collection:**	**1/24/17 3:35:00 PM**
Dil. Factor:	**24.9**	**Date of Analysis:**	**2/6/17 02:24 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	120	Not Detected	1100	Not Detected
1,2-Dibromoethane (EDB)	120	Not Detected	960	Not Detected
Chlorobenzene	120	Not Detected	570	Not Detected
Ethyl Benzene	120	Not Detected	540	Not Detected
m,p-Xylene	120	52 J	540	220 J
o-Xylene	120	Not Detected	540	Not Detected
Styrene	120	Not Detected	530	Not Detected
Bromoform	120	Not Detected	1300	Not Detected
Cumene	120	130	610	640
1,1,2,2-Tetrachloroethane	120	Not Detected	850	Not Detected
Propylbenzene	120	Not Detected	610	Not Detected
4-Ethyltoluene	120	Not Detected	610	Not Detected
1,3,5-Trimethylbenzene	120	Not Detected	610	Not Detected
1,2,4-Trimethylbenzene	120	Not Detected	610	Not Detected
1,3-Dichlorobenzene	120	Not Detected	750	Not Detected
1,4-Dichlorobenzene	120	Not Detected	750	Not Detected
alpha-Chlorotoluene	120	Not Detected	640	Not Detected
1,2-Dichlorobenzene	120	Not Detected	750	Not Detected
1,2,4-Trichlorobenzene	500	Not Detected	3700	Not Detected
Hexachlorobutadiene	500	Not Detected	5300	Not Detected
Naphthalene	500	Not Detected	2600	Not Detected

J = Estimated value.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	102	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/06feb17.b/14020610.d
Lab Smp Id: 1701428B-16A
Inj Date : 06-FEB-2017 14:24
Operator : gd Inst ID: msd14.i
Smp Info : 5.0mL #1L1603
Misc Info : 5.7"Hg->14.9psi
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/06feb17.b/14651201b.m
Meth Date : 06-Feb-2017 12:42 gdelacru Quant Type: ISTD
Cal Date : 19-DEC-2016 11:43 Cal File: 14121908.d
Als bottle: 1
Dil Factor: 24.90000
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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.312	5.312 (1.000)	130	87894	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	69963			46.96- 106.96	79.60
5.312	5.312 (1.000)	49	110773			97.69- 157.69	126.03
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.446	6.446 (1.000)	114	362958	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	53054			0.00- 45.92	14.62
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
10.335	10.335 (1.000)	117	330352	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	263832			19.32- 79.32	79.86
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.984	5.984 (1.126)	65	102819	382.069	382.07	80.00- 120.00	100.00(a)
5.984	5.984 (1.126)	67	53082			24.72- 84.72	51.63
$ 146 Toluene-d8						CAS #: 2037-26-5	
8.489	8.503 (1.317)	98	348201	388.484	388.48	80.00- 120.00	100.00(a)
8.489	8.489 (1.317)	70	42218			0.00- 40.20	12.12

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8 (continued)							
8.489	8.489 (1.317)	100	239802			38.62- 98.62	68.87
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
11.343	11.343 (1.097)	174	210285	410.180	410.18	80.00- 120.00	100.00(a)
11.343	11.343 (1.097)	95	267100			89.78- 149.78	127.02
11.343	11.343 (1.097)	176	203743			66.10- 126.10	96.89
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.857	3.857 (0.726)	73	7212	10.2367	254.89	80.00- 120.00	100.00
3.857	3.857 (0.726)	57	2301			0.00- 56.69	31.91
3.857	3.857 (0.726)	41	2364			0.00- 54.89	32.78
78 Hexane					CAS #: 110-54-3		
4.095	4.095 (0.771)	57	6692	14.3819	358.11	80.00- 120.00	100.00
4.095	4.095 (0.771)	43	5161			34.03- 94.03	77.12
4.109	4.095 (0.773)	86	978			0.00- 45.63	14.61
102 Cyclohexane					CAS #: 110-82-7		
5.494	5.494 (1.034)	84	14771	41.4290	1031.6	80.00- 120.00	100.00
5.494	5.494 (1.034)	56	30354			109.96- 169.96	205.49
5.494	5.494 (1.034)	41	16622			47.10- 107.10	112.53
121 Heptane					CAS #: 142-82-5		
6.152	6.152 (0.954)	71	6460	19.1685	477.30	80.00- 120.00	100.00
6.152	6.152 (0.954)	43	13540			167.16- 227.16	209.59
6.152	6.166 (0.954)	100	2159			4.59- 64.59	33.42
169 m,p-Xylene					CAS #: 108-38-3		
10.559	10.559 (1.022)	106	1237	2.07214	51.596	80.00- 120.00	100.00(a)
10.559	10.559 (1.022)	91	3875			163.96- 223.96	313.19
175 Cumene					CAS #: 98-82-8		
11.189	11.203 (1.083)	105	9228	5.19478	129.35	80.00- 120.00	100.00
11.189	11.203 (1.083)	120	2669			0.00- 57.87	28.93
11.189	11.189 (1.083)	51	4480			0.00- 40.21	48.55

QC Flag Legend

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

Report Date: 09-Feb-2017 15:05

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14020610.d
Lab Smp Id: 1701428B-16A
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msd14.i/06feb17.b/14651201b.m
Misc Info: 5.7"Hg->14.9psi

Calibration Date: 06-FEB-2017
Calibration Time: 09:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	81368	48821	113915	87894	8.02
123 1,4-Difluorobenze	344671	206803	482539	362958	5.31
163 Chlorobenzene-d5	321726	193036	450416	330352	2.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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: 09-Feb-2017 15:05

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 06feb17
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1701428B-16A
Level: LOW Operator: gd
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12ethanol.spk Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msd14.i/06feb17.b/14651201b.m
Misc Info: 5.7"Hg->14.9psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	400.00	382.07	95.52	70-130
$ 146 Toluene-d8	400.00	388.48	97.12	70-130
$ 177 4-Bromofluorobenze	400.00	410.18	102.55	70-130

Data File: /chem/msd14.i/06feb17.b/14020610.d

Date : 06-FEB-2017 14:24

Client ID:

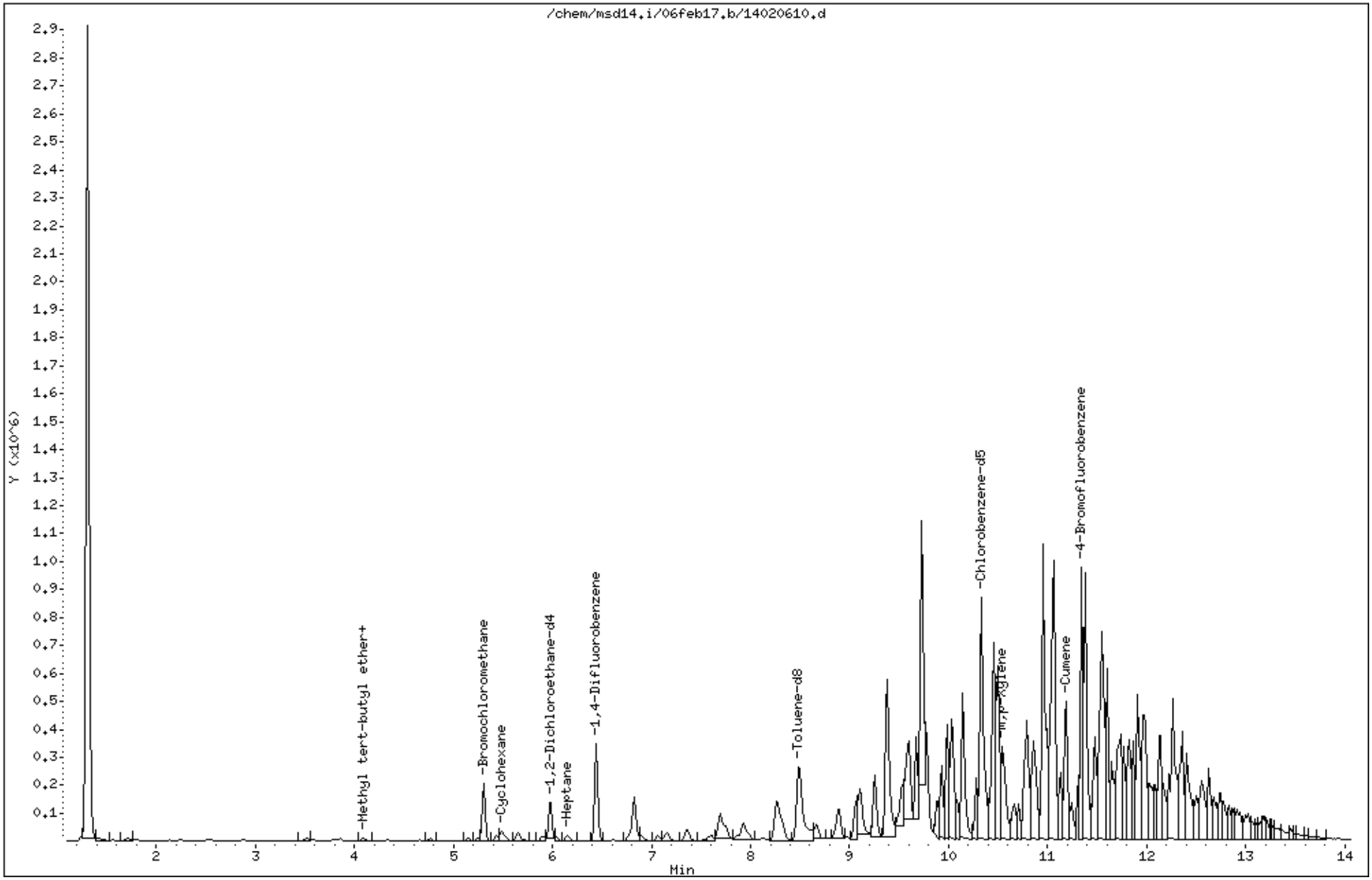
Instrument: msd14.i

Sample Info: 5.0mL #1L1603

Operator: gd

Column phase: RTX-624

Column diameter: 0.18



Data File: /chem/msd14.i/06feb17.b/14020610.d

Date : 06-FEB-2017 14:24

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #1L1603

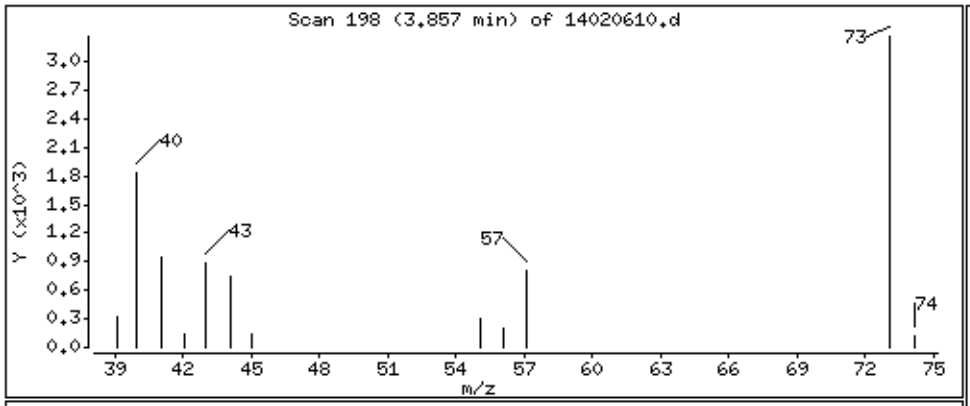
Operator: gd

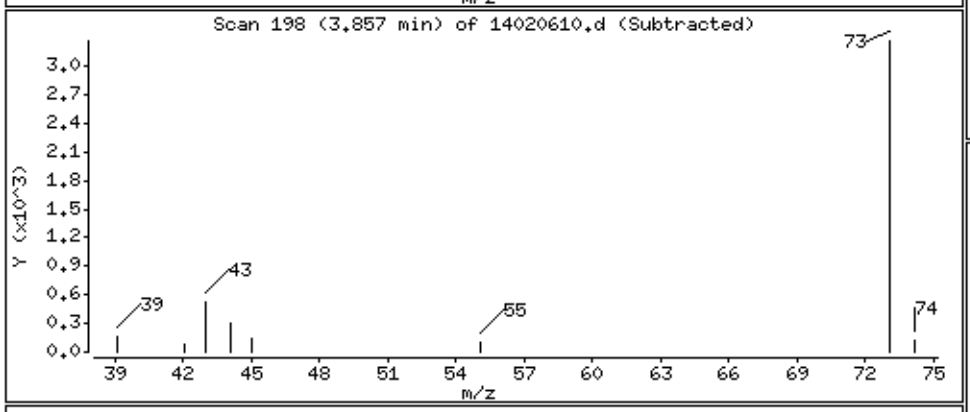
Column phase: RTX-624

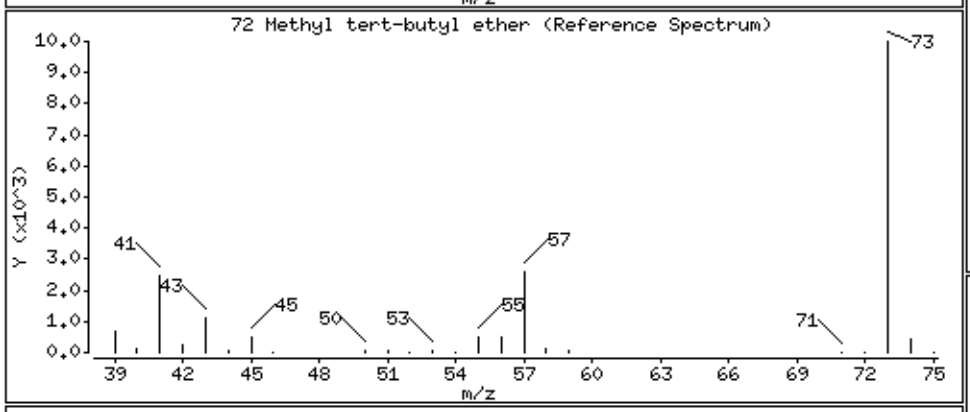
Column diameter: 0.18

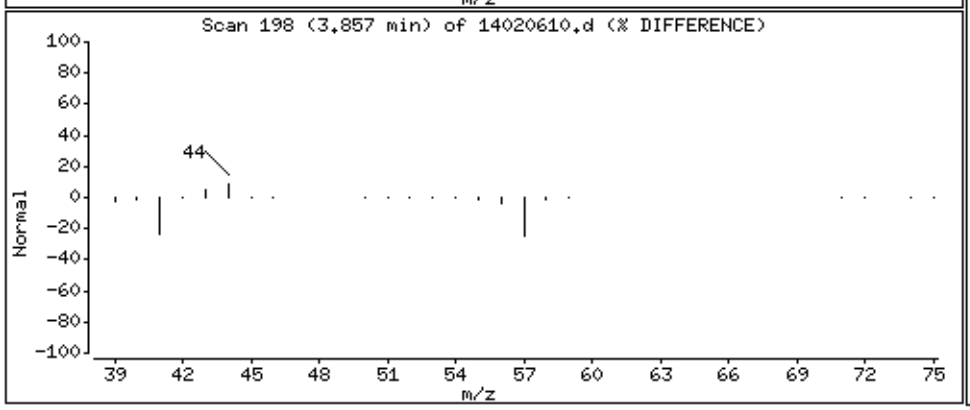
72 Methyl tert-butyl ether

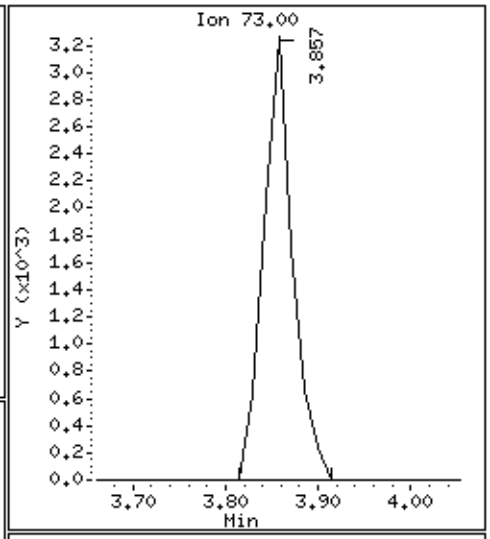
Concentration: 254.89 PPBV

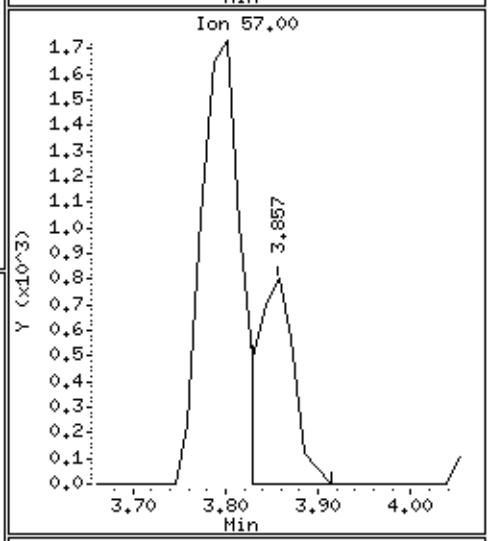


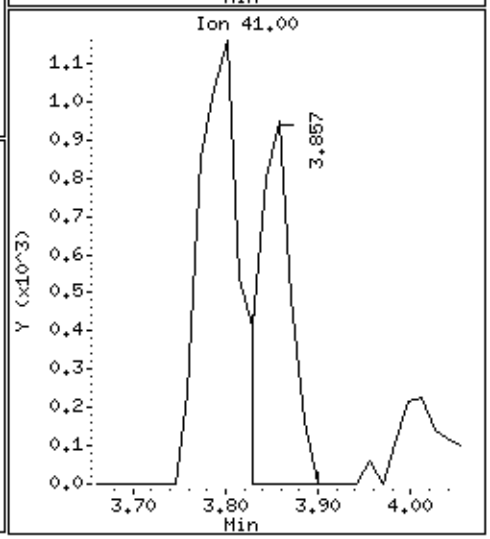












Data File: /chem/msd14.i/06feb17.b/14020610.d

Date : 06-FEB-2017 14:24

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #1L1603

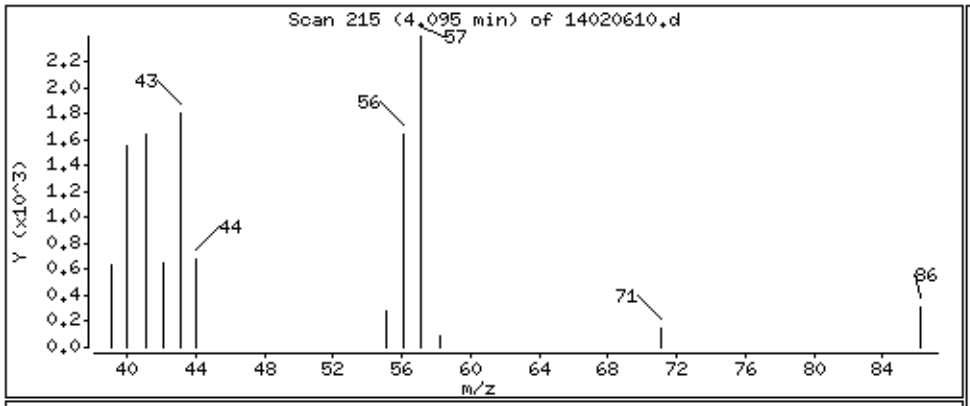
Operator: gd

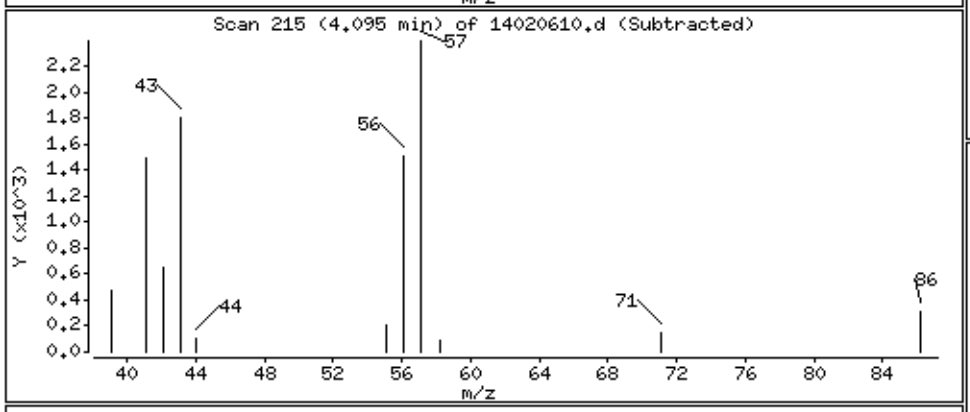
Column phase: RTX-624

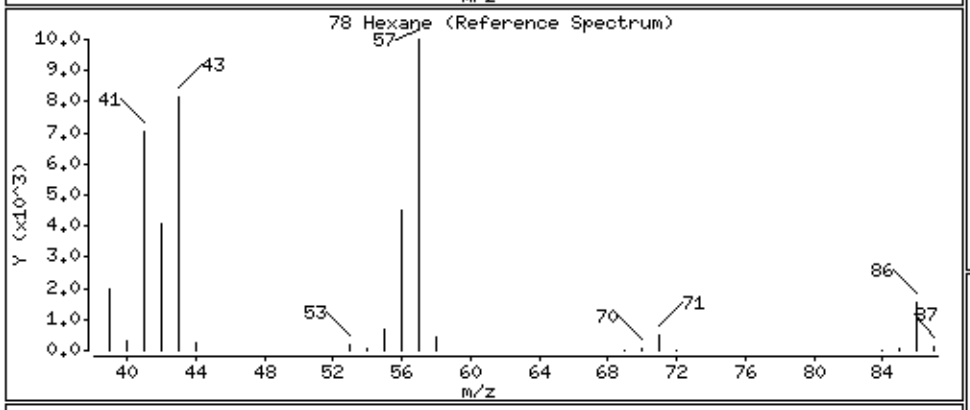
Column diameter: 0.18

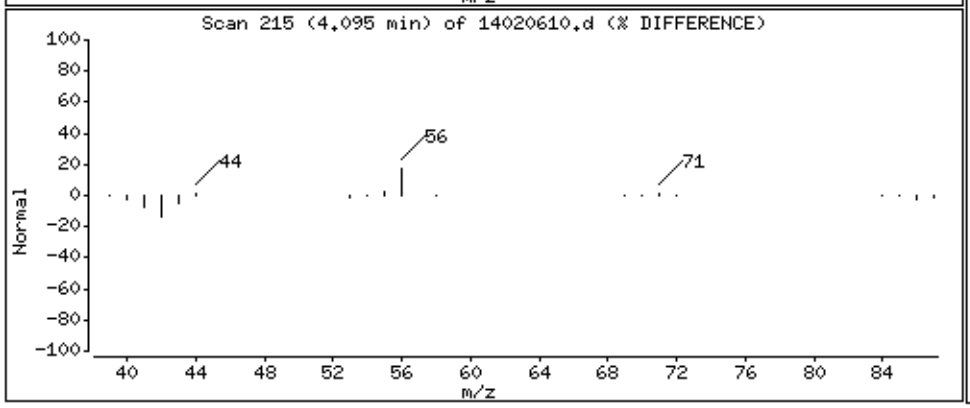
78 Hexane

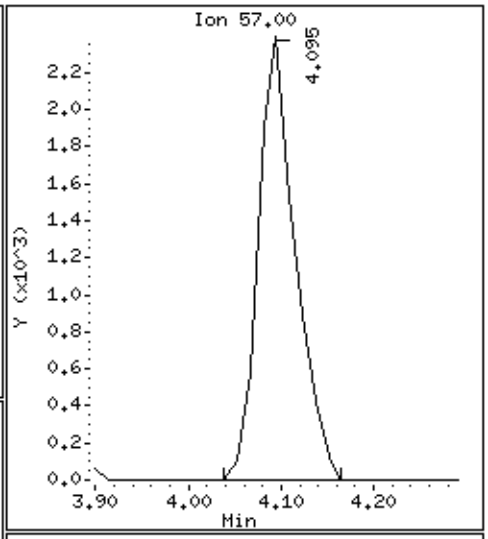
Concentration: 358.11 PPBV

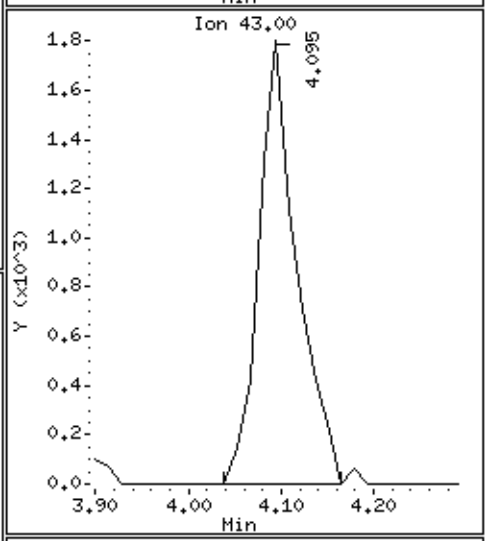


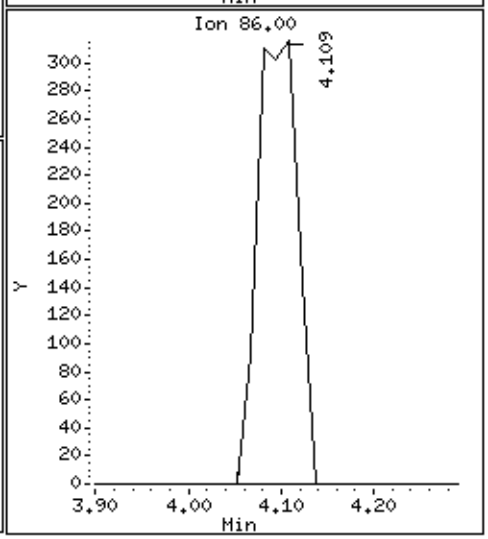












Data File: /chem/msd14.i/06feb17.b/14020610.d

Date : 06-FEB-2017 14:24

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #1L1603

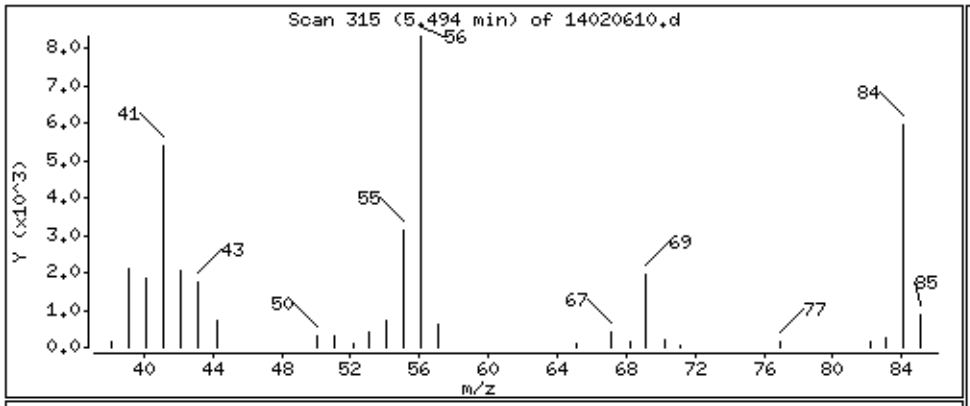
Operator: gd

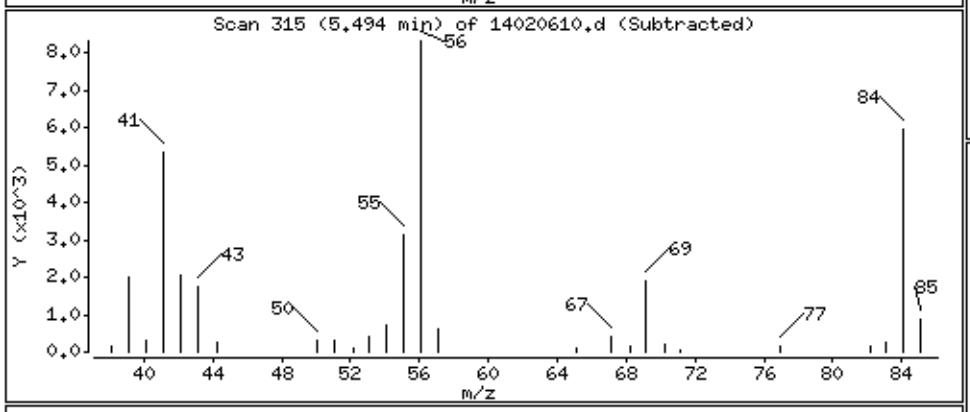
Column phase: RTX-624

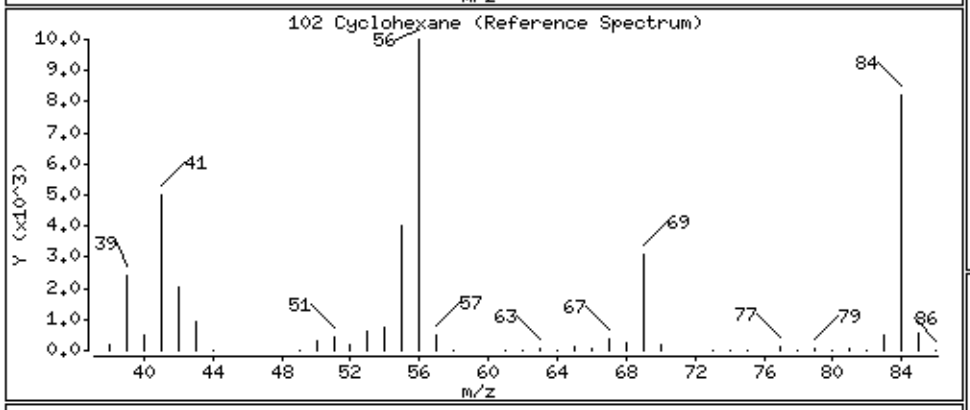
Column diameter: 0.18

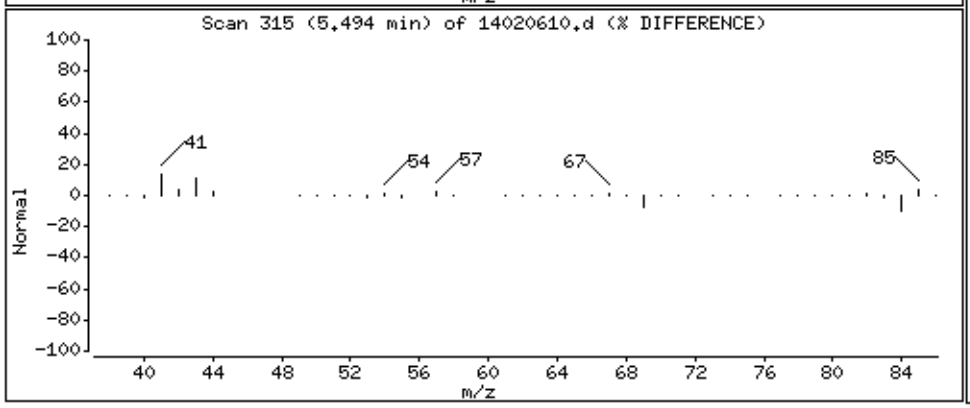
102 Cyclohexane

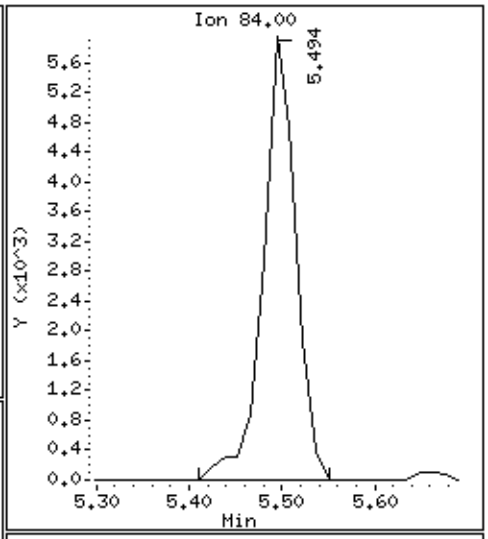
Concentration: 1031.6 PPBV

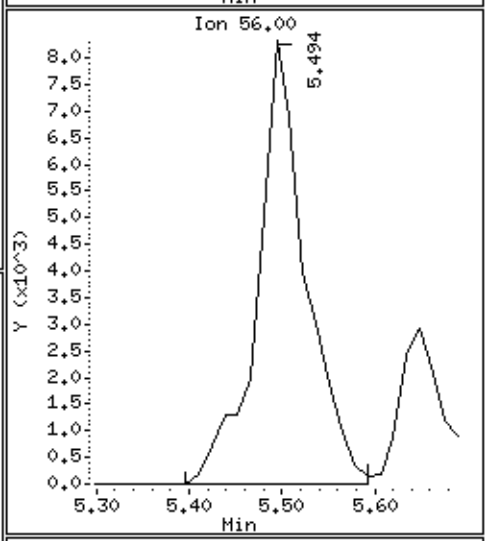


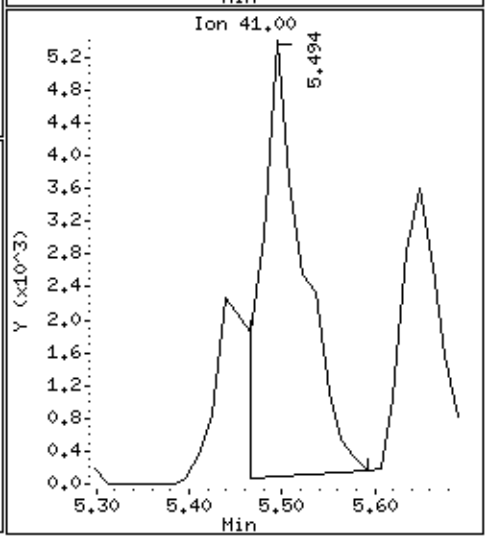












Data File: /chem/msd14.i/06feb17.b/14020610.d

Date : 06-FEB-2017 14:24

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #1L1603

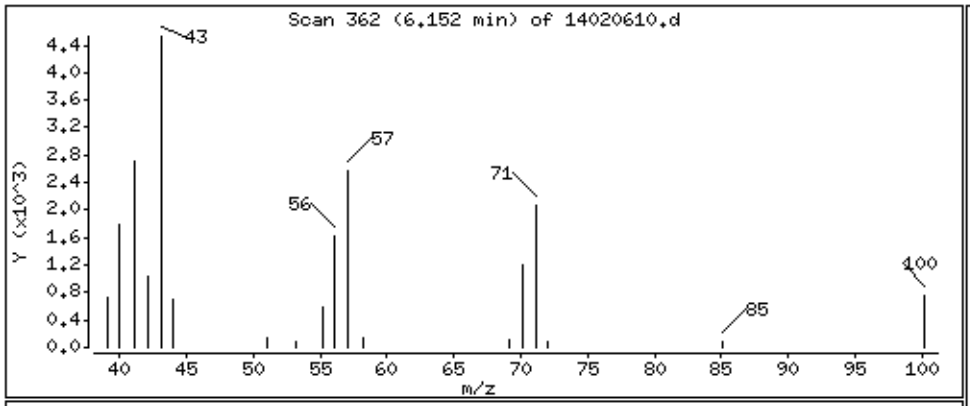
Operator: gd

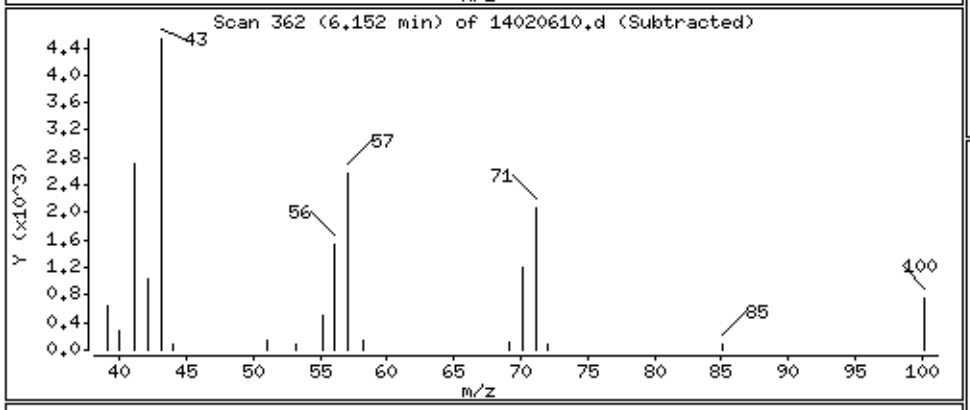
Column phase: RTX-624

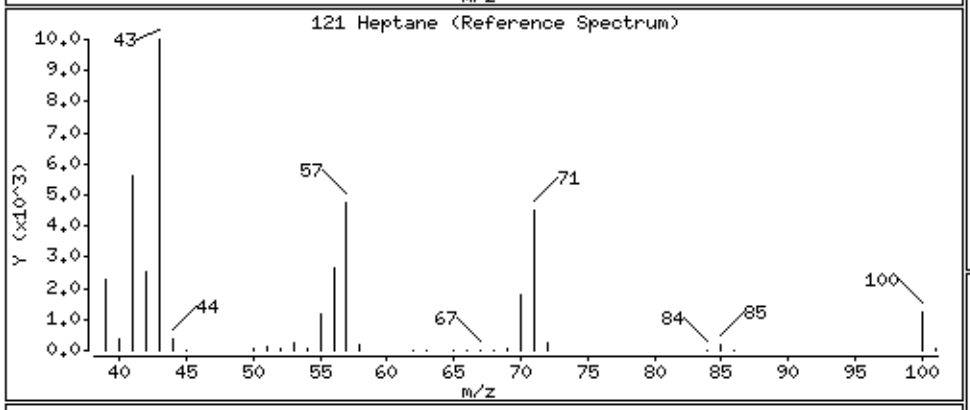
Column diameter: 0.18

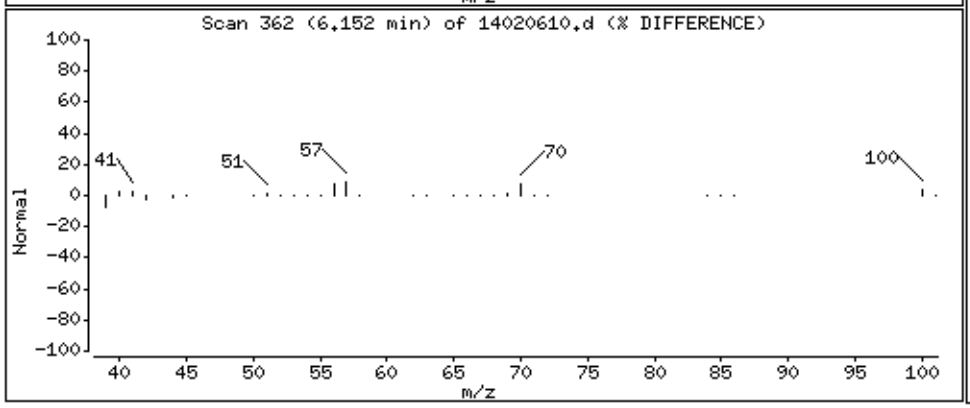
121 Heptane

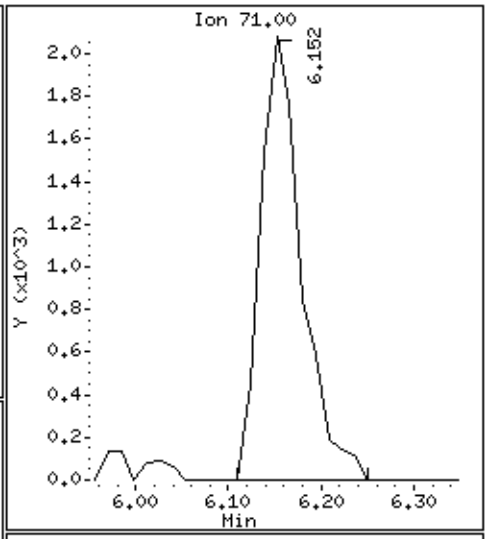
Concentration: 477.30 PPBV

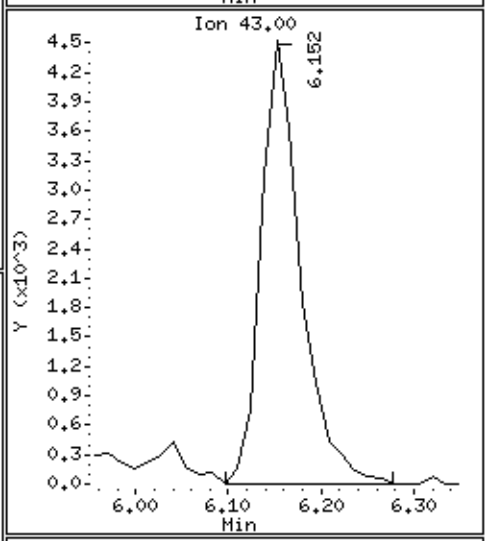


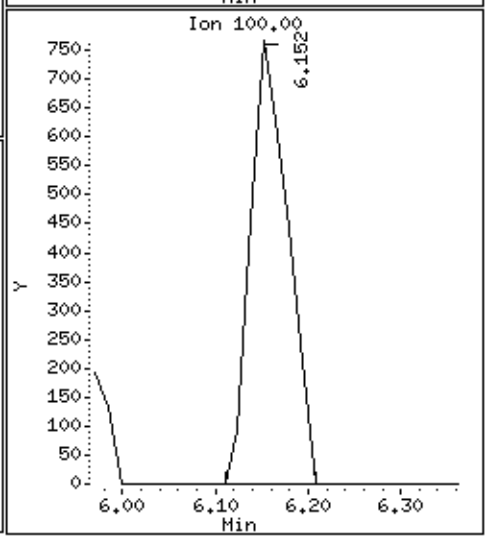












Data File: /chem/msd14.i/06feb17.b/14020610.d

Date : 06-FEB-2017 14:24

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #1L1603

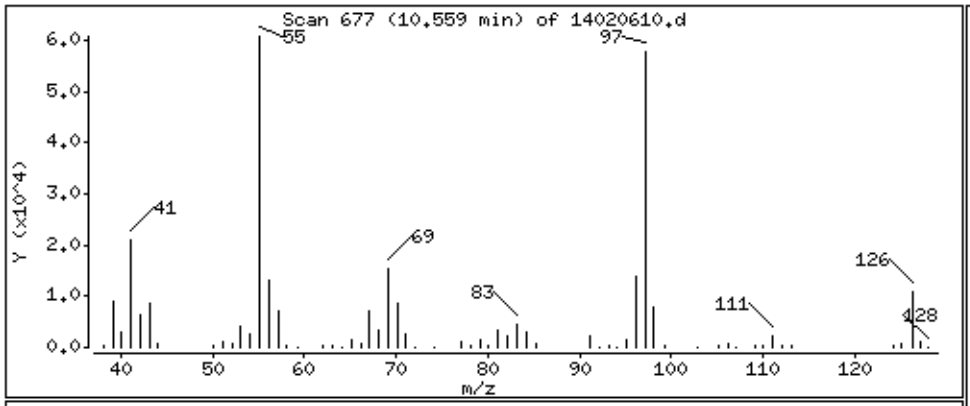
Operator: gd

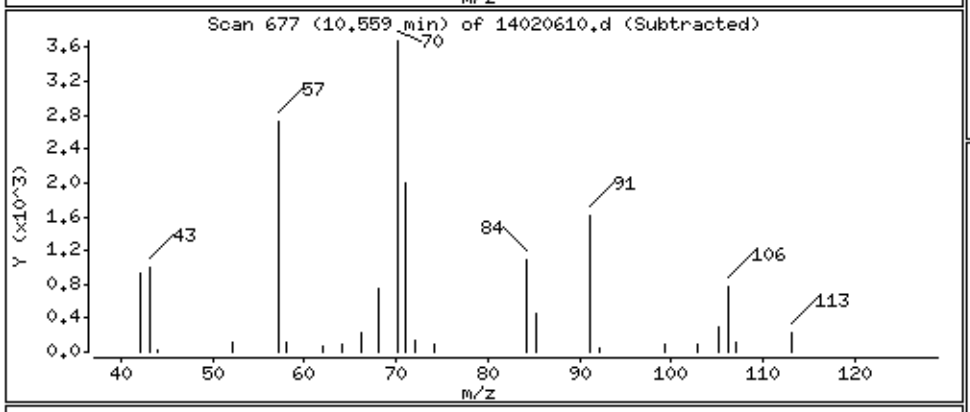
Column phase: RTX-624

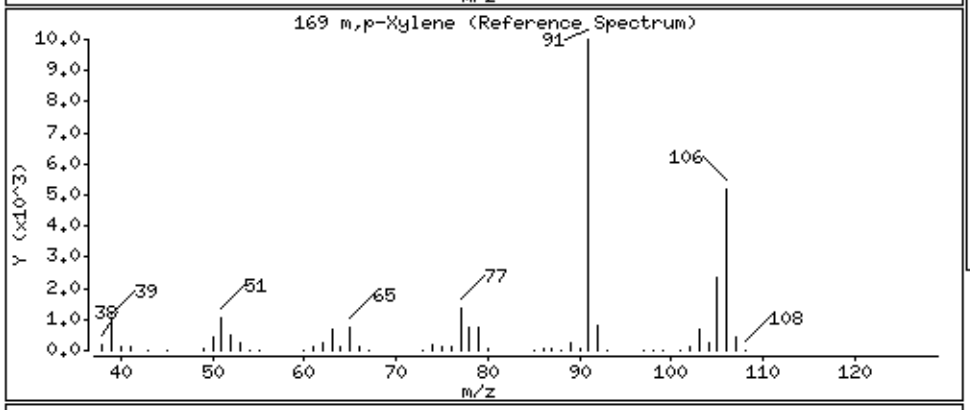
Column diameter: 0.18

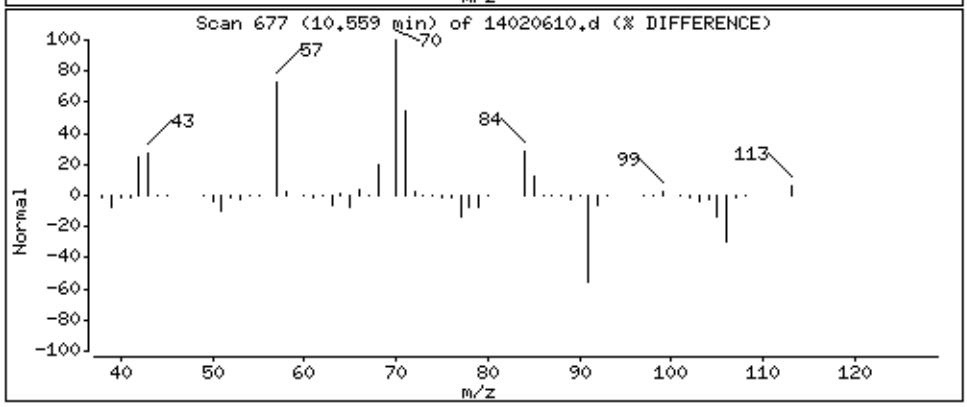
169 m,p-Xylene

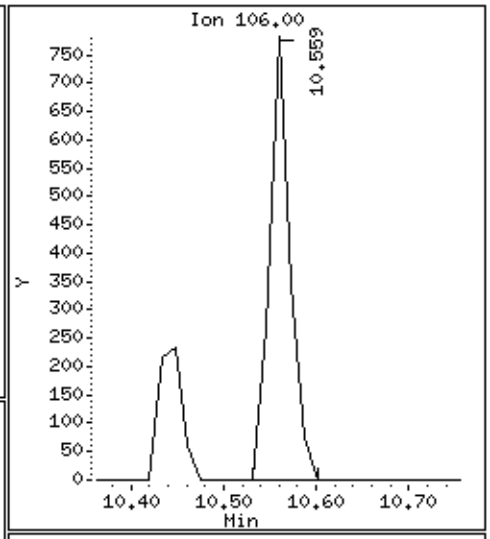
Concentration: 51.596 PPBV

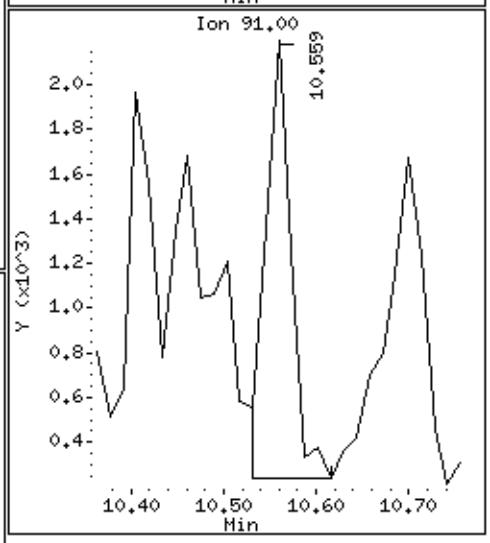












Data File: /chem/msd14.i/06feb17.b/14020610.d

Date : 06-FEB-2017 14:24

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #1L1603

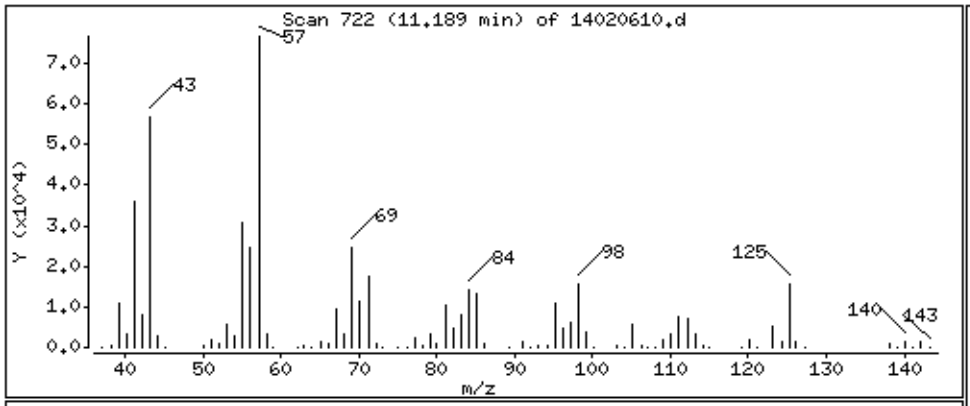
Operator: gd

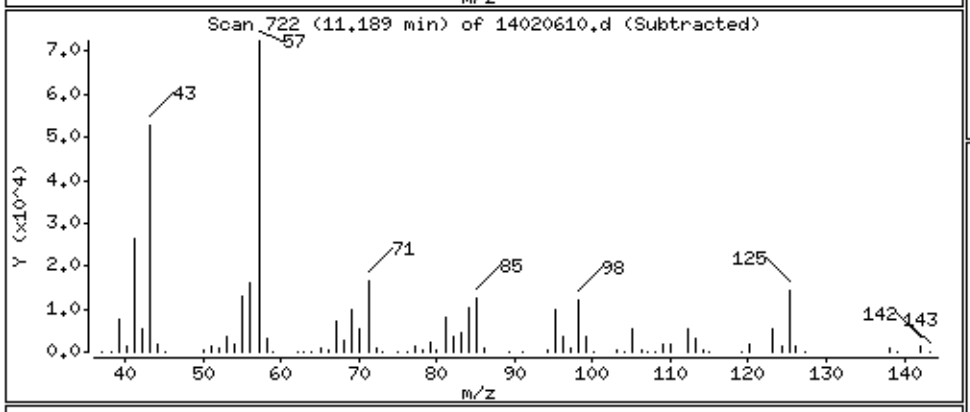
Column phase: RTX-624

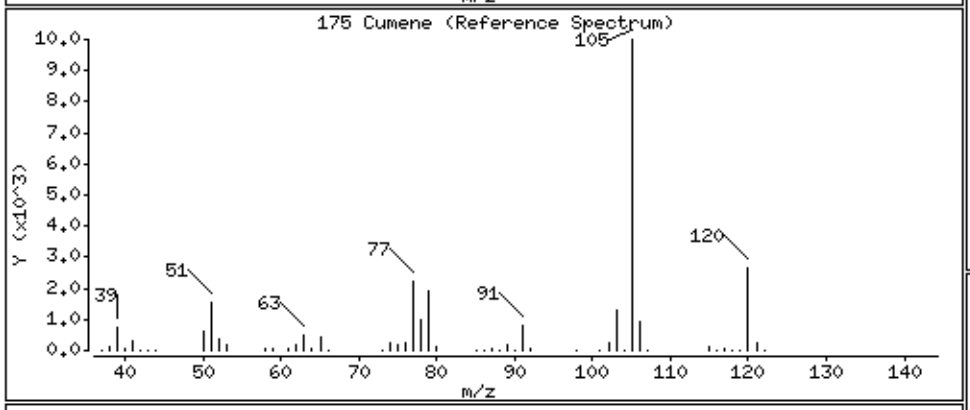
Column diameter: 0.18

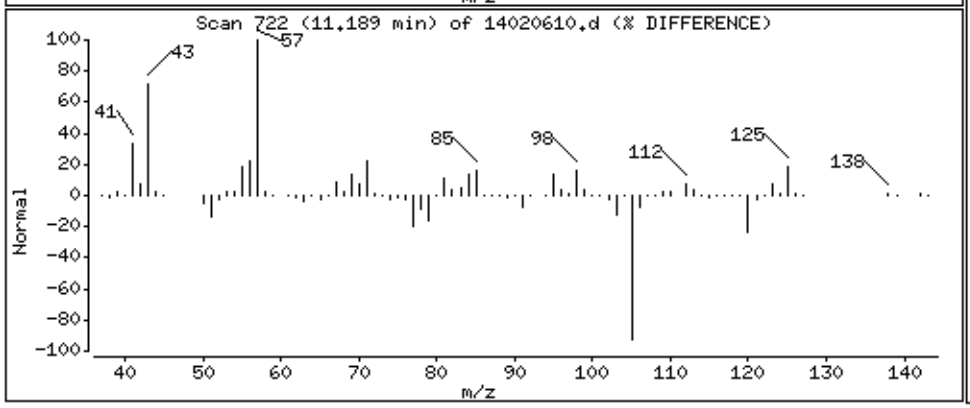
175 Cumene

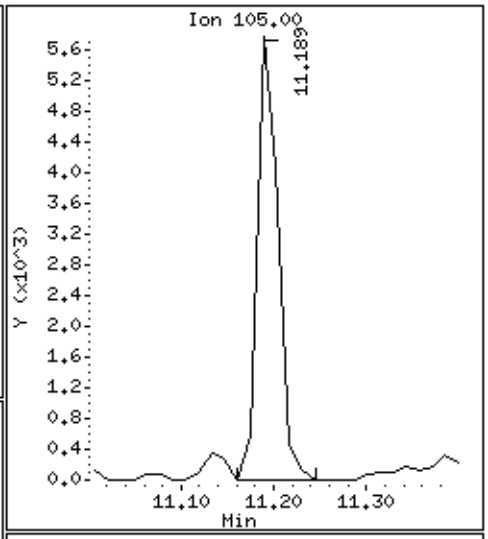
Concentration: 129.35 PPBV

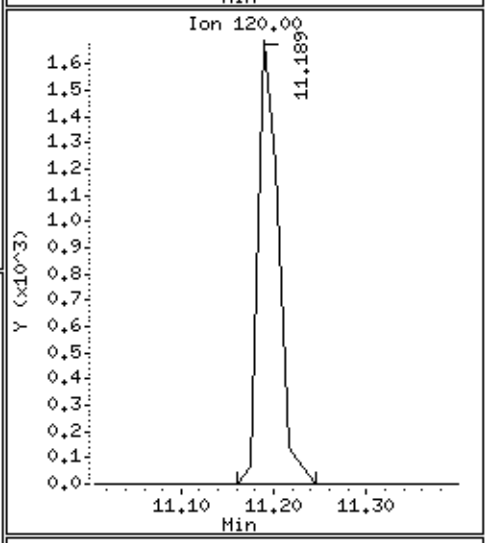


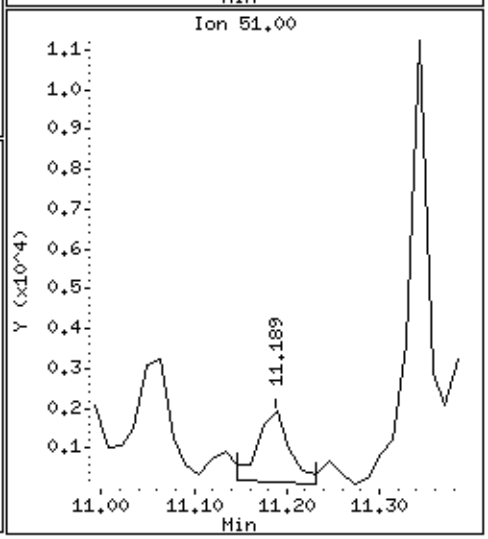












eurofins | Air Toxics

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

Client Sample ID: B8SS-2D-012417

Lab ID#: 1701428B-17A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	120	250	440	900
Hexane	120	360	430	1300
Cyclohexane	120	980	420	3400
2,2,4-Trimethylpentane	120	100 J	560	470 J
Heptane	120	440	500	1800
Toluene	120	21 J	460	81 J
m,p-Xylene	120	64 J	520	280 J
Cumene	120	120 J	590	580 J

eurofins | Air Toxics

Client Sample ID: B8SS-2D-012417

Lab ID#: 1701428B-17A

EPA METHOD TO-15 GC/MS

File Name:	**14020611**	**Date of Collection:**	**1/24/17 3:35:00 PM**
Dil. Factor:	**24.2**	**Date of Analysis:**	**2/6/17 03:00 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	120	Not Detected	600	Not Detected
Freon 114	120	Not Detected	840	Not Detected
Chloromethane	480	Not Detected	1000	Not Detected
Vinyl Chloride	120	Not Detected	310	Not Detected
1,3-Butadiene	120	Not Detected	270	Not Detected
Bromomethane	480	Not Detected	1900	Not Detected
Chloroethane	480	Not Detected	1300	Not Detected
Freon 11	120	Not Detected	680	Not Detected
Ethanol	480	Not Detected	910	Not Detected
Freon 113	120	Not Detected	930	Not Detected
1,1-Dichloroethene	120	Not Detected	480	Not Detected
Acetone	480	Not Detected	1100	Not Detected
2-Propanol	480	Not Detected	1200	Not Detected
Carbon Disulfide	480	Not Detected	1500	Not Detected
3-Chloropropene	480	Not Detected	1500	Not Detected
Methylene Chloride	480	Not Detected	1700	Not Detected
Methyl tert-butyl ether	120	250	440	900
trans-1,2-Dichloroethene	120	Not Detected	480	Not Detected
Hexane	120	360	430	1300
1,1-Dichloroethane	120	Not Detected	490	Not Detected
2-Butanone (Methyl Ethyl Ketone)	480	Not Detected	1400	Not Detected
cis-1,2-Dichloroethene	120	Not Detected	480	Not Detected
Tetrahydrofuran	120	Not Detected	360	Not Detected
Chloroform	120	Not Detected	590	Not Detected
1,1,1-Trichloroethane	120	Not Detected	660	Not Detected
Cyclohexane	120	980	420	3400
Carbon Tetrachloride	120	Not Detected	760	Not Detected
2,2,4-Trimethylpentane	120	100 J	560	470 J
Benzene	120	Not Detected	390	Not Detected
1,2-Dichloroethane	120	Not Detected	490	Not Detected
Heptane	120	440	500	1800
Trichloroethene	120	Not Detected	650	Not Detected
1,2-Dichloropropane	120	Not Detected	560	Not Detected
1,4-Dioxane	480	Not Detected	1700	Not Detected
Bromodichloromethane	120	Not Detected	810	Not Detected
cis-1,3-Dichloropropene	120	Not Detected	550	Not Detected
4-Methyl-2-pentanone	120	Not Detected	500	Not Detected
Toluene	120	21 J	460	81 J
trans-1,3-Dichloropropene	120	Not Detected	550	Not Detected
1,1,2-Trichloroethane	120	Not Detected	660	Not Detected
Tetrachloroethene	120	Not Detected	820	Not Detected
2-Hexanone	480	Not Detected	2000	Not Detected

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Client Sample ID: B8SS-2D-012417

Lab ID#: 1701428B-17A

EPA METHOD TO-15 GC/MS

File Name:	**14020611**	**Date of Collection:**	**1/24/17 3:35:00 PM**
Dil. Factor:	**24.2**	**Date of Analysis:**	**2/6/17 03:00 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	120	Not Detected	1000	Not Detected
1,2-Dibromoethane (EDB)	120	Not Detected	930	Not Detected
Chlorobenzene	120	Not Detected	560	Not Detected
Ethyl Benzene	120	Not Detected	520	Not Detected
m,p-Xylene	120	64 J	520	280 J
o-Xylene	120	Not Detected	520	Not Detected
Styrene	120	Not Detected	520	Not Detected
Bromoform	120	Not Detected	1200	Not Detected
Cumene	120	120 J	590	580 J
1,1,2,2-Tetrachloroethane	120	Not Detected	830	Not Detected
Propylbenzene	120	Not Detected	590	Not Detected
4-Ethyltoluene	120	Not Detected	590	Not Detected
1,3,5-Trimethylbenzene	120	Not Detected	590	Not Detected
1,2,4-Trimethylbenzene	120	Not Detected	590	Not Detected
1,3-Dichlorobenzene	120	Not Detected	730	Not Detected
1,4-Dichlorobenzene	120	Not Detected	730	Not Detected
alpha-Chlorotoluene	120	Not Detected	630	Not Detected
1,2-Dichlorobenzene	120	Not Detected	730	Not Detected
1,2,4-Trichlorobenzene	480	Not Detected	3600	Not Detected
Hexachlorobutadiene	480	Not Detected	5200	Not Detected
Naphthalene	480	Not Detected	2500	Not Detected

J = Estimated value.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	100	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/06feb17.b/14020611.d
Lab Smp Id: 1701428B-17A
Inj Date : 06-FEB-2017 15:00
Operator : gd Inst ID: msd14.i
Smp Info : 5.0mL #12373
Misc Info : 4.9"Hg->15.1psi
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/06feb17.b/14651201b.m
Meth Date : 06-Feb-2017 12:42 gdelacru Quant Type: ISTD
Cal Date : 19-DEC-2016 11:43 Cal File: 14121908.d
Als bottle: 1
Dil Factor: 24.20000
Integrator: HP RTE Compound Sublist: TO15Nmdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.312	5.312 (1.000)	130	88698	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	69513			46.96- 106.96	78.37
5.312	5.312 (1.000)	49	111508			97.69- 157.69	125.72
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.446	6.446 (1.000)	114	366286	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	54562			0.00- 45.92	14.90
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
10.335	10.335 (1.000)	117	336827	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	270263			19.32- 79.32	80.24
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.984	5.984 (1.126)	65	103230	380.119	380.12	80.00- 120.00	100.00(a)
5.984	5.984 (1.126)	67	55563			24.72- 84.72	53.83
$ 146 Toluene-d8						CAS #: 2037-26-5	
8.489	8.503 (1.317)	98	358034	395.825	395.82	80.00- 120.00	100.00(a)
8.502	8.489 (1.319)	70	41182			0.00- 40.20	11.50

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

$ 146 Toluene-d8 (continued)
  8.489   8.489 (1.317)   100    242132                    38.62-  98.62    67.63
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 11.343  11.343 (1.097)   174    209345 400.497   400.50  80.00- 120.00   100.00(a)
 11.343  11.343 (1.097)    95    263052                   89.78- 149.78   125.65
 11.343  11.343 (1.097)   176    199172                   66.10- 126.10    95.14
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                       CAS #: 1634-04-4
  3.857   3.857 (0.726)    73      7362 10.3548   250.59  80.00- 120.00   100.00
  3.857   3.857 (0.726)    57      2360                     0.00-  56.69    32.06
  3.857   3.857 (0.726)    41      2122                     0.00-  54.89    28.83
-------------------------------------------------------------------------------
   78 Hexane                                        CAS #: 110-54-3
  4.095   4.095 (0.771)    57      7047 15.0076   363.18  80.00- 120.00   100.00
  4.095   4.095 (0.771)    43      4779                    34.03-  94.03    67.81
  4.095   4.095 (0.771)    86      1192                     0.00-  45.63    16.92
-------------------------------------------------------------------------------
  102 Cyclohexane                                   CAS #: 110-82-7
  5.494   5.494 (1.034)    84     14570 40.4948   979.98  80.00- 120.00   100.00
  5.494   5.494 (1.034)    56     30640                  109.96- 169.96   210.29
  5.494   5.494 (1.034)    41     16614                   47.10- 107.10   114.03
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                        CAS #: 540-84-1
  5.928   5.928 (1.116)    57      6672 4.19561   101.53  80.00- 120.00   100.00(a)
  5.900   5.928 (1.111)    56      6882                     1.61-  61.61   103.15
  5.900   5.928 (1.111)    41      6143                     0.00-  55.08    92.07
-------------------------------------------------------------------------------
  121 Heptane                                       CAS #: 142-82-5
  6.152   6.152 (0.954)    71      6177 18.1623   439.53  80.00- 120.00   100.00
  6.152   6.152 (0.954)    43     12705                  167.16- 227.16   205.66
  6.166   6.166 (0.957)   100      2159                     4.59-  64.59    34.95
-------------------------------------------------------------------------------
  147 Toluene                                       CAS #: 108-88-3
  8.614   8.614 (1.336)    91      1015 0.88754   21.478  80.00- 120.00   100.00(a)
  8.600   8.614 (1.334)    92       387                    28.41-  88.41    38.10
-------------------------------------------------------------------------------
  169 m,p-Xylene                                    CAS #: 108-38-3
 10.559  10.559 (1.022)   106      1601 2.63034   63.654  80.00- 120.00   100.00(a)
 10.559  10.559 (1.022)    91      3729                   163.96- 223.96   232.84
-------------------------------------------------------------------------------
  175 Cumene                                        CAS #: 98-82-8
 11.189  11.203 (1.083)   105      8768 4.84094   117.15  80.00- 120.00   100.00(a)
 11.189  11.203 (1.083)   120      2598                     0.00-  57.87    29.64
 11.189  11.189 (1.083)    51      3541                     0.00-  40.21    40.39
-------------------------------------------------------------------------------
```

QC Flag Legend

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

Report Date: 09-Feb-2017 15:05

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14020611.d
Lab Smp Id: 1701428B-17A
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msd14.i/06feb17.b/14651201b.m
Misc Info: 4.9"Hg->15.1psi

Calibration Date: 06-FEB-2017
Calibration Time: 09:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	81368	48821	113915	88698	9.01
123 1,4-Difluorobenze	344671	206803	482539	366286	6.27
163 Chlorobenzene-d5	321726	193036	450416	336827	4.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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: 09-Feb-2017 15:05

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 06feb17
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1701428B-17A
Level: LOW Operator: gd
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12ethanol.spk Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msd14.i/06feb17.b/14651201b.m
Misc Info: 4.9"Hg->15.1psi

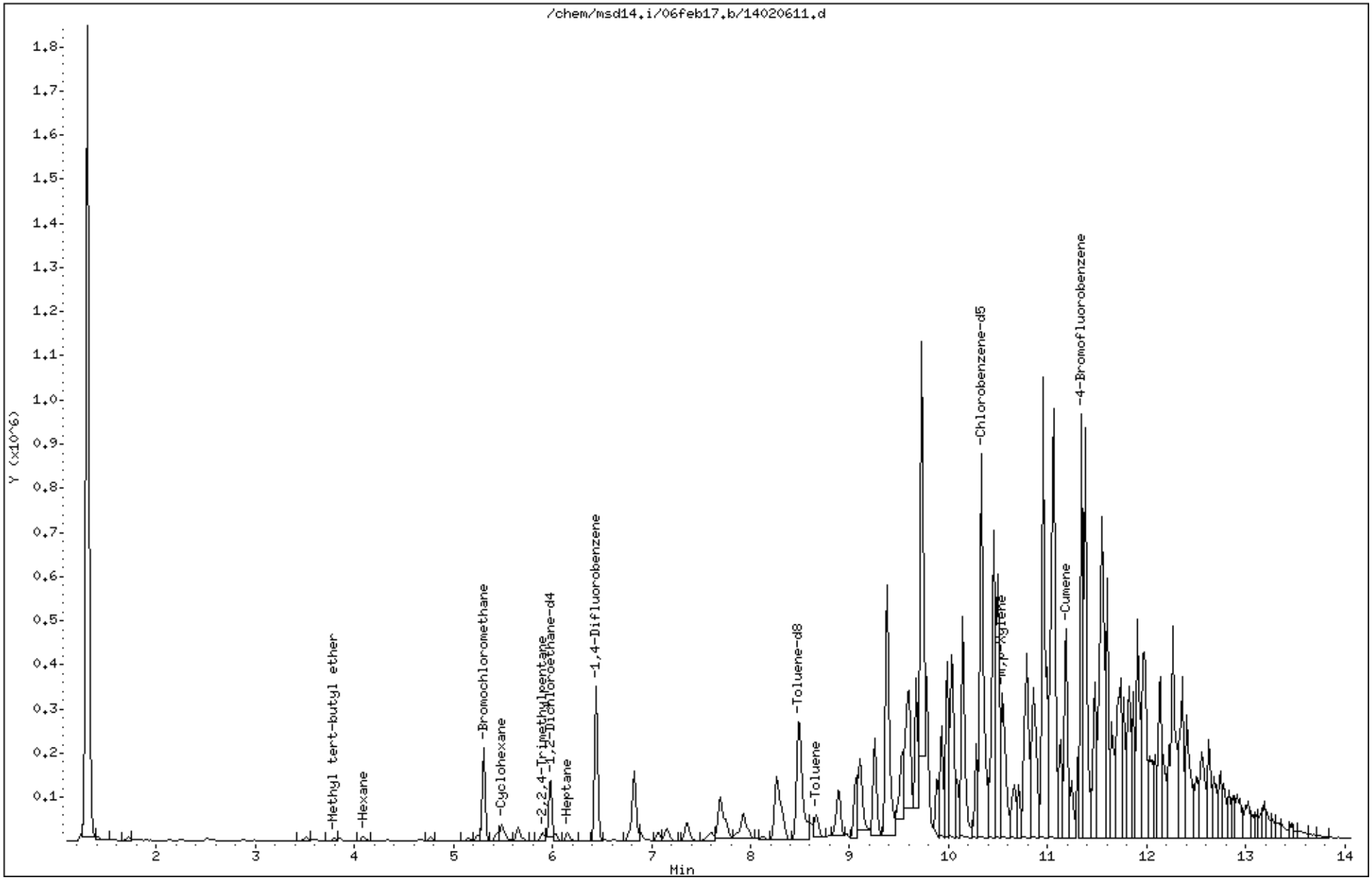
SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	400.00	380.12	95.03	70-130
$ 146 Toluene-d8	400.00	395.82	98.96	70-130
$ 177 4-Bromofluorobenze	400.00	400.50	100.12	70-130

Data File: /chem/msd14.i/06feb17.b/14020611.d
Date : 06-FEB-2017 15:00
Client ID:
Sample Info: 5.0mL #12373

Column phase: RTX-624

Instrument: msd14.i

Operator: gd
Column diameter: 0.18



Data File: /chem/msd14.i/06feb17.b/14020611.d

Date : 06-FEB-2017 15:00

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #12373

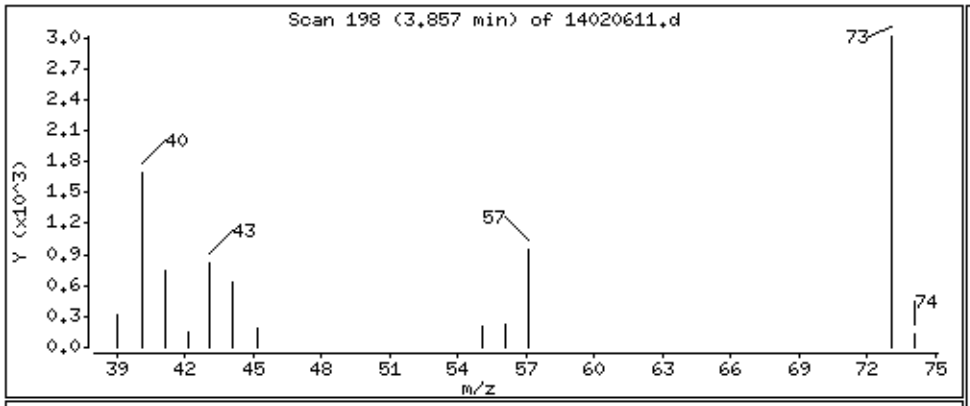
Operator: gd

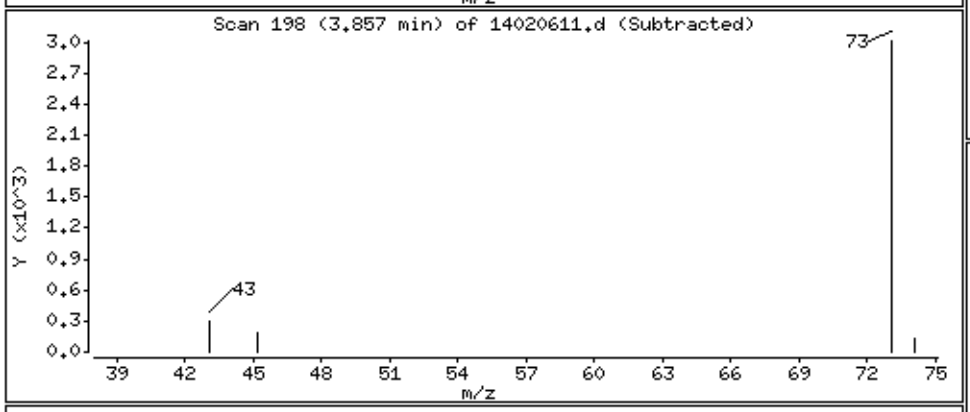
Column phase: RTX-624

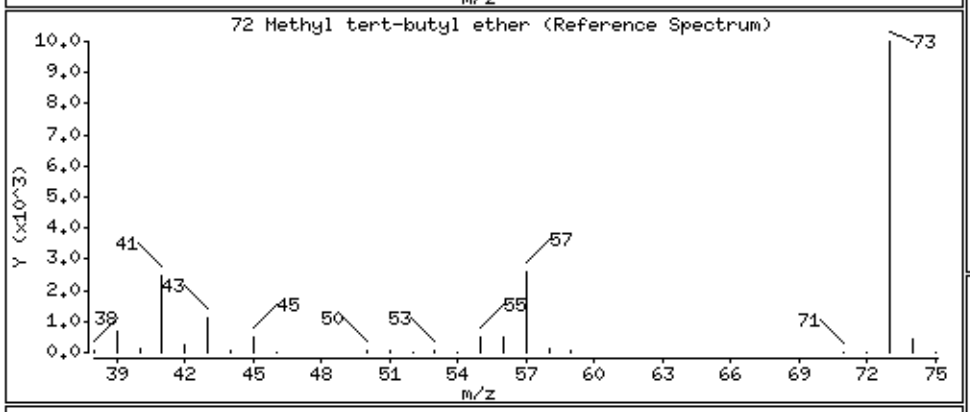
Column diameter: 0.18

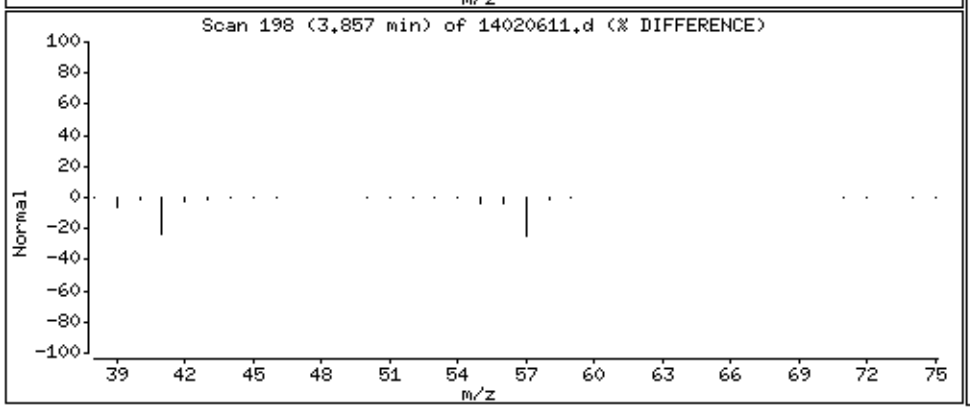
72 Methyl tert-butyl ether

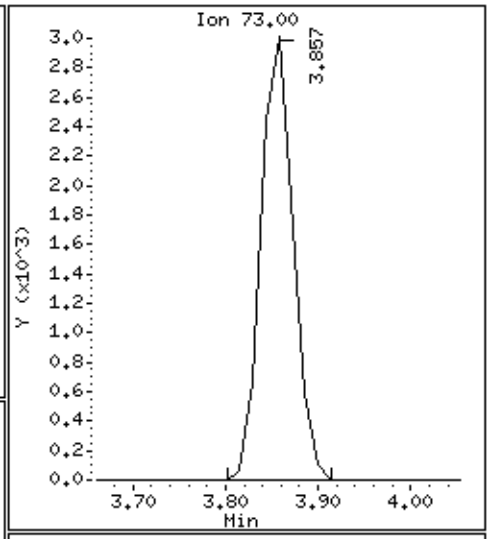
Concentration: 250.59 PPBV

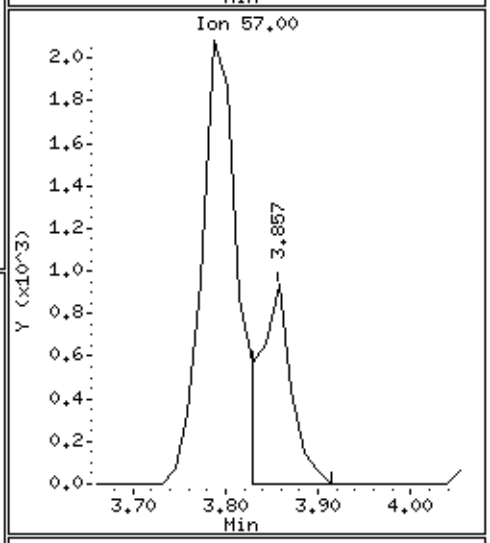


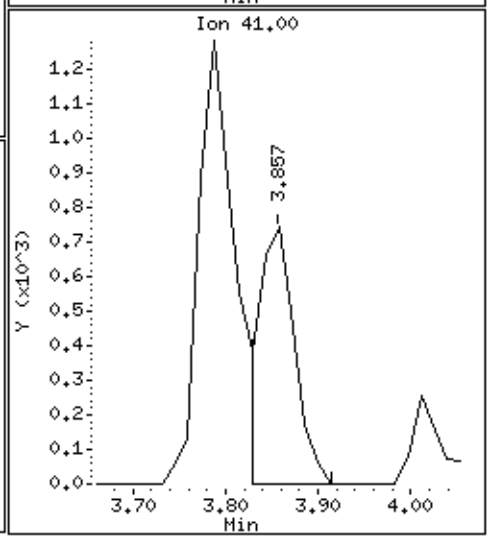












Data File: /chem/msd14.i/06feb17.b/14020611.d

Date : 06-FEB-2017 15:00

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #12373

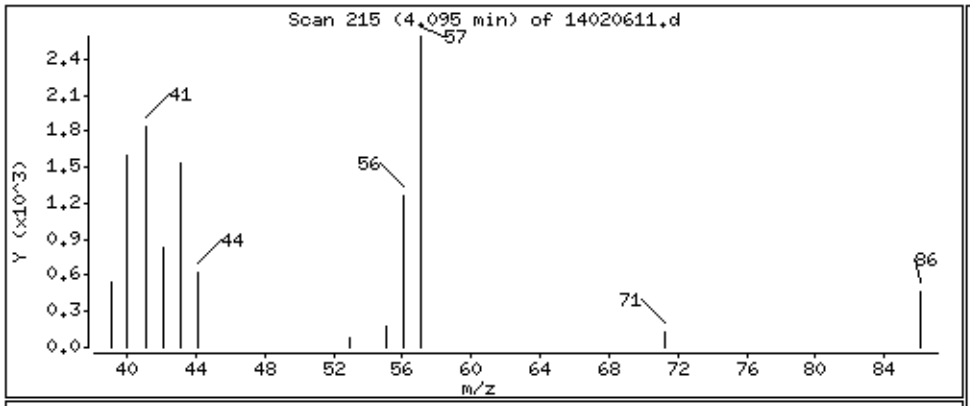
Operator: gd

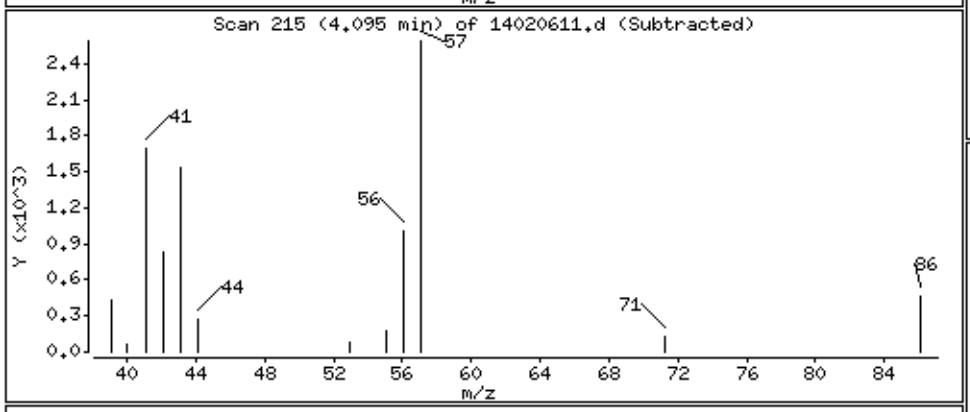
Column phase: RTX-624

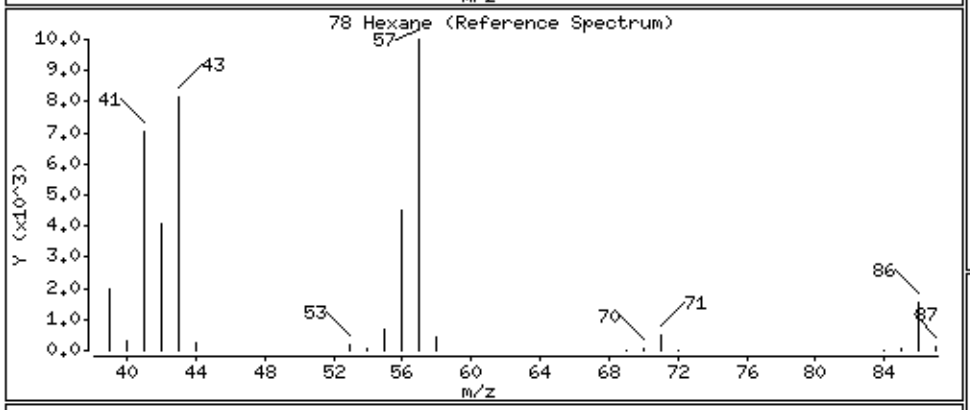
Column diameter: 0.18

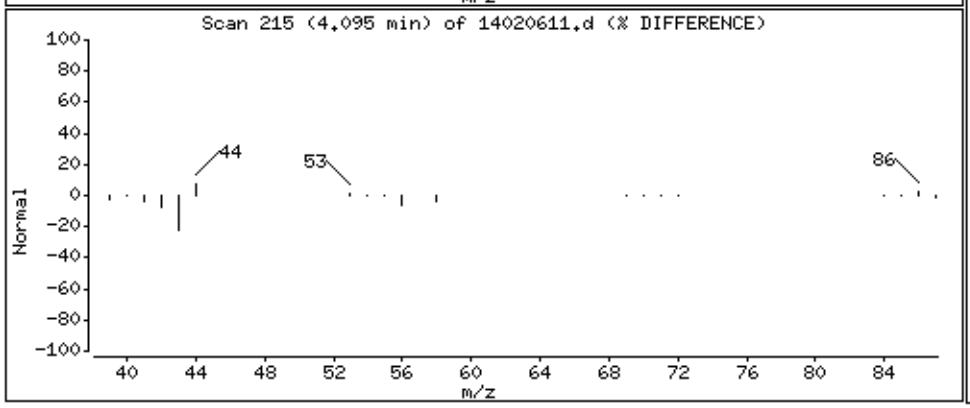
78 Hexane

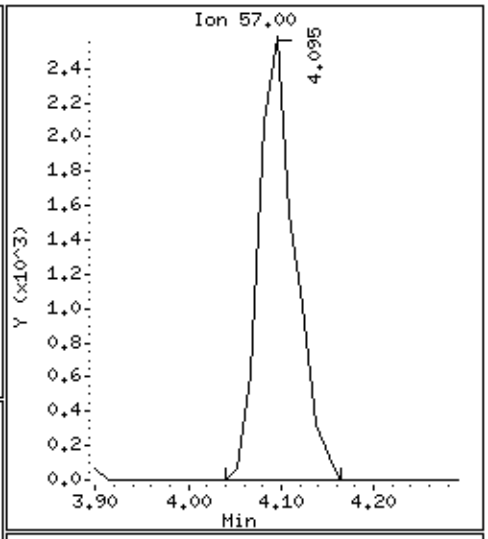
Concentration: 363.18 PPBV

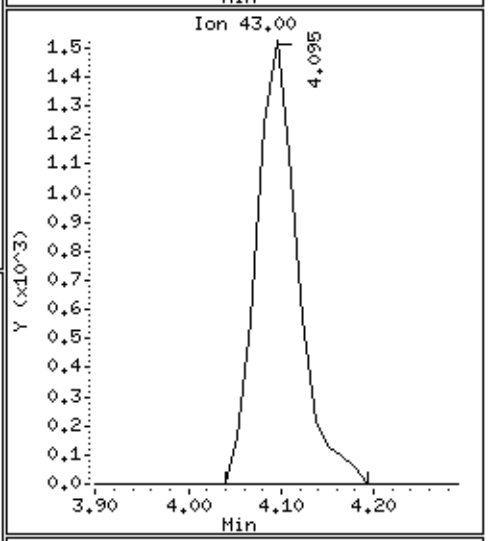


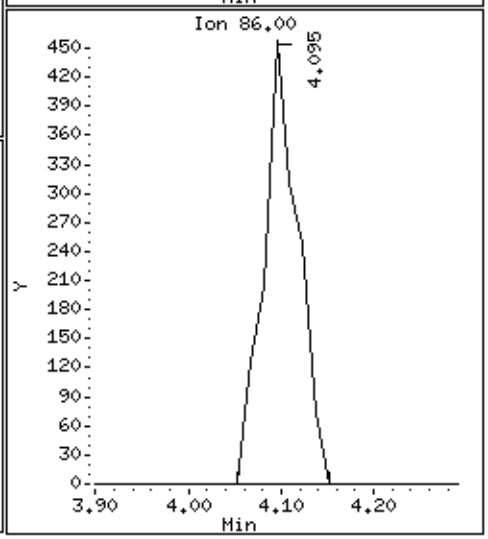












Data File: /chem/msd14.i/06feb17.b/14020611.d

Date : 06-FEB-2017 15:00

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #12373

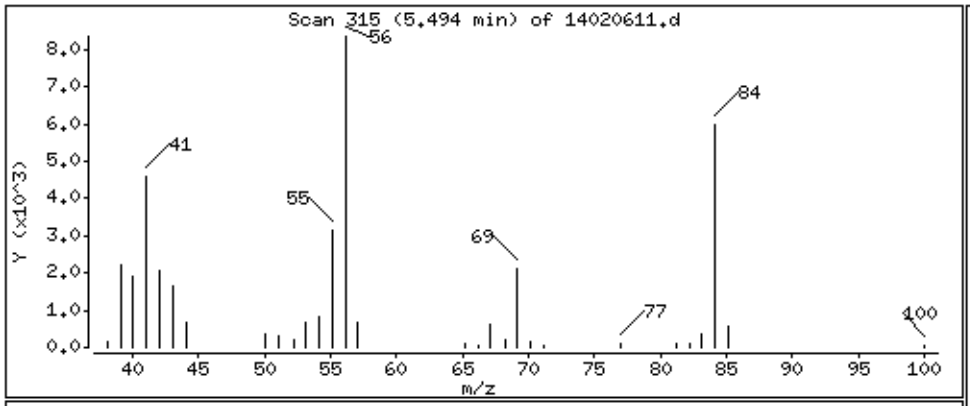
Operator: gd

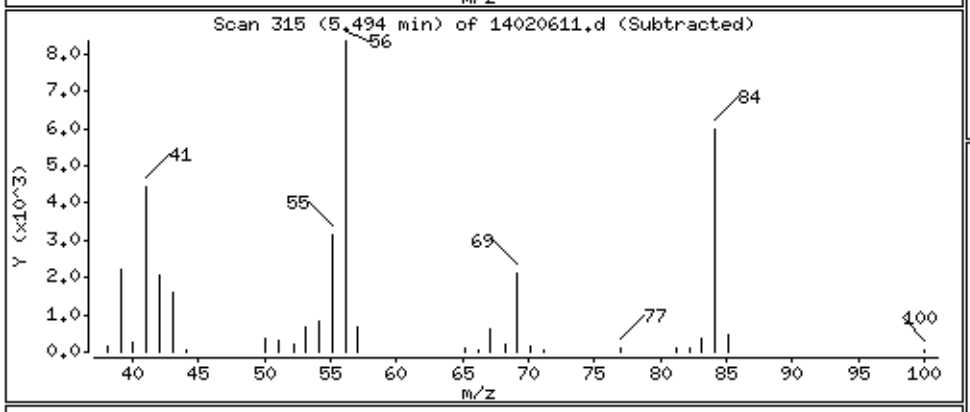
Column phase: RTX-624

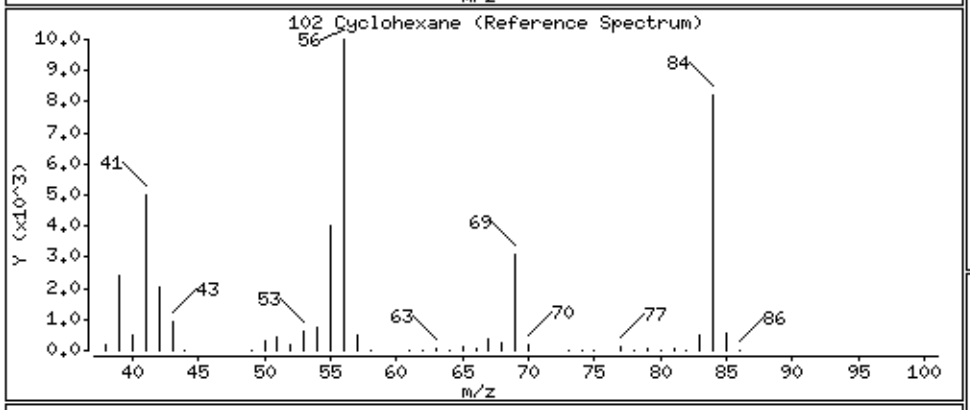
Column diameter: 0.18

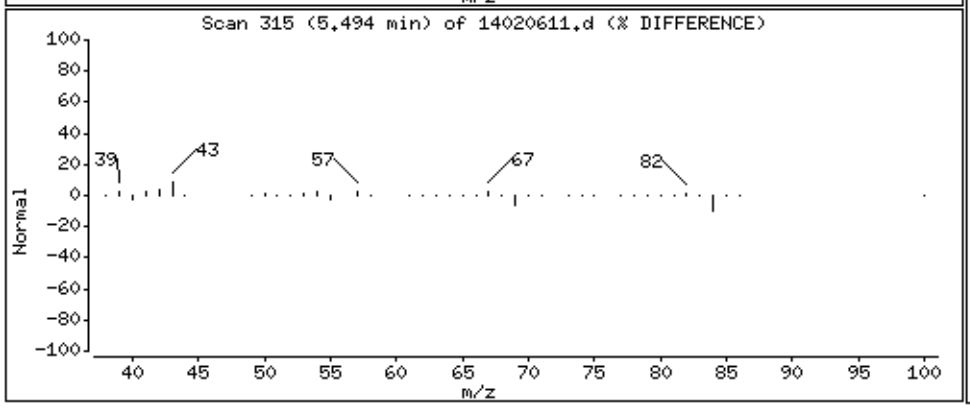
102 Cyclohexane

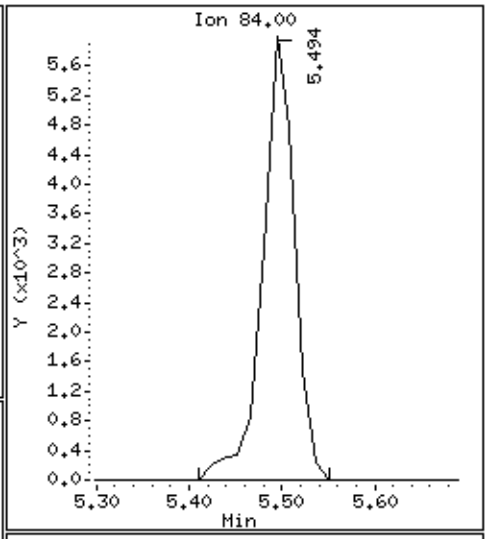
Concentration: 979.98 PPBV

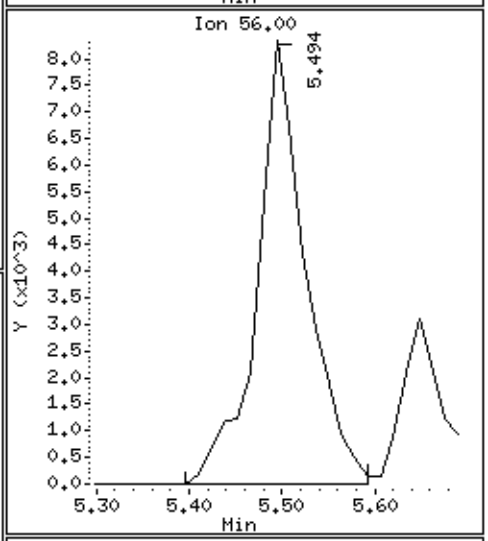


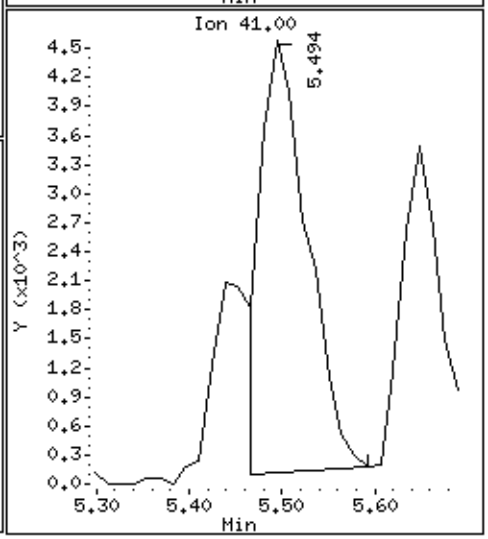












Data File: /chem/msd14.i/06feb17.b/14020611.d

Date : 06-FEB-2017 15:00

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #12373

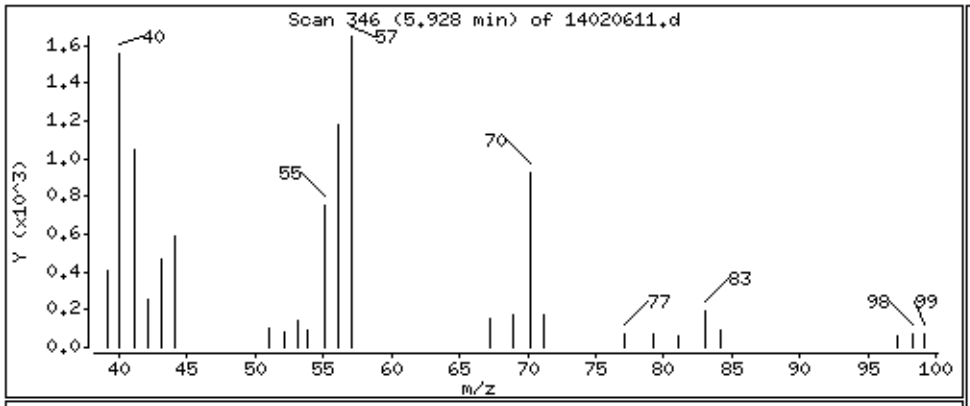
Operator: gd

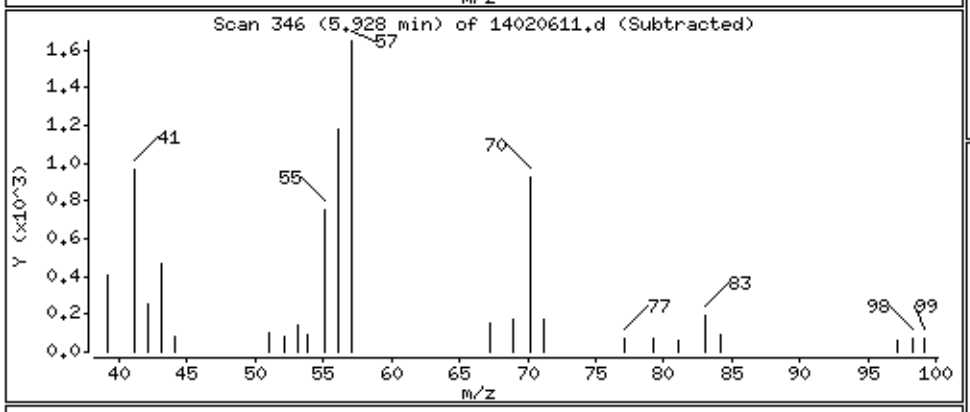
Column phase: RTX-624

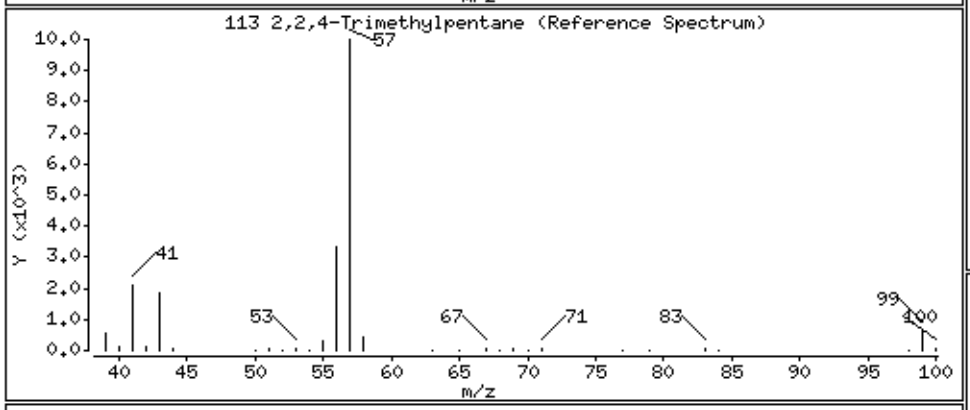
Column diameter: 0.18

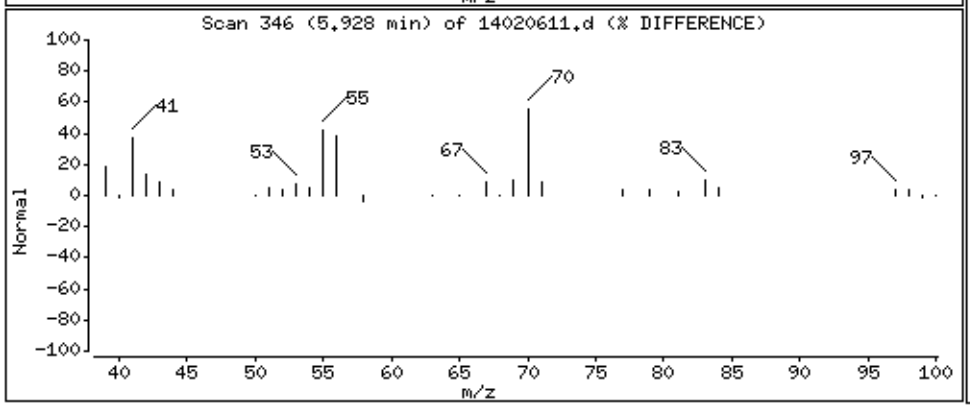
113 2,2,4-Trimethylpentane

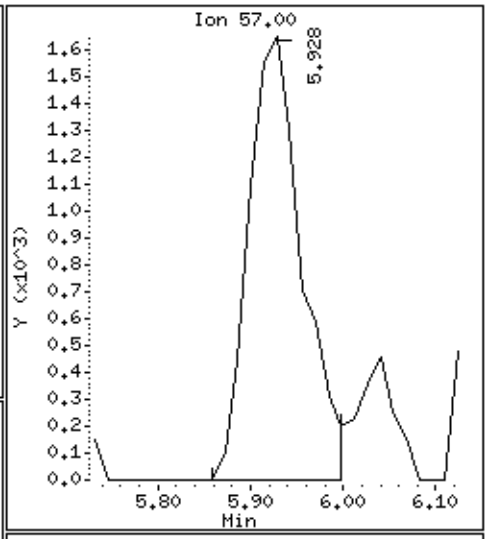
Concentration: 101.53 PPBV

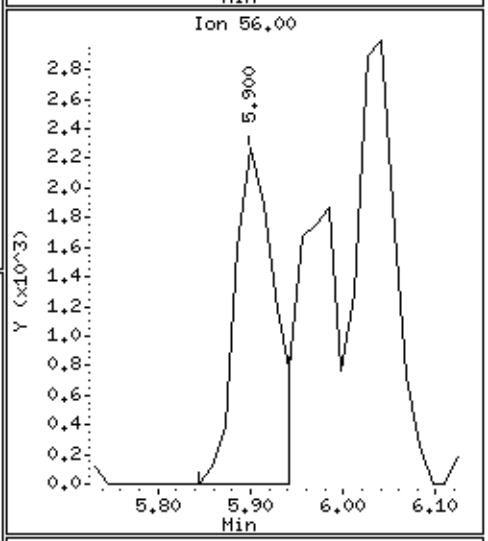


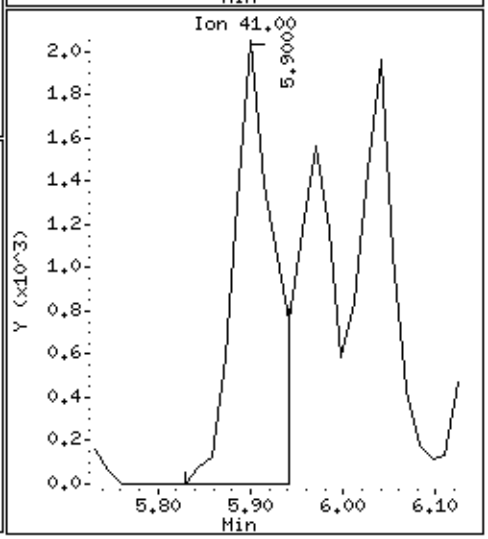












Data File: /chem/msd14.i/06feb17.b/14020611.d

Date : 06-FEB-2017 15:00

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #12373

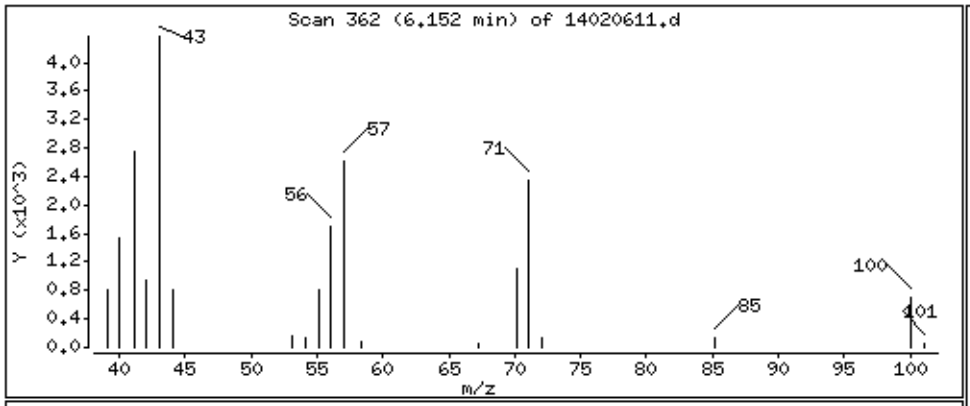
Operator: gd

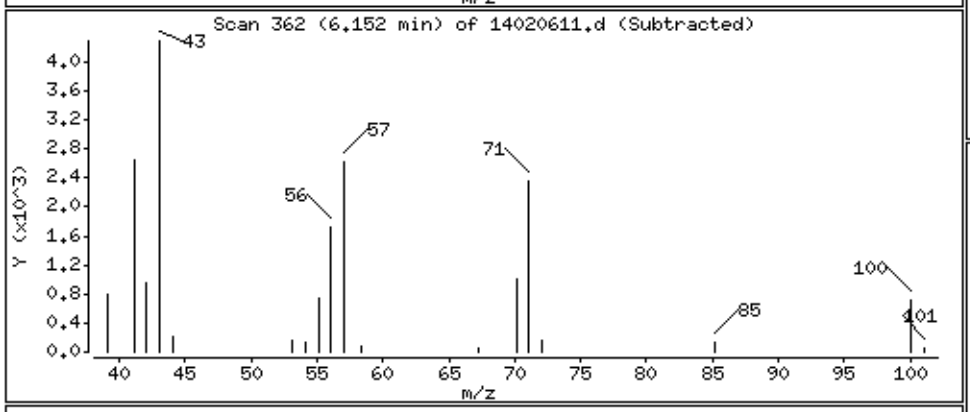
Column phase: RTX-624

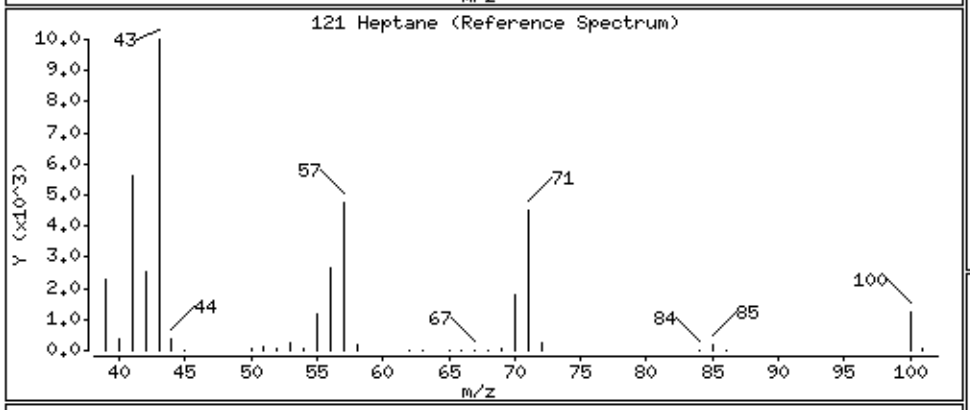
Column diameter: 0.18

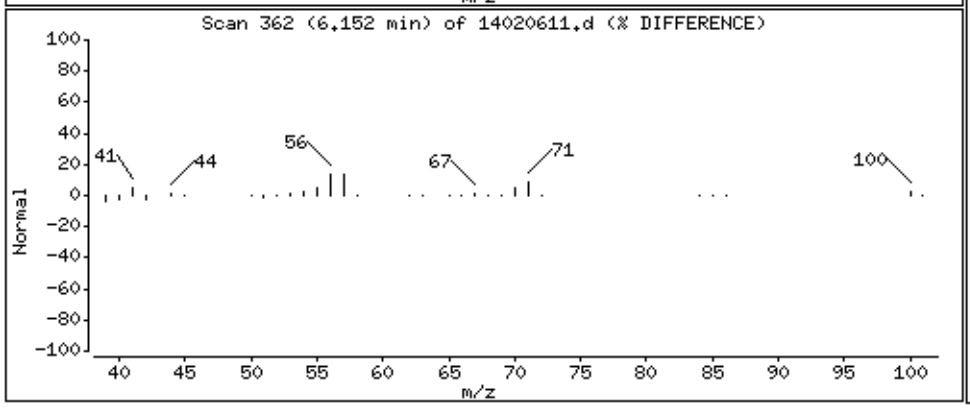
121 Heptane

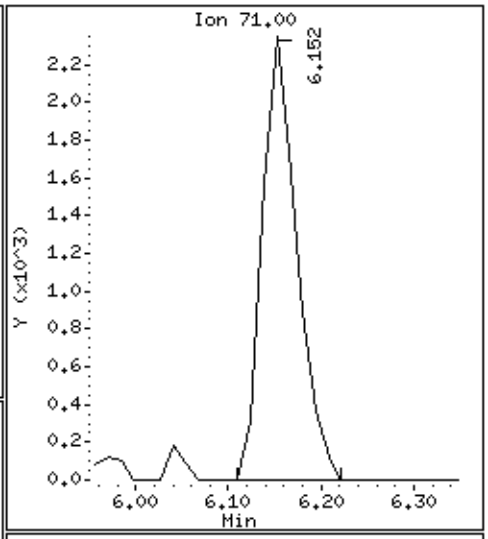
Concentration: 439.53 PPBV

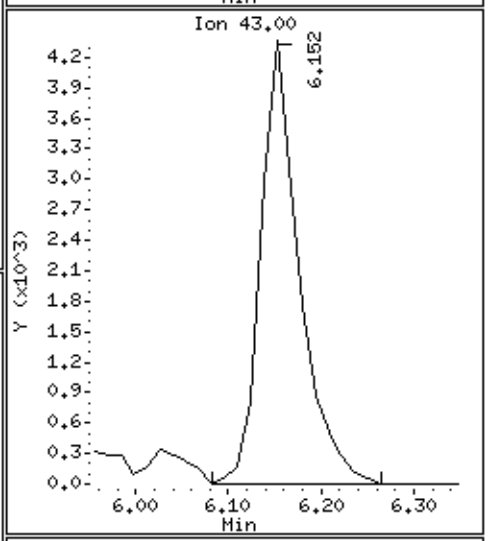


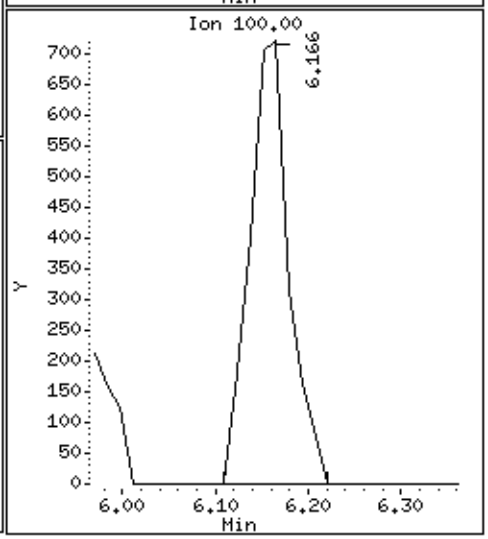












Data File: /chem/msd14.i/06feb17.b/14020611.d

Date : 06-FEB-2017 15:00

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #12373

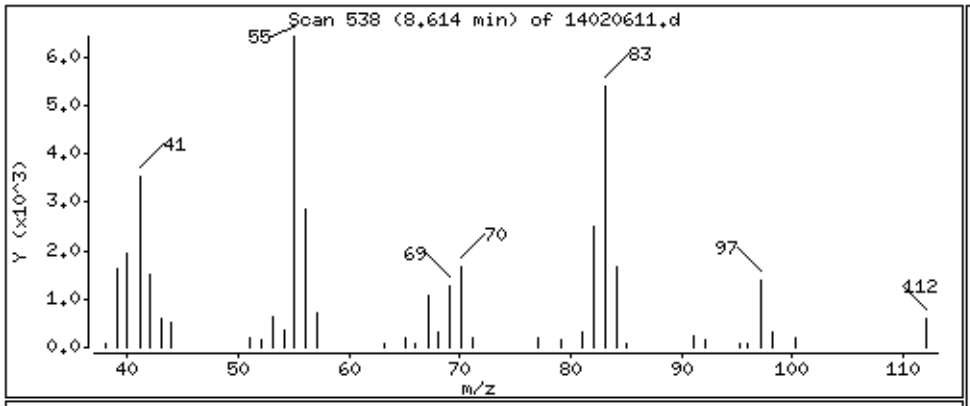
Operator: gd

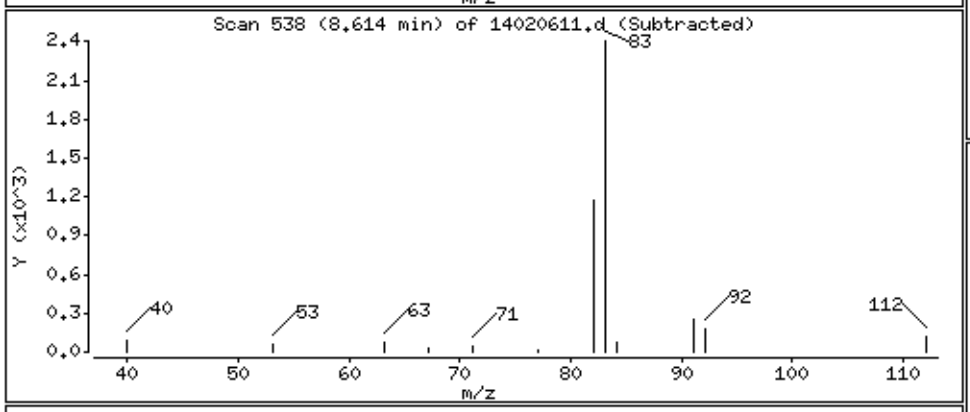
Column phase: RTX-624

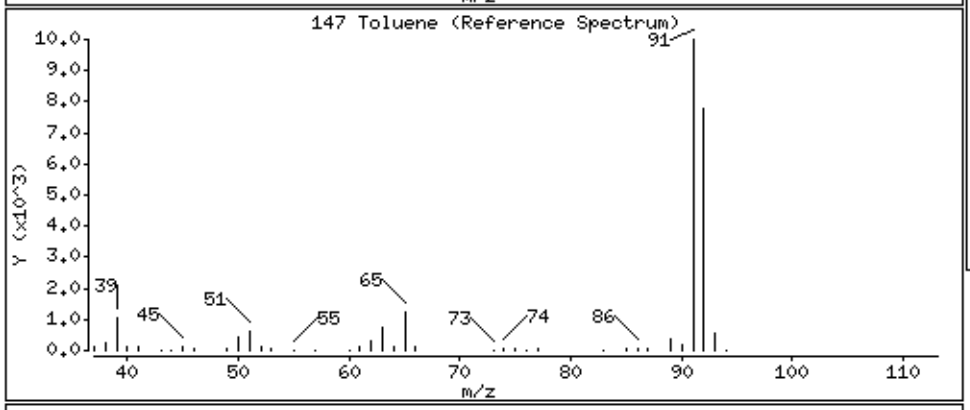
Column diameter: 0.18

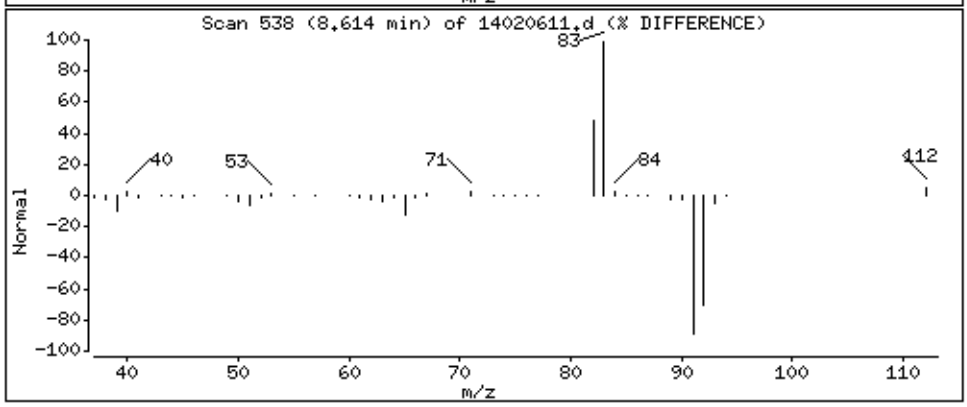
147 Toluene

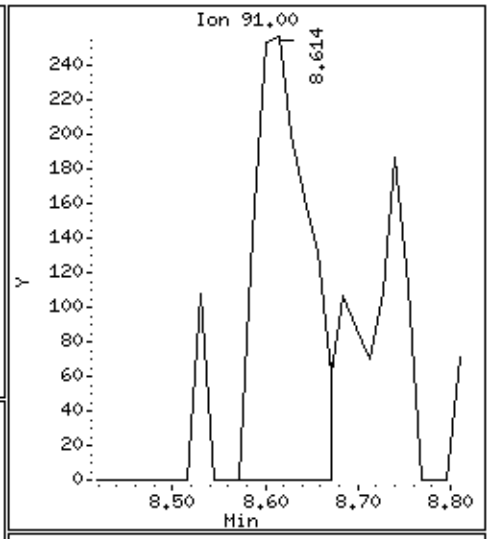
Concentration: 21.478 PPBV

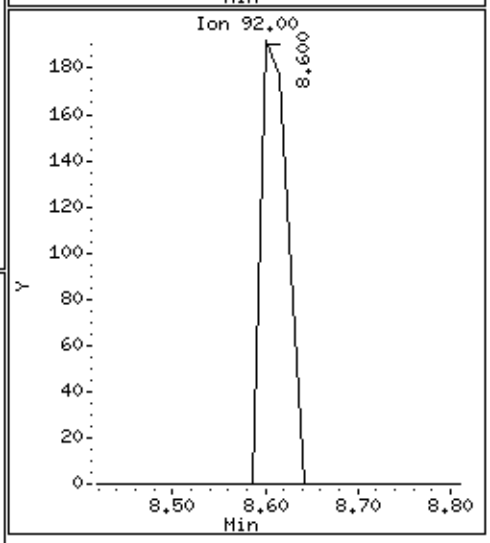












Data File: /chem/msd14.i/06feb17.b/14020611.d

Date : 06-FEB-2017 15:00

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #12373

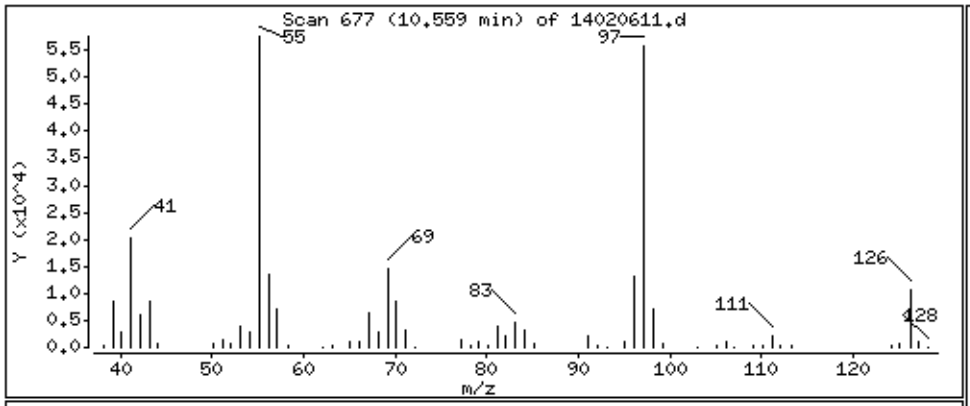
Operator: gd

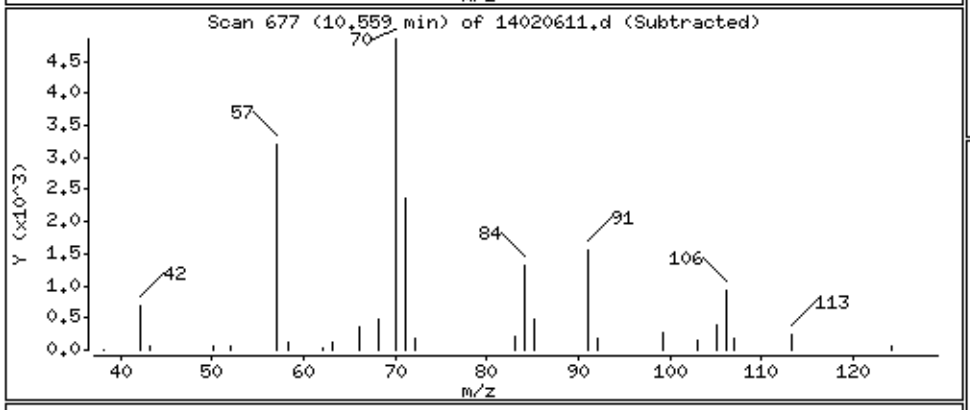
Column phase: RTX-624

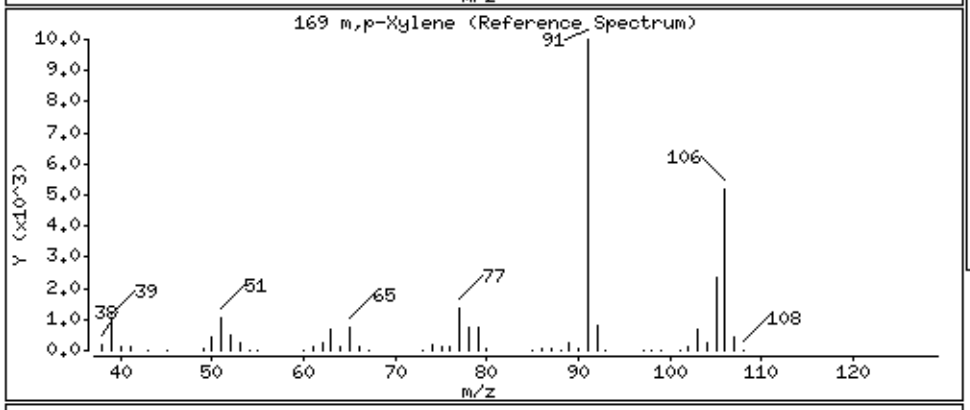
Column diameter: 0.18

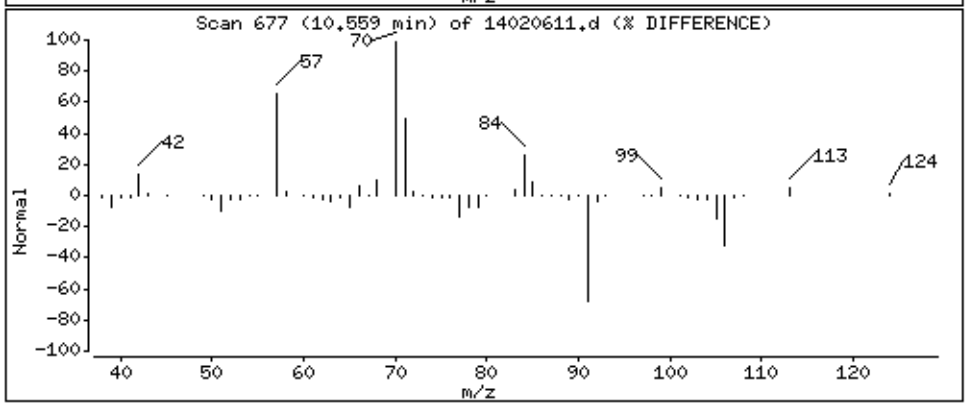
169 m,p-Xylene

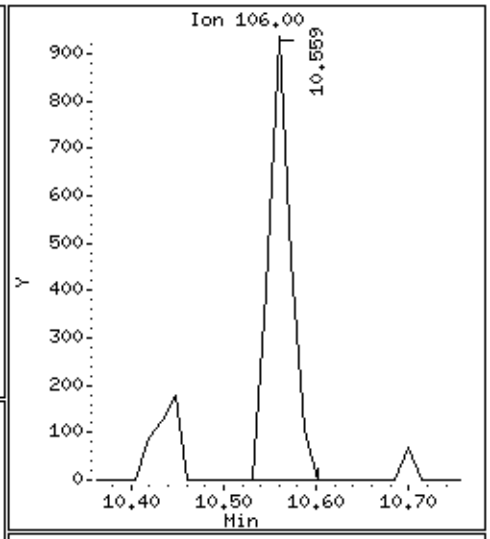
Concentration: 63.654 PPBV

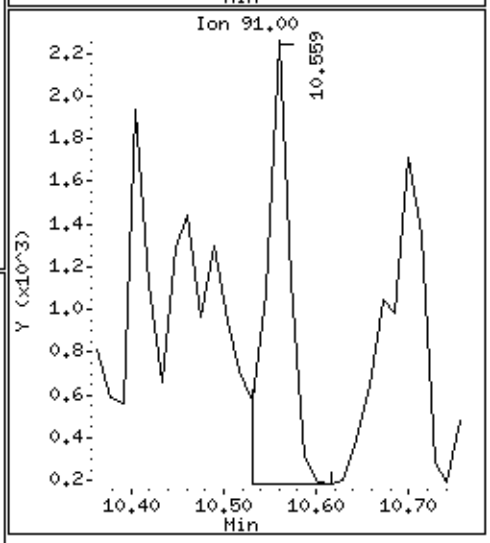












Data File: /chem/msd14.i/06feb17.b/14020611.d

Date : 06-FEB-2017 15:00

Client ID:

Instrument: msd14.i

Sample Info: 5.0mL #12373

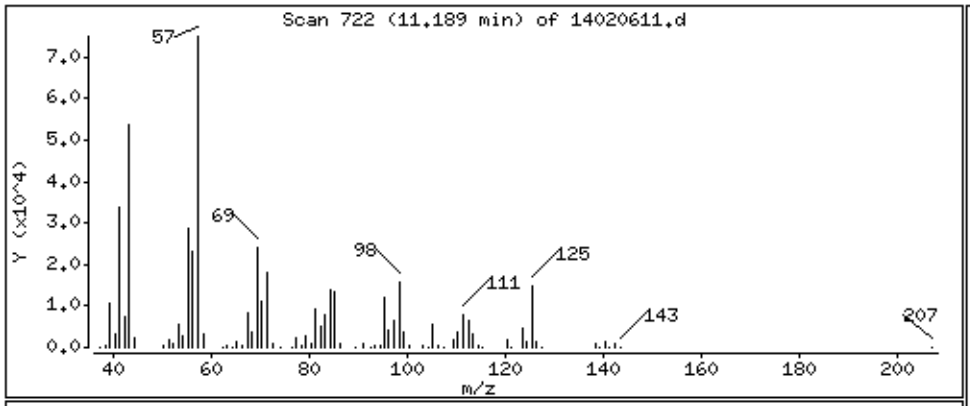
Operator: gd

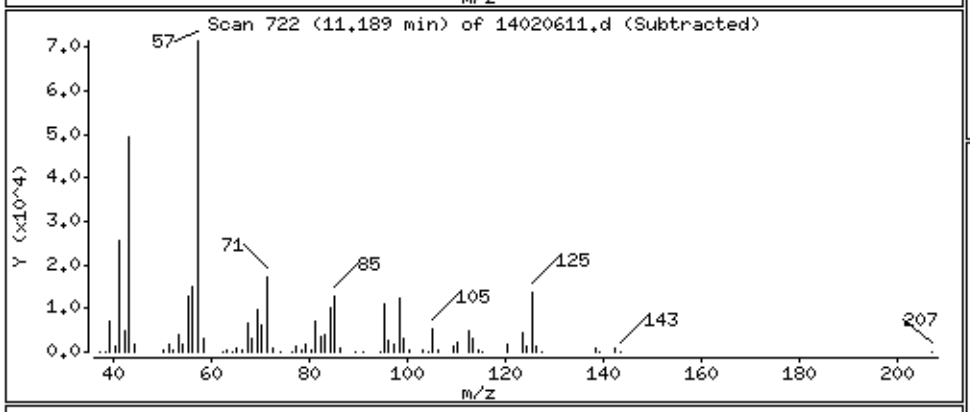
Column phase: RTX-624

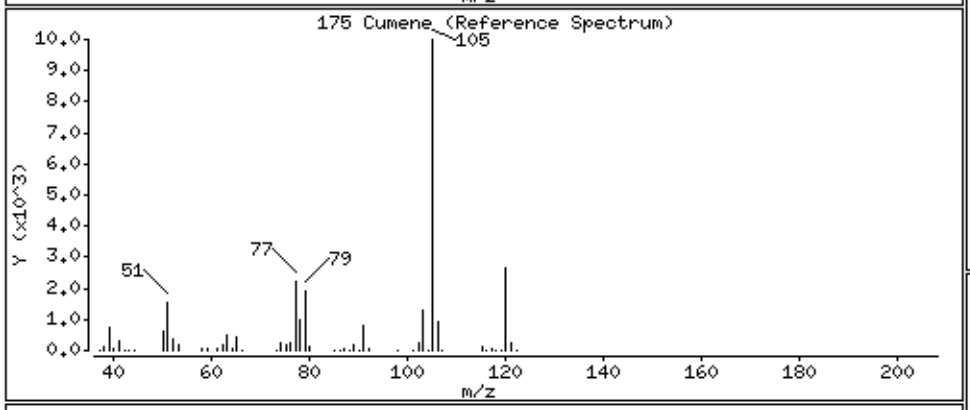
Column diameter: 0.18

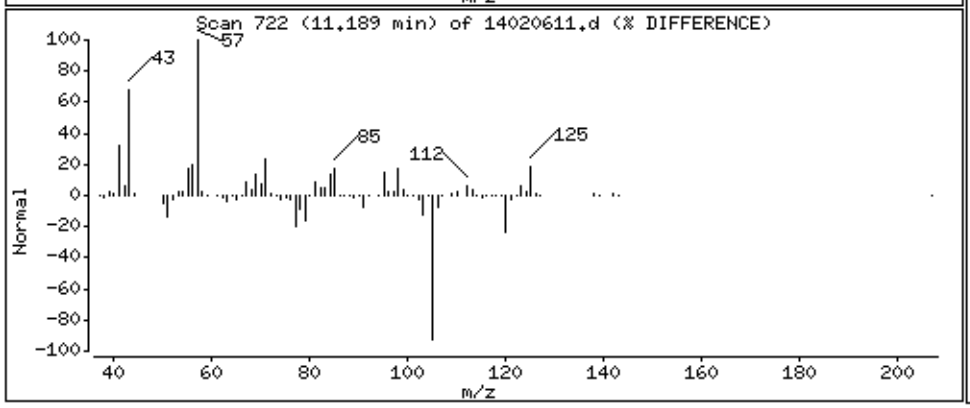
175 Cumene

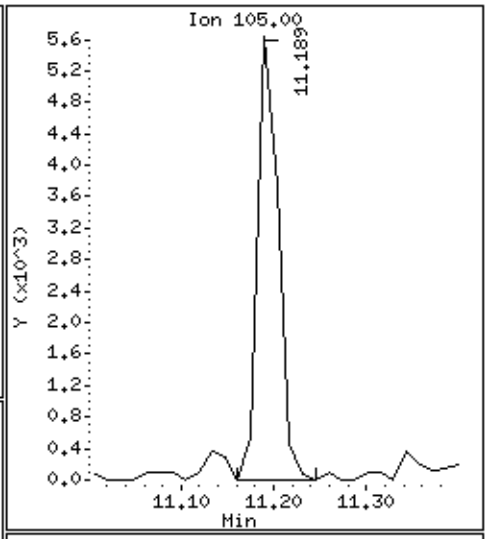
Concentration: 117.15 PPBV

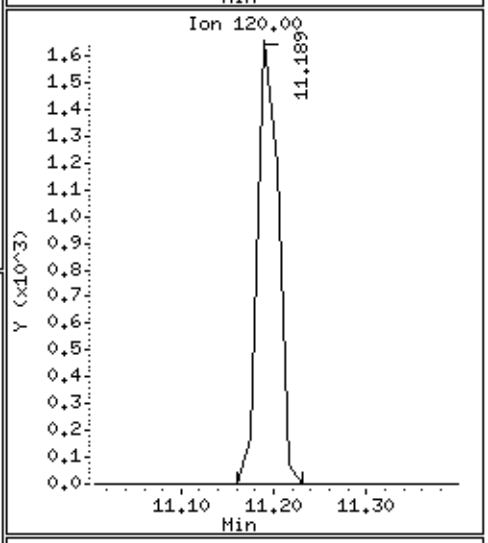


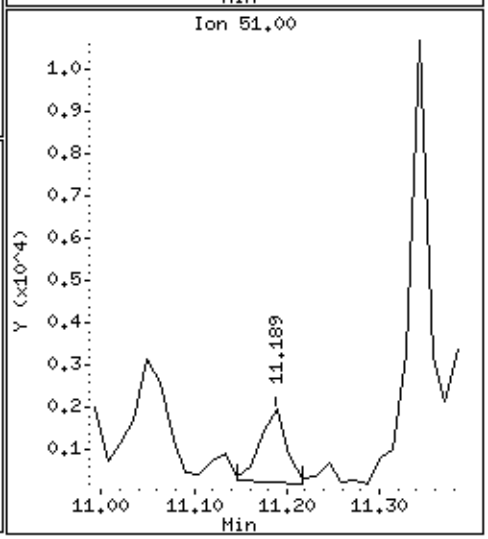












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B18SS-1-012617

Lab ID#: 1701428B-18A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	0.63 J	6.2	3.1 J
Freon 11	1.2	1.4	7.0	7.6
Ethanol	5.0	140	9.4	270
Acetone	12	12 J	30	29 J
2-Propanol	5.0	180	12	460
Carbon Disulfide	5.0	1.2 J	16	3.7 J
2-Butanone (Methyl Ethyl Ketone)	5.0	2.1 J	15	6.2 J
Benzene	1.2	0.22 J	4.0	0.71 J
Toluene	1.2	1.4	4.7	5.4
Ethyl Benzene	1.2	0.32 J	5.4	1.4 J
m,p-Xylene	1.2	1.0 J	5.4	4.6 J
o-Xylene	1.2	0.50 J	5.4	2.2 J
4-Ethyltoluene	1.2	0.23 J	6.1	1.1 J
1,2,4-Trimethylbenzene	1.2	0.25 J	6.1	1.2 J
1,3-Dichlorobenzene	1.2	1.2 J	7.5	7.2 J

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Client Sample ID: B18SS-1-012617

Lab ID#: 1701428B-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a020224**	**Date of Collection:**	**1/26/17 5:30:00 PM**
Dil. Factor:	**2.50**	**Date of Analysis:**	**2/3/17 01:54 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	0.63 J	6.2	3.1 J
Freon 114	1.2	Not Detected	8.7	Not Detected
Chloromethane	12	Not Detected	26	Not Detected
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,3-Butadiene	1.2	Not Detected	2.8	Not Detected
Bromomethane	12	Not Detected	48	Not Detected
Chloroethane	5.0	Not Detected	13	Not Detected
Freon 11	1.2	1.4	7.0	7.6
Ethanol	5.0	140	9.4	270
Freon 113	1.2	Not Detected	9.6	Not Detected
1,1-Dichloroethene	1.2	Not Detected	5.0	Not Detected
Acetone	12	12 J	30	29 J
2-Propanol	5.0	180	12	460
Carbon Disulfide	5.0	1.2 J	16	3.7 J
3-Chloropropene	5.0	Not Detected	16	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
Methyl tert-butyl ether	5.0	Not Detected	18	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	5.0	Not Detected
Hexane	1.2	Not Detected	4.4	Not Detected
1,1-Dichloroethane	1.2	Not Detected	5.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.0	2.1 J	15	6.2 J
cis-1,2-Dichloroethene	1.2	Not Detected	5.0	Not Detected
Tetrahydrofuran	1.2	Not Detected	3.7	Not Detected
Chloroform	1.2	Not Detected	6.1	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.8	Not Detected
Cyclohexane	1.2	Not Detected	4.3	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.9	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.8	Not Detected
Benzene	1.2	0.22 J	4.0	0.71 J
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Heptane	1.2	Not Detected	5.1	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.8	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected
Bromodichloromethane	1.2	Not Detected	8.4	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.7	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	5.1	Not Detected
Toluene	1.2	1.4	4.7	5.4
trans-1,3-Dichloropropene	1.2	Not Detected	5.7	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.5	Not Detected
2-Hexanone	5.0	Not Detected	20	Not Detected

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Client Sample ID: B18SS-1-012617

Lab ID#: 1701428B-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a020224**	**Date of Collection:**	**1/26/17 5:30:00 PM**
Dil. Factor:	**2.50**	**Date of Analysis:**	**2/3/17 01:54 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.2	Not Detected	11	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.6	Not Detected
Chlorobenzene	1.2	Not Detected	5.8	Not Detected
Ethyl Benzene	1.2	0.32 J	5.4	1.4 J
m,p-Xylene	1.2	1.0 J	5.4	4.6 J
o-Xylene	1.2	0.50 J	5.4	2.2 J
Styrene	1.2	Not Detected	5.3	Not Detected
Bromoform	1.2	Not Detected	13	Not Detected
Cumene	1.2	Not Detected	6.1	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.6	Not Detected
Propylbenzene	1.2	Not Detected	6.1	Not Detected
4-Ethyltoluene	1.2	0.23 J	6.1	1.1 J
1,3,5-Trimethylbenzene	1.2	Not Detected	6.1	Not Detected
1,2,4-Trimethylbenzene	1.2	0.25 J	6.1	1.2 J
1,3-Dichlorobenzene	1.2	1.2 J	7.5	7.2 J
1,4-Dichlorobenzene	1.2	Not Detected	7.5	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.5	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.5	Not Detected
1,2,4-Trichlorobenzene	5.0	Not Detected	37	Not Detected
Hexachlorobutadiene	5.0	Not Detected	53	Not Detected
Naphthalene	2.5	Not Detected	13	Not Detected

J = Estimated value.

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

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	106	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/02feb17.b/a020224.d
Lab Smp Id: 1701428B-18A
Inj Date : 03-FEB-2017 01:54
Operator : jlf Inst ID: msda.i
Smp Info : 200mL 1L1720
Misc Info : 5.5 Hg->15.3 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/02feb17.b/a17q0116a.m
Meth Date : 02-Feb-2017 15:46 jscarbro Quant Type: ISTD
Cal Date : 16-JAN-2017 18:50 Cal File: a011609.d
Als bottle: 9
Dil Factor: 2.50000
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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.521 (1.000)	130	196542	25.0000		80.00- 120.00	100.00
5.528	5.521 (1.000)	128	153377			50.57- 110.57	78.04
5.528	5.521 (1.000)	49	297260			118.90- 178.90	151.25
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.409 (1.000)	114	836276	25.0000		80.00- 120.00	100.00
6.416	6.409 (1.000)	88	118948			0.00- 45.14	14.22
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	807983	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	398410			21.31- 81.31	49.31
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.065	6.058 (1.097)	65	254659	24.5408	24.541	80.00- 120.00	100.00
6.065	6.058 (1.097)	67	129218			29.46- 89.46	50.74
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.627	7.620 (1.189)	98	869798	24.8837	24.884	80.00- 120.00	100.00
7.627	7.620 (1.189)	70	90269			0.00- 39.82	10.38

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

$ 146 Toluene-d8 (continued)
  7.627   7.620 (1.189)   100    577962                    36.19-  96.19    66.45
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
  9.847   9.848 (1.112)   174    520056 26.6355   26.635  80.00- 120.00   100.00
  9.847   9.848 (1.112)    95    614017                    92.19- 152.19   118.07
  9.847   9.848 (1.112)   176    519865                    71.02- 131.02    99.96
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.560   1.553 (0.282)    85      4491 0.25181   0.6295  80.00- 120.00   100.00(a)
  1.560   1.553 (0.282)    87      1036                     2.19-  62.19    23.09
-------------------------------------------------------------------------------
   35 Freon 11                                      CAS #: 75-69-4
  2.656   2.642 (0.480)   101     10474 0.54234    1.356  80.00- 120.00   100.00
  2.649   2.642 (0.479)   103      7157                    34.98-  94.98    68.34
-------------------------------------------------------------------------------
   42 Ethanol                                       CAS #: 64-17-5
  2.992   2.978 (0.541)    45    220937 56.5472   141.37  80.00- 120.00   100.00
  2.992   2.978 (0.541)    46     89853                     9.25-  69.25    40.67
-------------------------------------------------------------------------------
   52 Acetone                                       CAS #: 67-64-1
  3.494   3.480 (0.632)    58     22145 4.96524   12.413  80.00- 120.00   100.00(a)
  3.494   3.480 (0.632)    43     71461                   267.70- 327.70   322.69
-------------------------------------------------------------------------------
   56 Carbon Disulfide                              CAS #: 75-15-0
  3.565   3.558 (0.645)    76     10154 0.47245    1.181  80.00- 120.00   100.00(a)
-------------------------------------------------------------------------------
   57 2-Propanol                                    CAS #: 67-63-0
  3.651   3.637 (0.661)    45   1220698 74.2341   185.58  80.00- 120.00   100.00
  3.651   3.637 (0.661)    43    198100                     0.00-  46.48    16.23
  3.651   3.637 (0.661)    59     42933                     0.00-  33.95     3.52
-------------------------------------------------------------------------------
   92 2-Butanone                                    CAS #: 78-93-3
  5.328   5.313 (0.964)    72      3486 0.83743    2.094  80.00- 120.00   100.00(a)
  5.335   5.313 (0.965)    43     41191                   492.83- 552.83  1181.29
  5.328   5.313 (0.964)    57      1993                    11.22-  71.22    57.17
-------------------------------------------------------------------------------
  116 Benzene                                       CAS #: 71-43-2
  6.044   6.037 (0.942)    78      2386 0.08950   0.2237  80.00- 120.00   100.00(a)
  6.044   6.037 (0.942)    77       675                     0.00-  52.91    28.30
-------------------------------------------------------------------------------
  147 Toluene                                       CAS #: 108-88-3
  7.684   7.677 (1.198)    91     21033 0.57893    1.447  80.00- 120.00   100.00
  7.684   7.677 (1.198)    92     12968                    28.71-  88.71    61.66
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                 CAS #: 100-41-4
  8.938   8.931 (1.009)   106      2299 0.12759   0.3190  80.00- 120.00   100.00(a)
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
167 Ethyl Benzene (continued)							
8.938	8.931 (1.009)	91	7809			278.30- 338.30	339.61
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	9280	0.41926	1.048	80.00- 120.00	100.00(a)
9.031	9.031 (1.019)	91	19062			162.42- 222.42	205.41
171 o-Xylene					CAS #: 95-47-6		
9.375	9.375 (1.058)	106	4274	0.19850	0.4962	80.00- 120.00	100.00(a)
9.375	9.375 (1.058)	91	9517			175.73- 235.73	222.67
188 4-Ethyltoluene					CAS #: 622-96-8		
10.077	10.098 (1.137)	120	1949	0.09231	0.2308	80.00- 120.00	100.00(a)
10.077	10.098 (1.137)	105	7034			289.38- 349.38	360.75
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.183)	120	2719	0.10175	0.2544	80.00- 120.00	100.00(a)
10.478	10.478 (1.183)	105	6855			182.43- 242.43	252.08
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.764	10.765 (1.215)	146	19301	0.47748	1.194	80.00- 120.00	100.00(a)
10.764	10.765 (1.215)	148	12951			33.68- 93.68	67.10
10.764	10.765 (1.215)	111	7919			10.08- 70.08	41.03

QC Flag Legend

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

Report Date: 09-Feb-2017 14:40

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a020224.d
Lab Smp Id: 1701428B-18A
Analysis Type: VOA
Quant Type: ISTD
Operator: jlf
Method File: /chem/msda.i/02feb17.b/a17q0116a.m
Misc Info: 5.5 Hg->15.3 psi

Calibration Date: 02-FEB-2017
Calibration Time: 10:10

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	213765	128259	299271	196542	-8.06
123 1,4-Difluorobenze	909926	545956	1273896	836276	-8.09
163 Chlorobenzene-d5	849867	509920	1189814	807983	-4.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.42	0.11
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	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: 09-Feb-2017 14:40

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 02feb17
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1701428B-18A
Level: LOW Operator: jlf
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12ethanol.spk Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msda.i/02feb17.b/a17q0116a.m
Misc Info: 5.5 Hg->15.3 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.541	98.16	70-130
$ 146 Toluene-d8	25.000	24.884	99.53	70-130
$ 177 4-Bromofluorobenze	25.000	26.635	106.54	70-130

Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

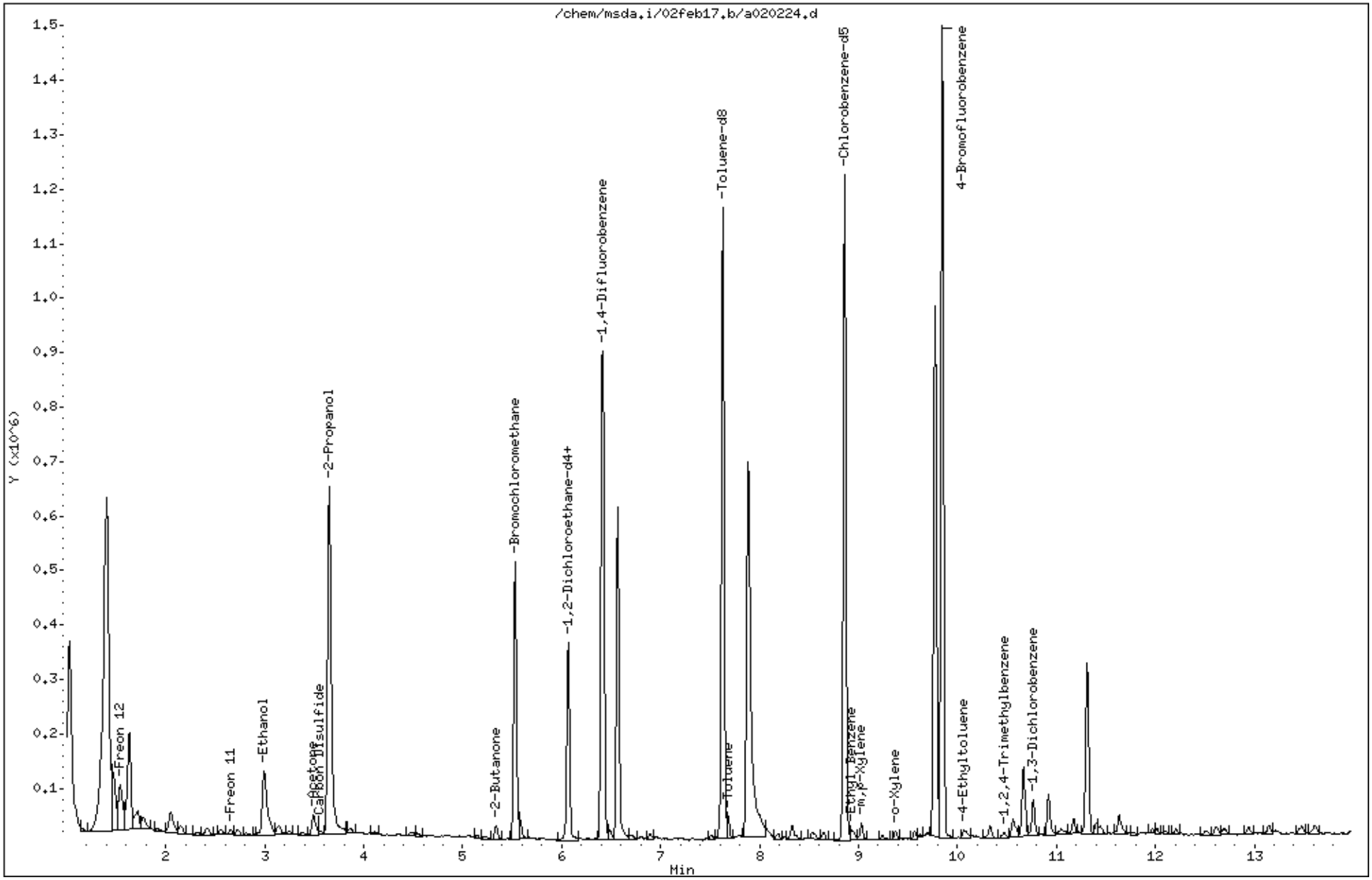
Sample Info: 200mL 1L1720

Column phase: RTX-624

Instrument: msda.i

Operator: jlf

Column diameter: 0.25



Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

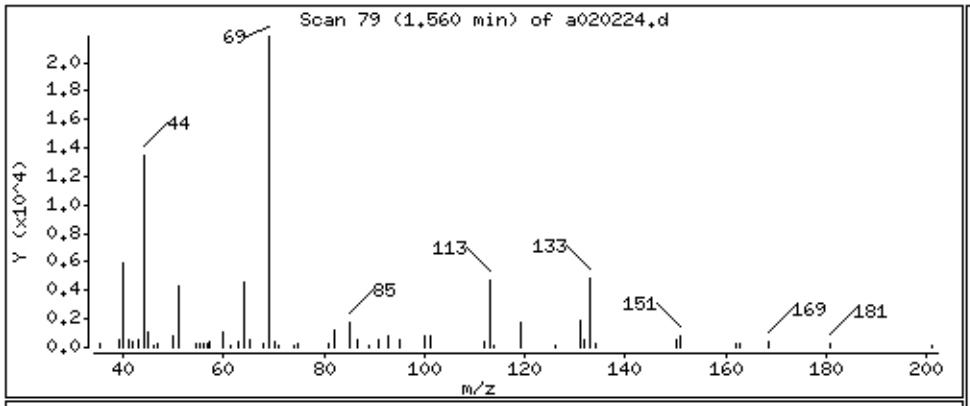
Operator: jlf

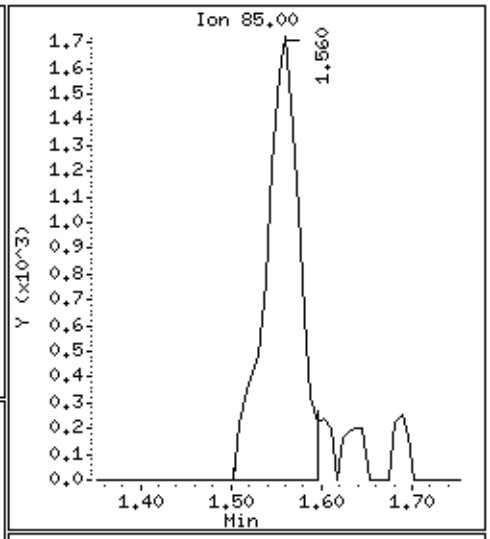
Column phase: RTX-624

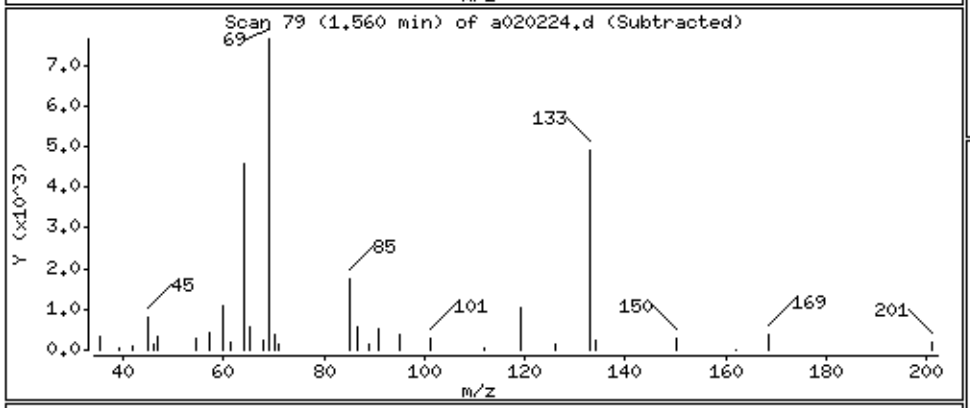
Column diameter: 0.25

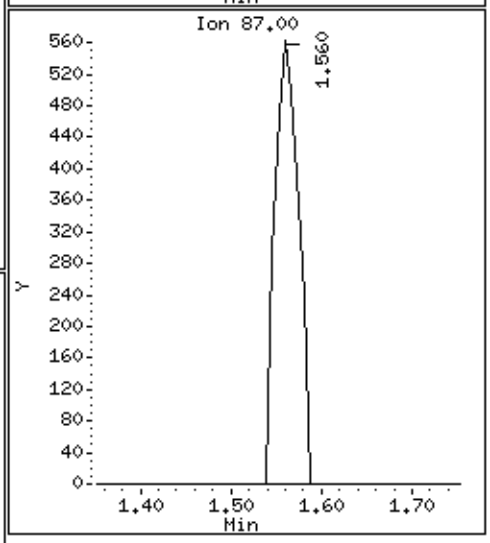
11 Freon 12

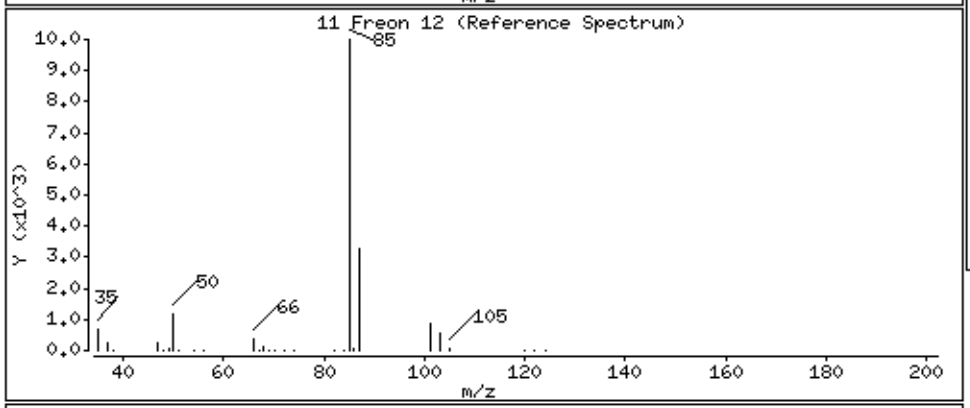
Concentration: 0.6295 PPBV

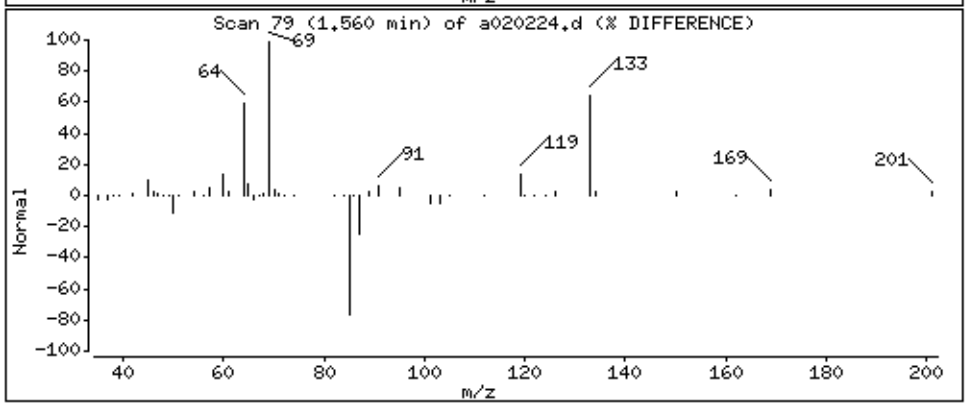












Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

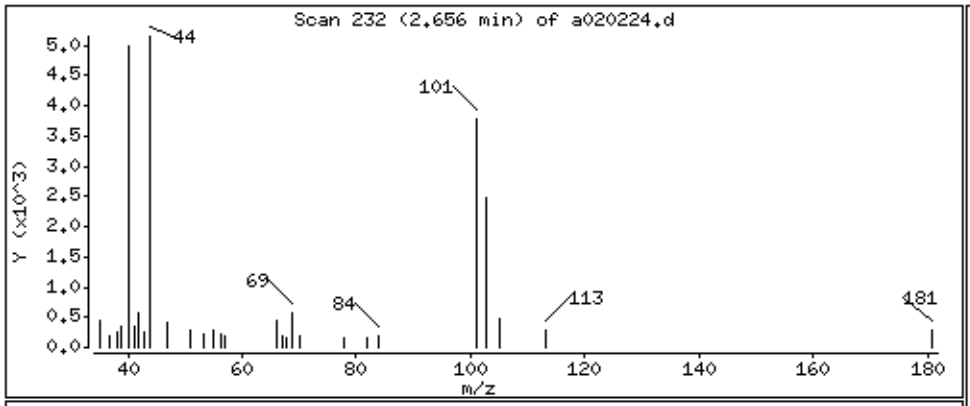
Operator: jlf

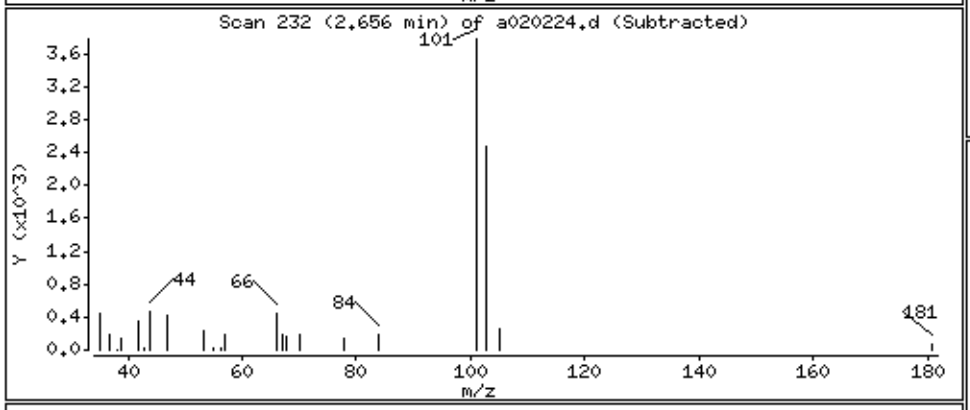
Column phase: RTX-624

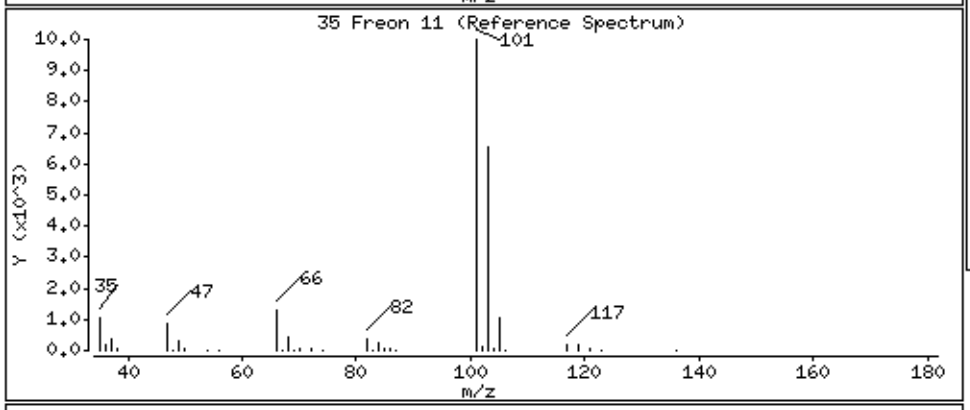
Column diameter: 0.25

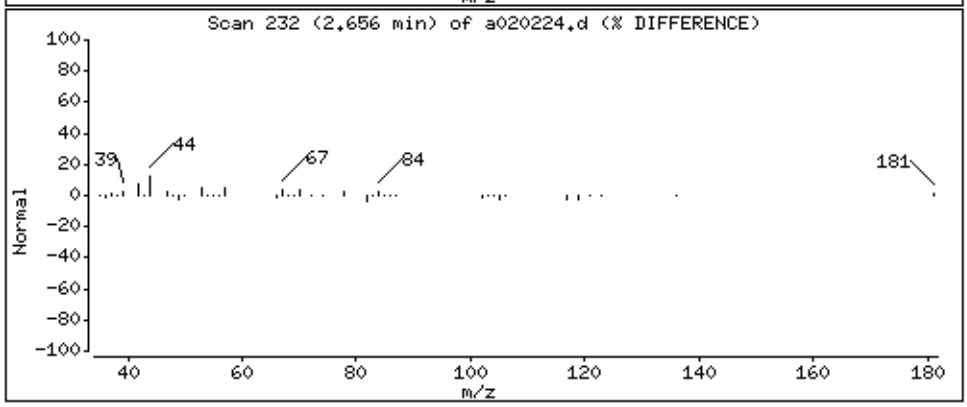
35 Freon 11

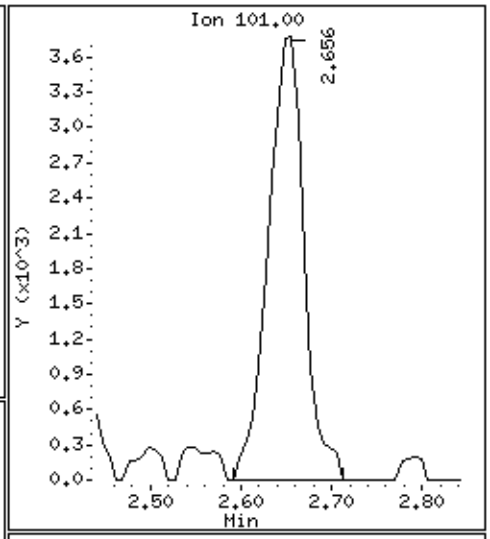
Concentration: 1.356 PPBV

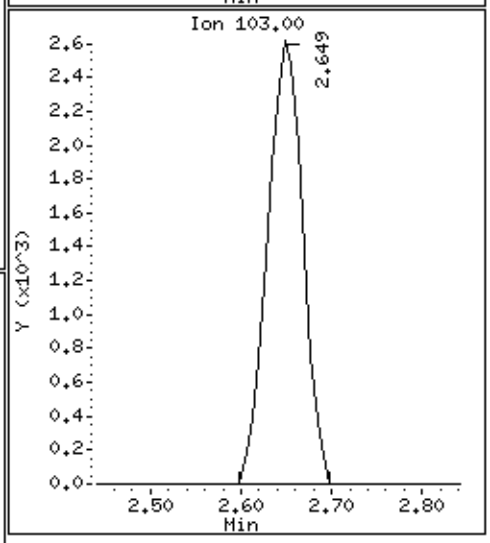












Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

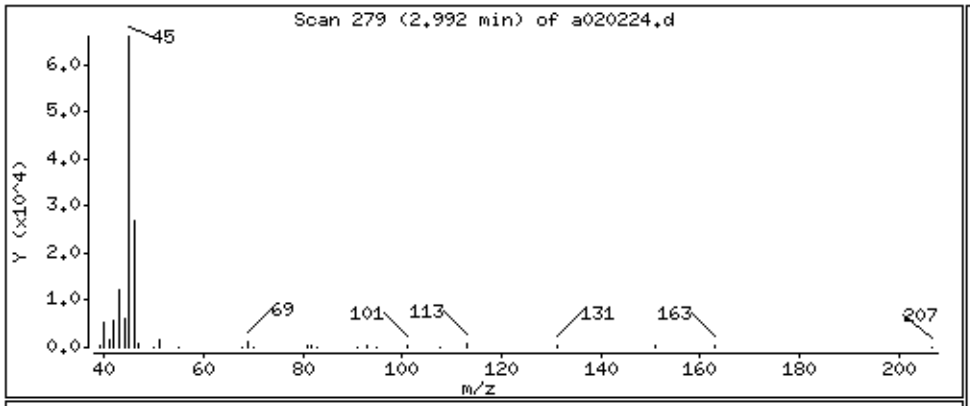
Operator: jlf

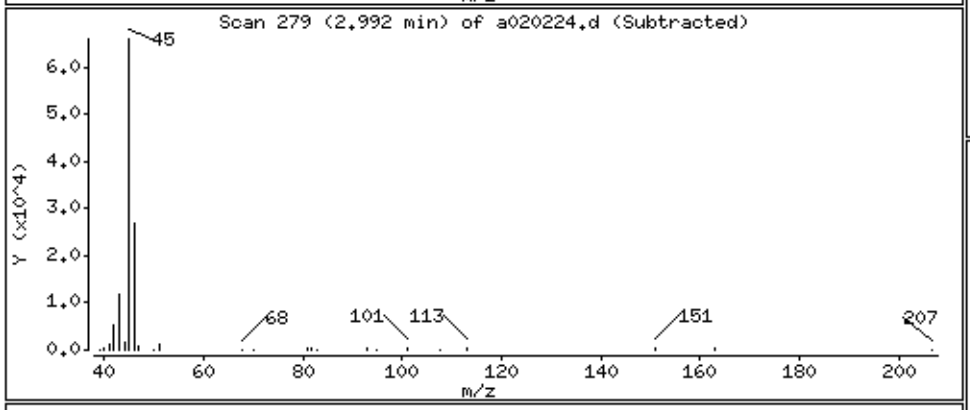
Column phase: RTX-624

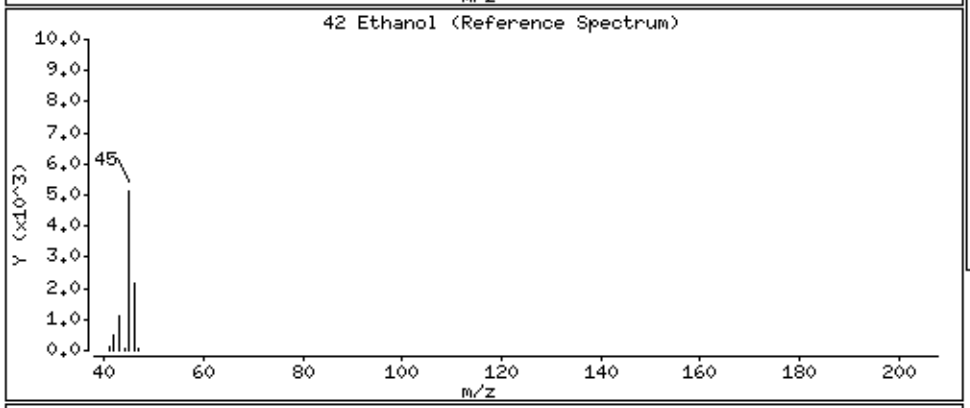
Column diameter: 0.25

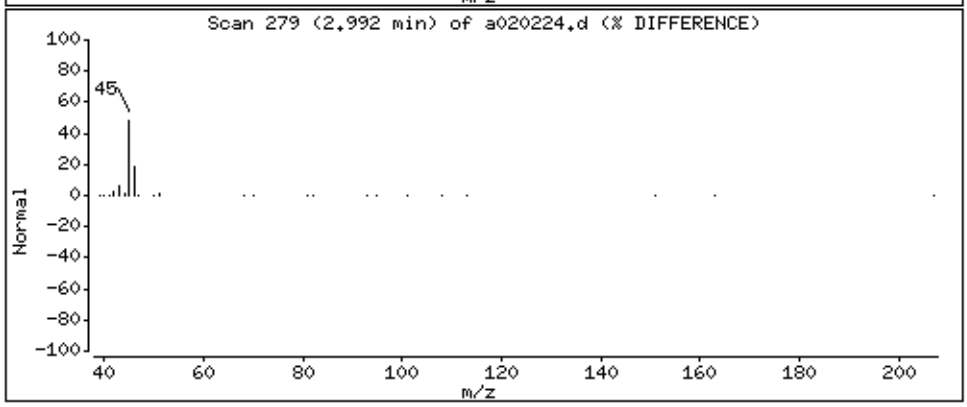
42 Ethanol

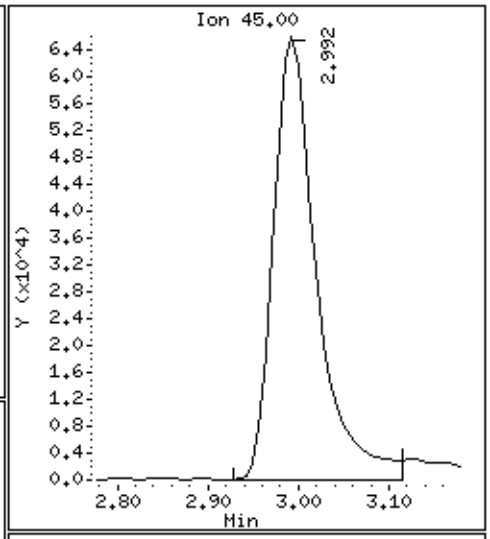
Concentration: 141.37 PPBV

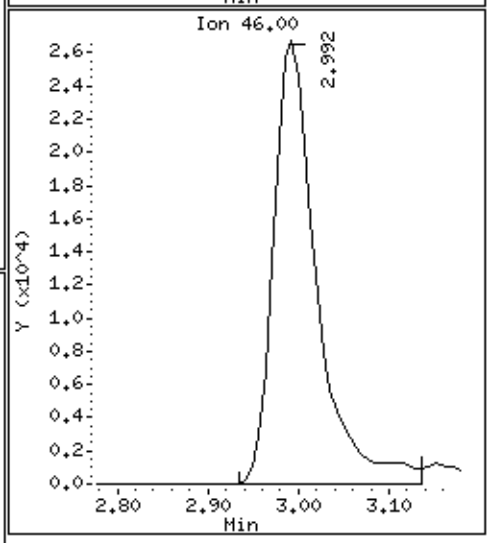












Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

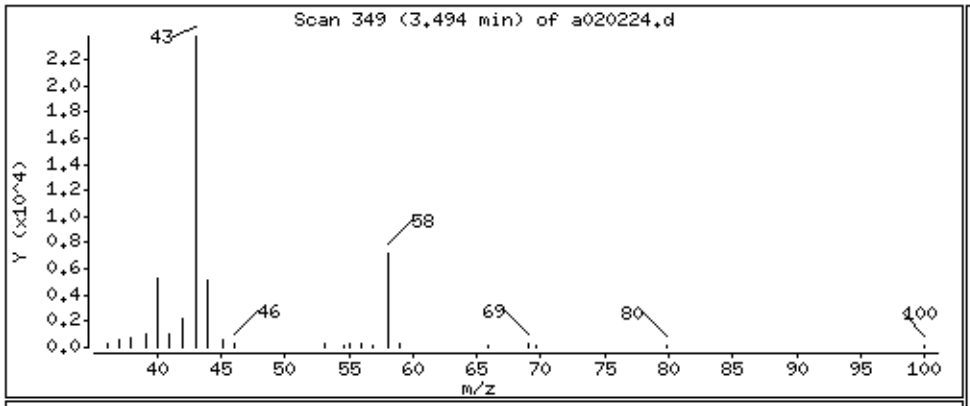
Operator: jlf

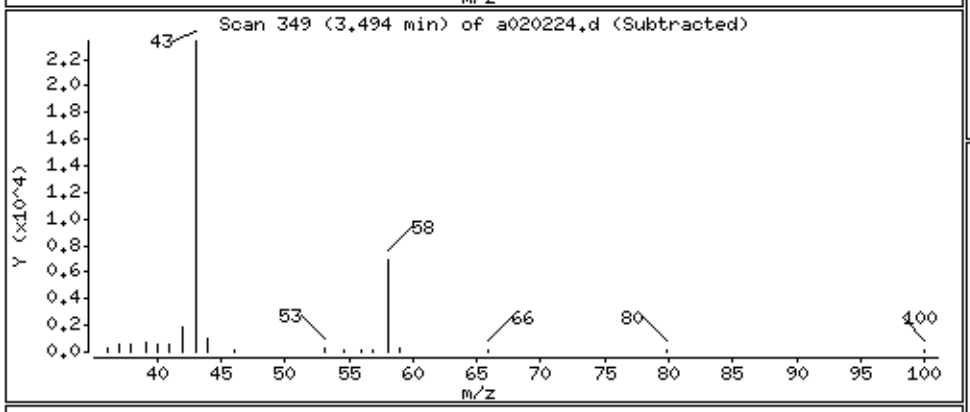
Column phase: RTX-624

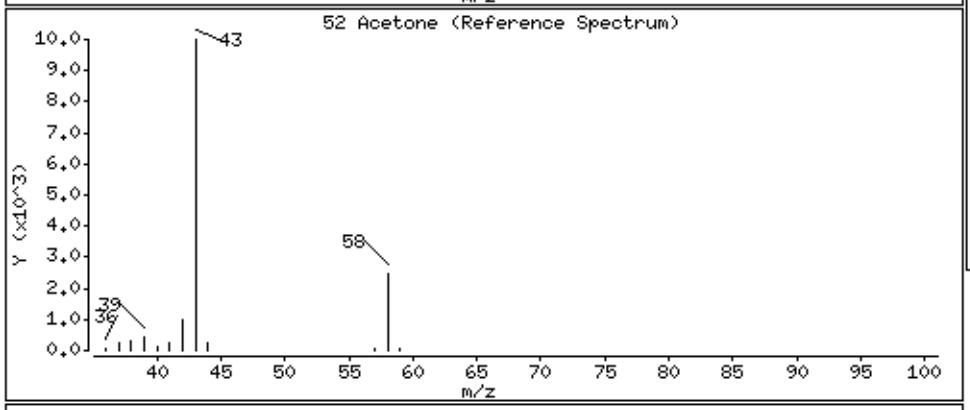
Column diameter: 0.25

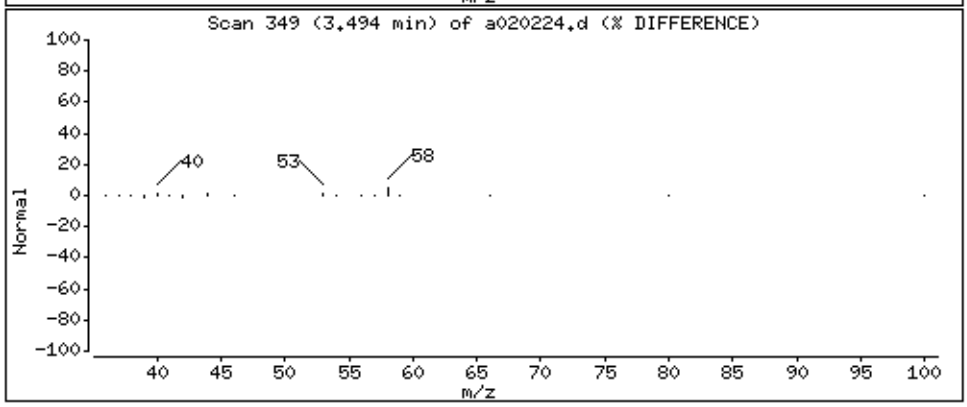
52 Acetone

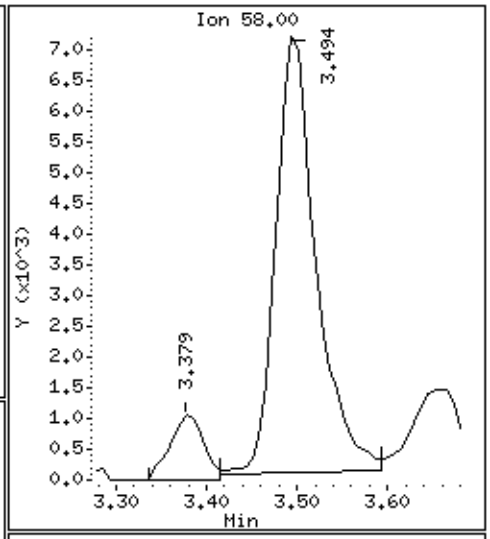
Concentration: 12.413 PPBV

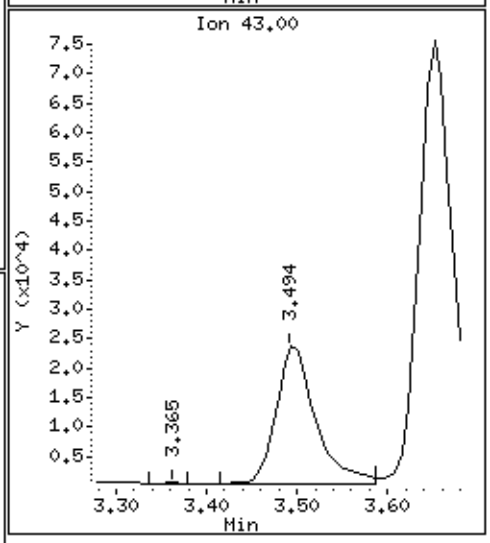












Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

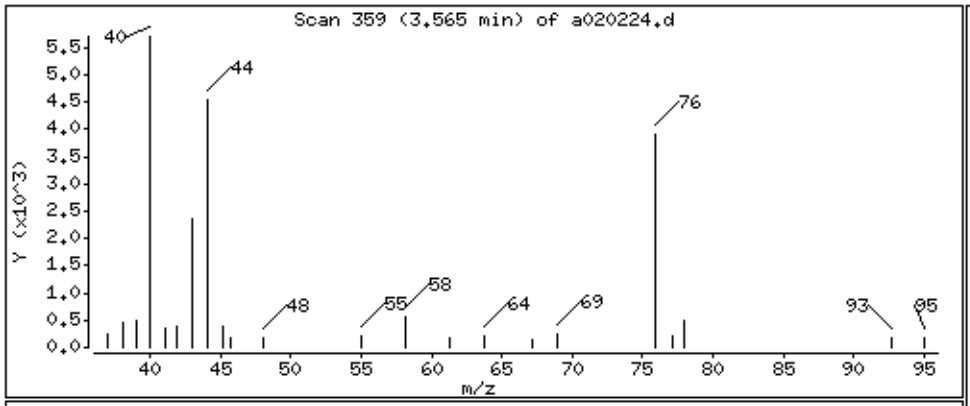
Operator: jlf

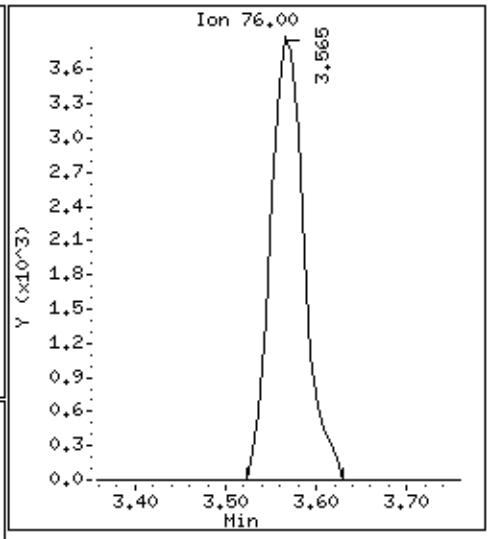
Column phase: RTX-624

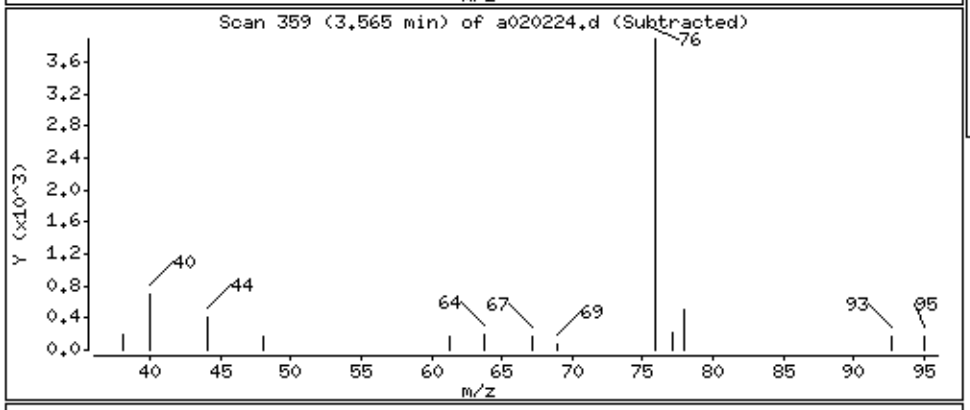
Column diameter: 0.25

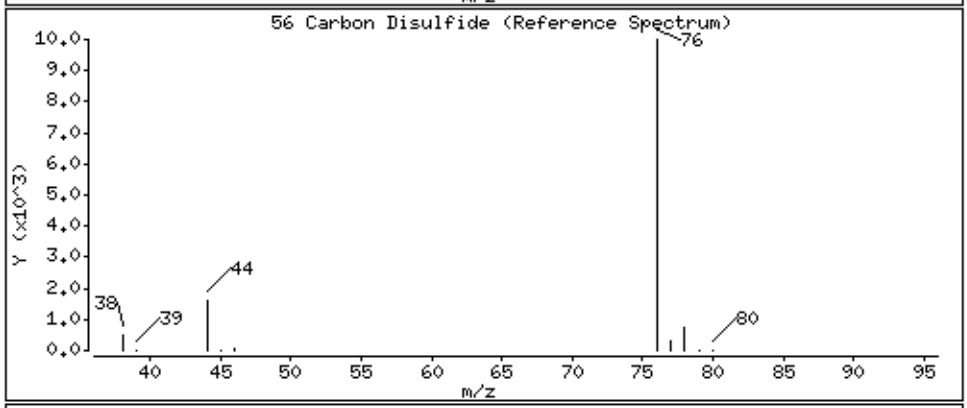
56 Carbon Disulfide

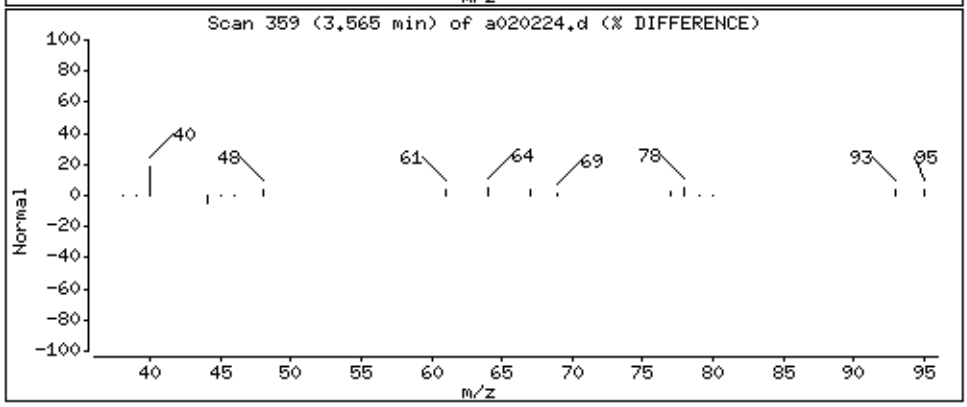
Concentration: 1.181 PPBV











Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

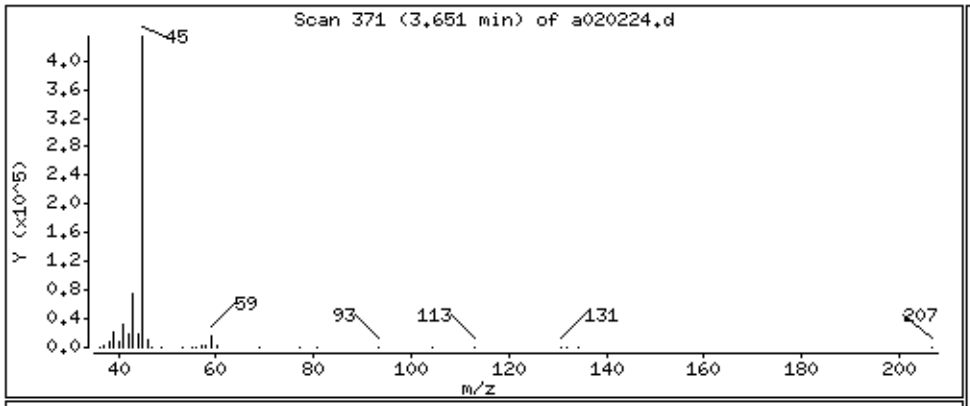
Operator: jlf

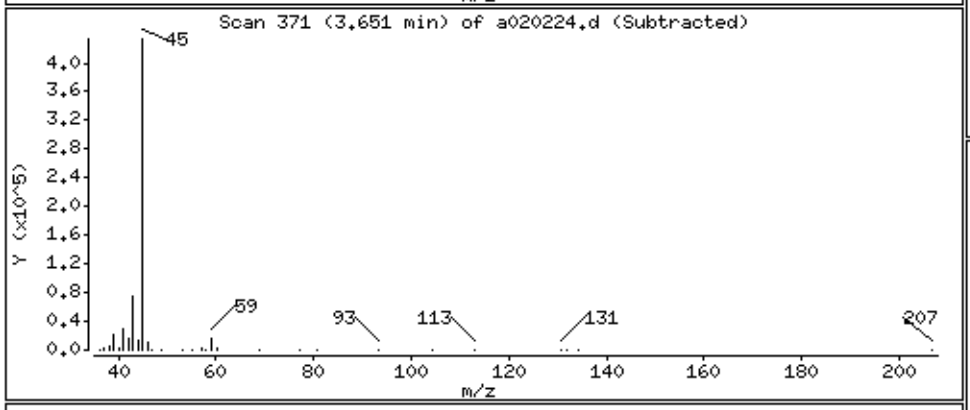
Column phase: RTX-624

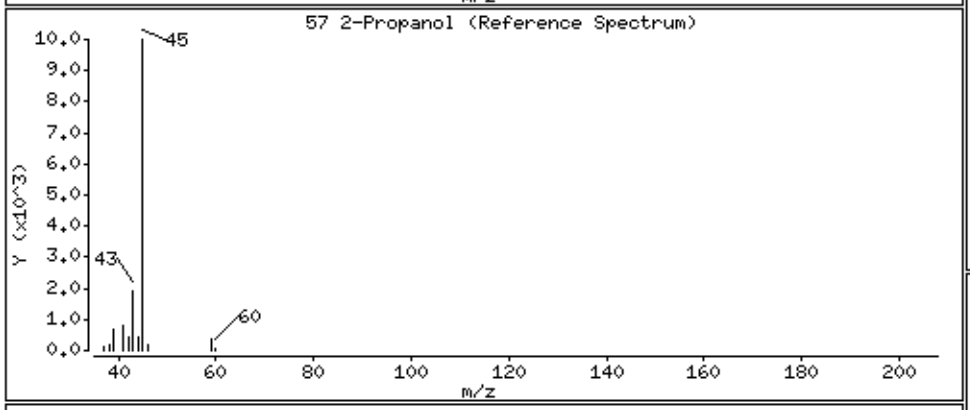
Column diameter: 0.25

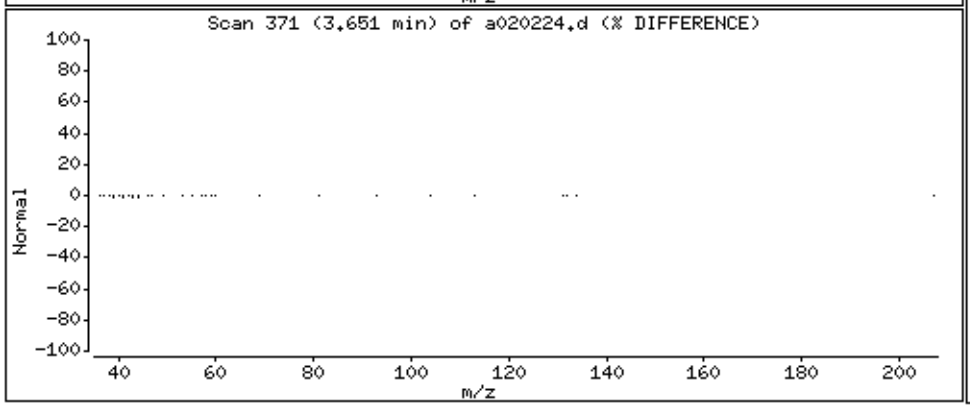
57 2-Propanol

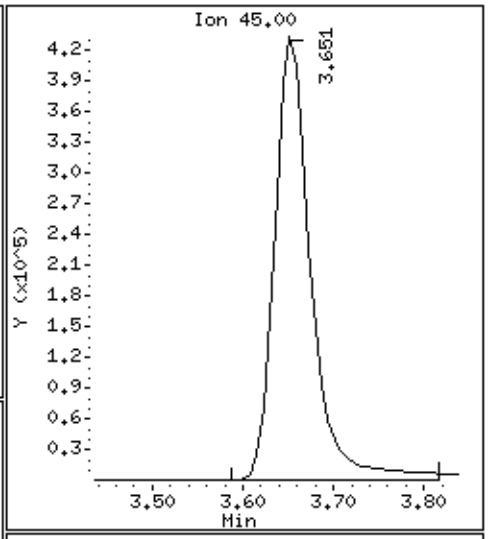
Concentration: 185.58 PPBV

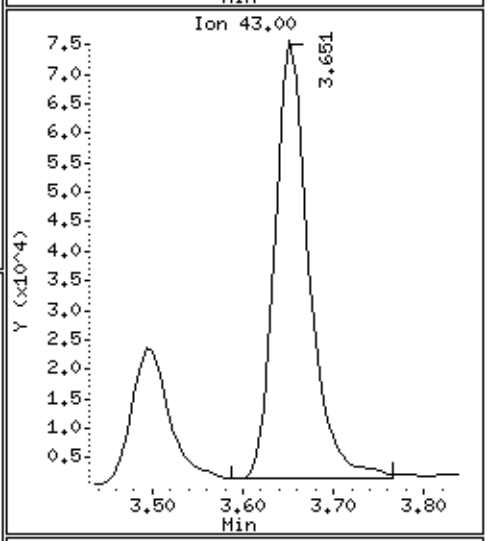


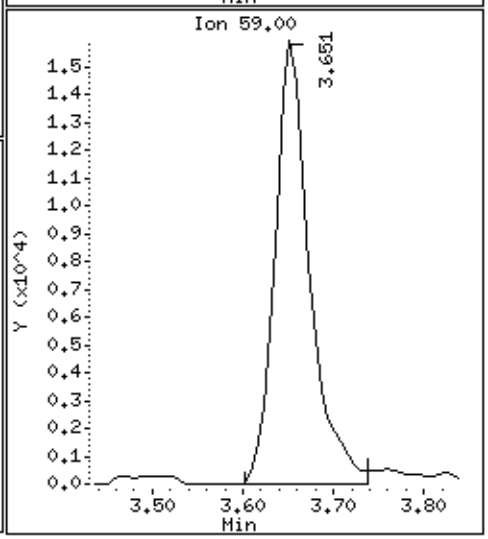












Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

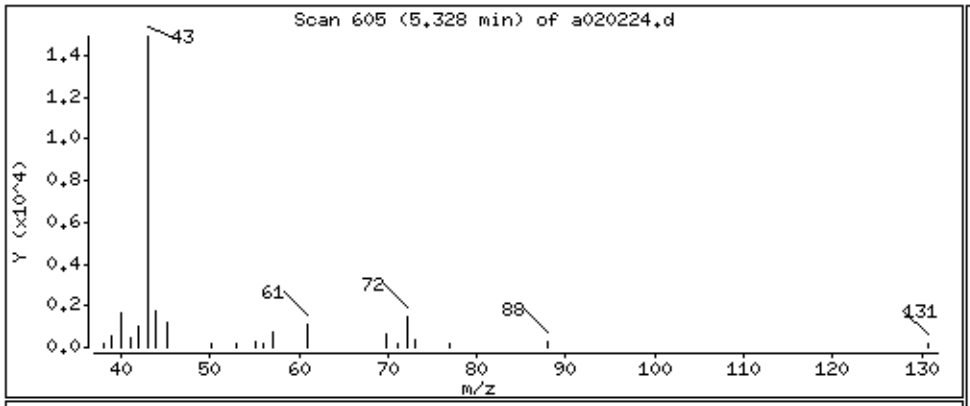
Operator: jlf

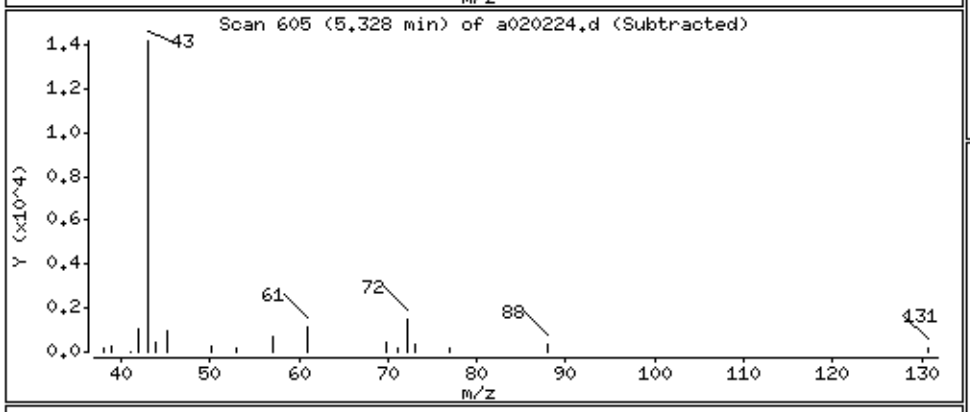
Column phase: RTX-624

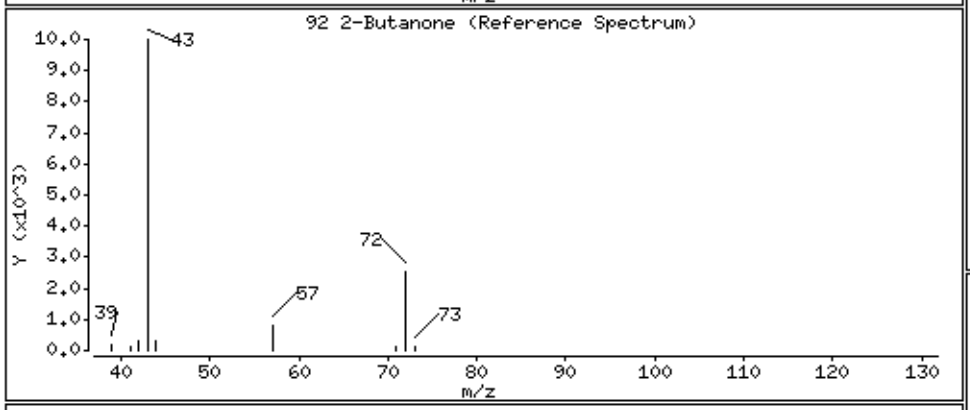
Column diameter: 0.25

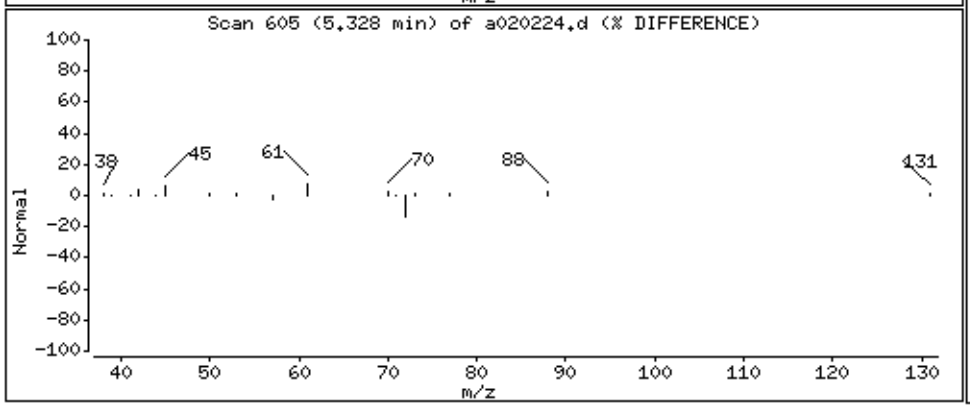
92 2-Butanone

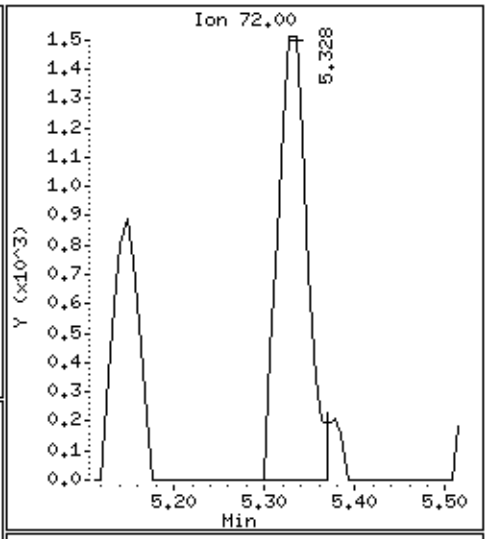
Concentration: 2.094 PPBV

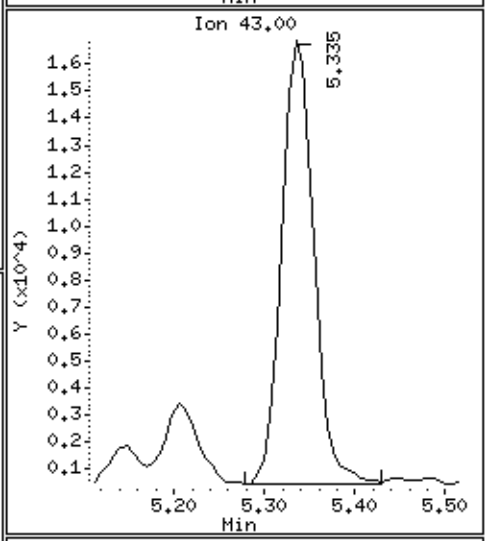


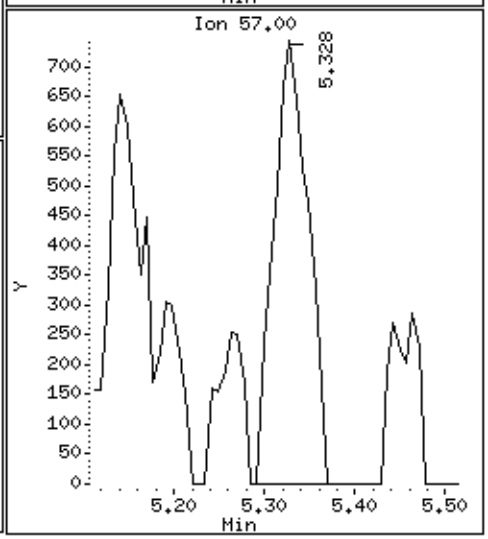












Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

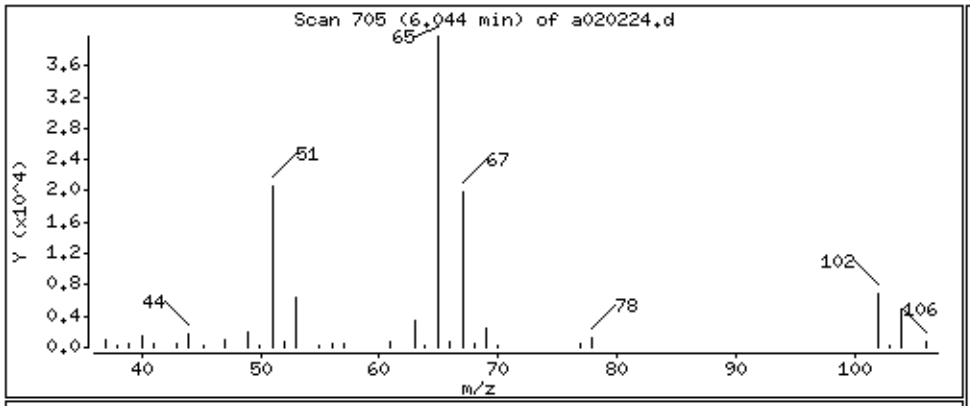
Operator: jlf

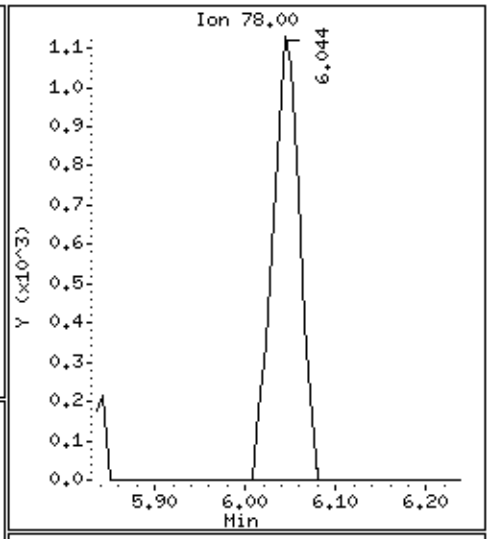
Column phase: RTX-624

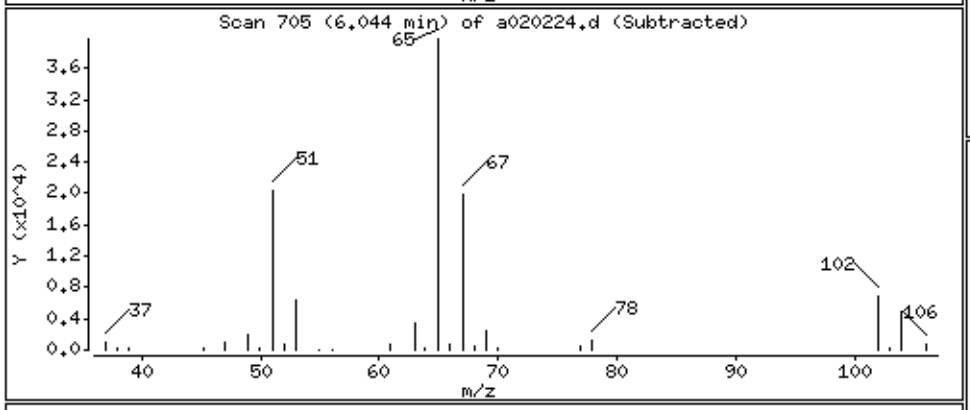
Column diameter: 0.25

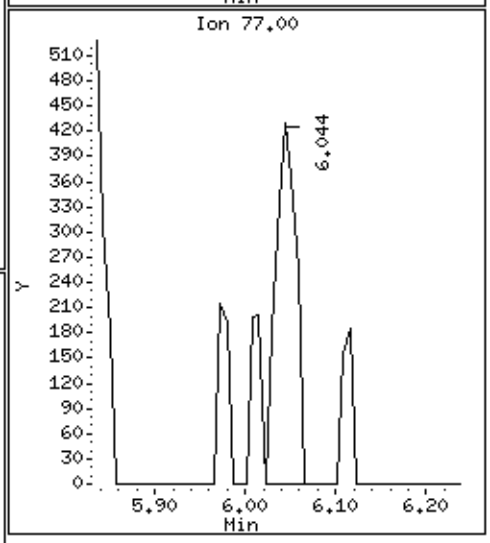
116 Benzene

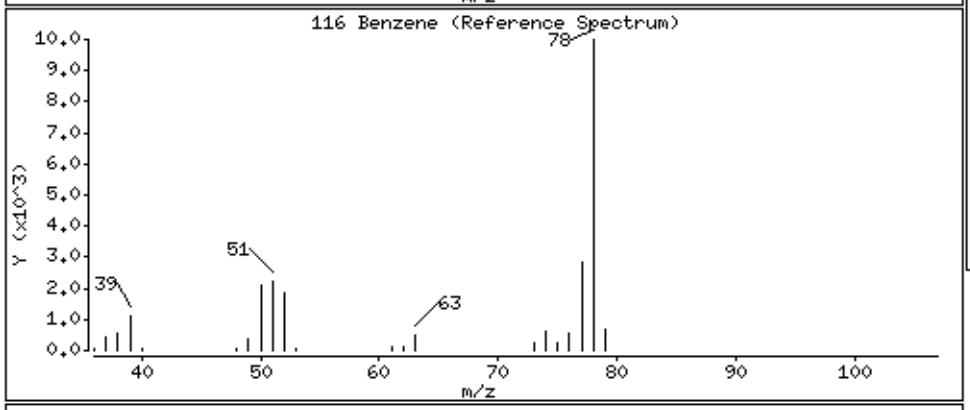
Concentration: 0.2237 PPBV

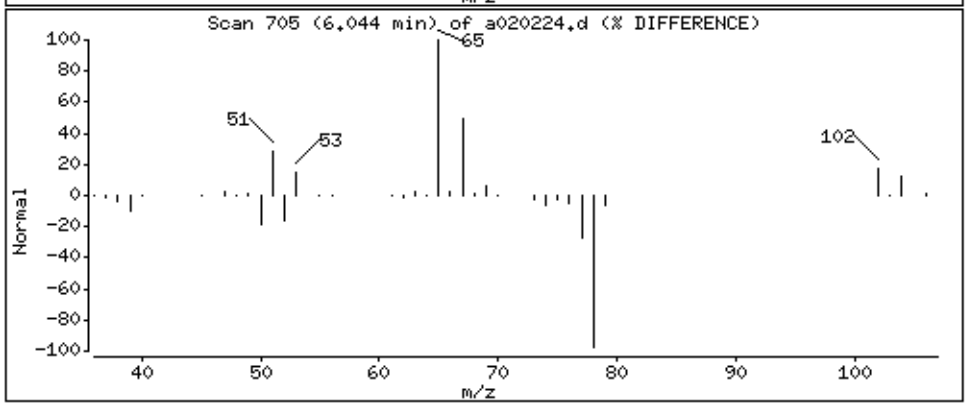












Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

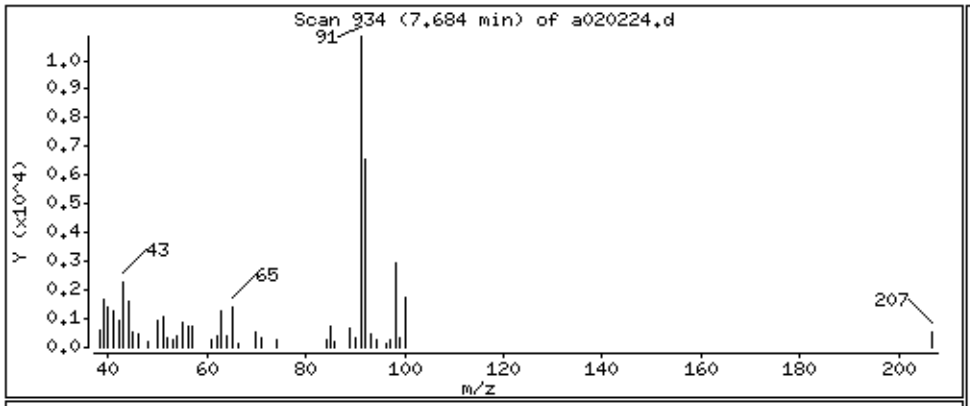
Operator: jlf

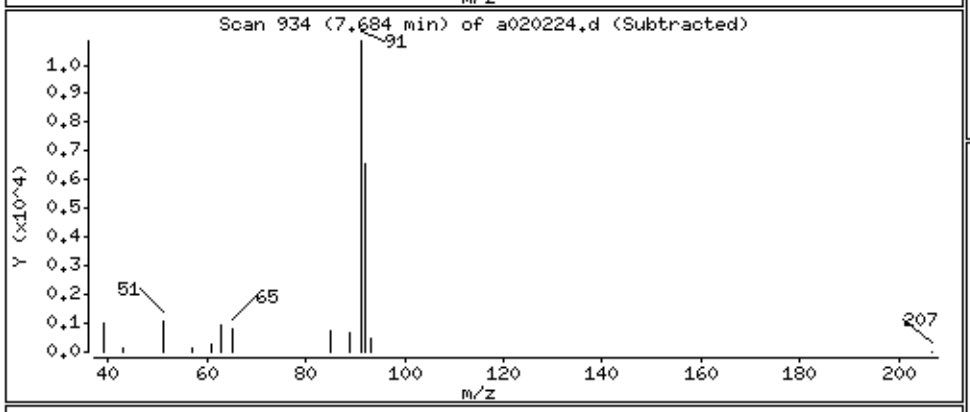
Column phase: RTX-624

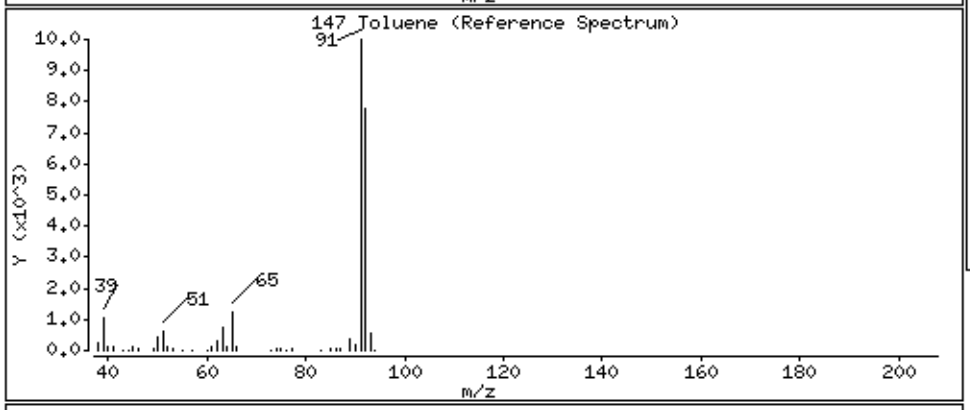
Column diameter: 0.25

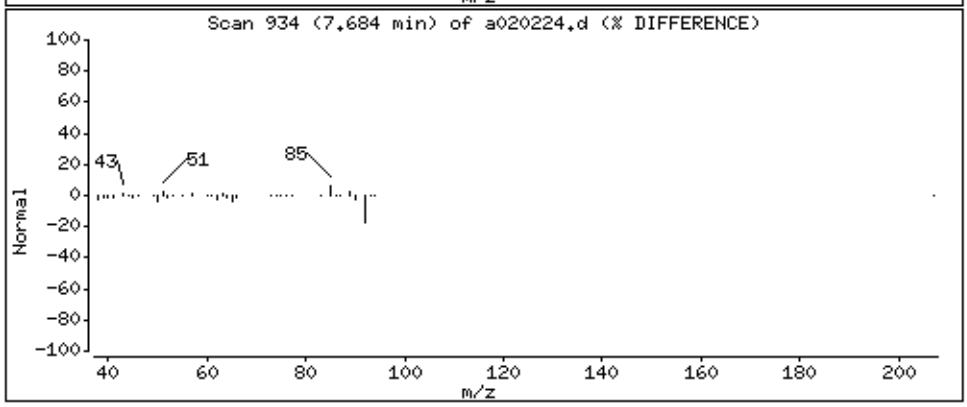
147 Toluene

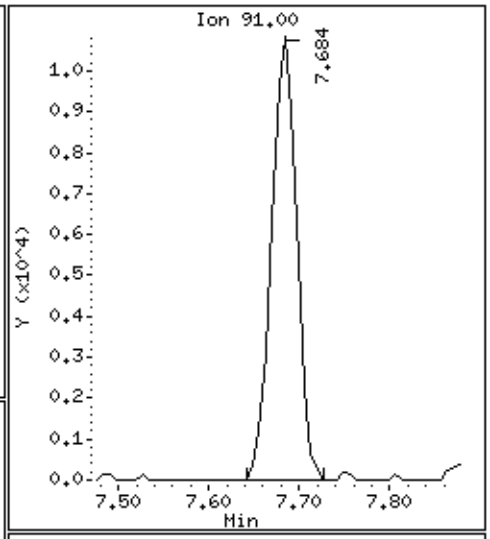
Concentration: 1.447 PPBV

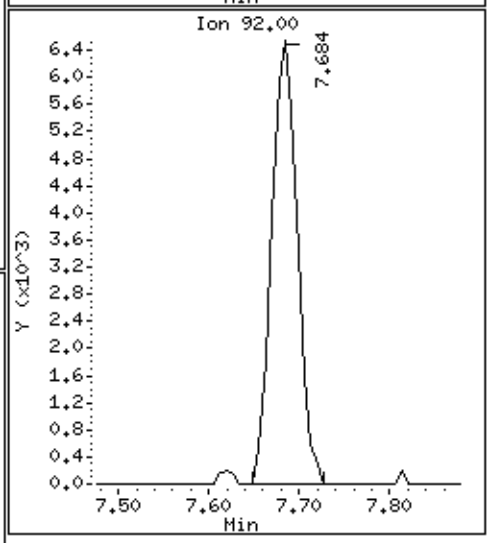












Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

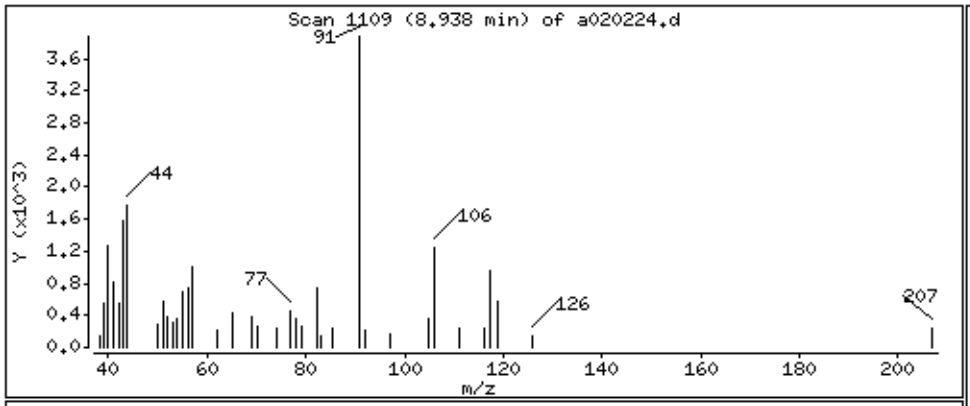
Operator: jlf

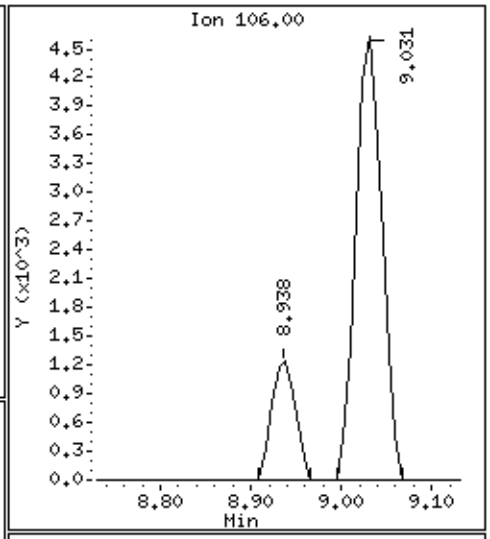
Column phase: RTX-624

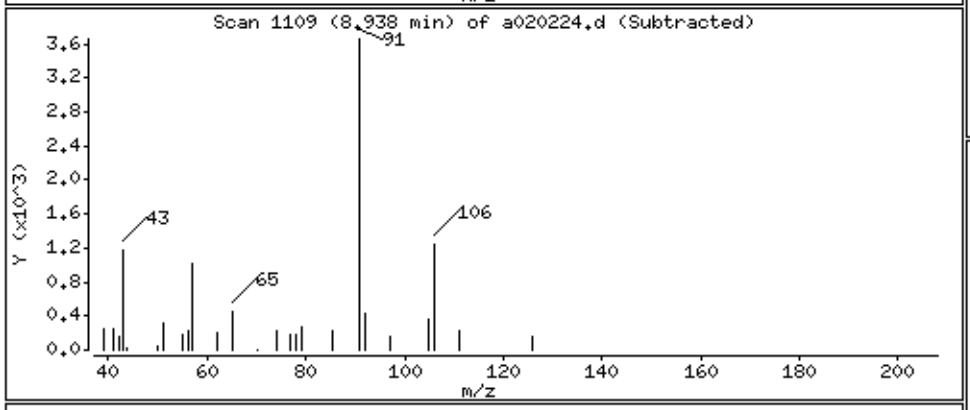
Column diameter: 0.25

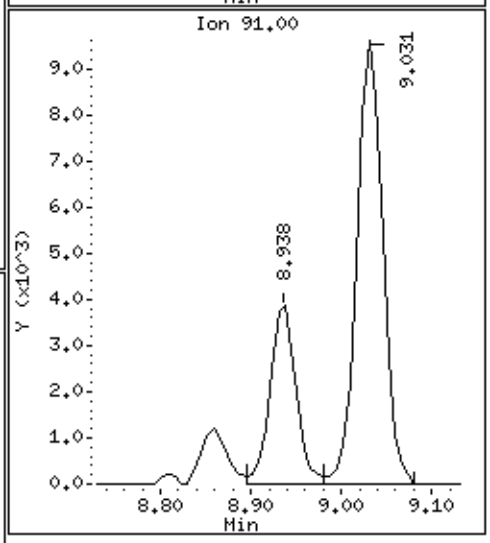
167 Ethyl Benzene

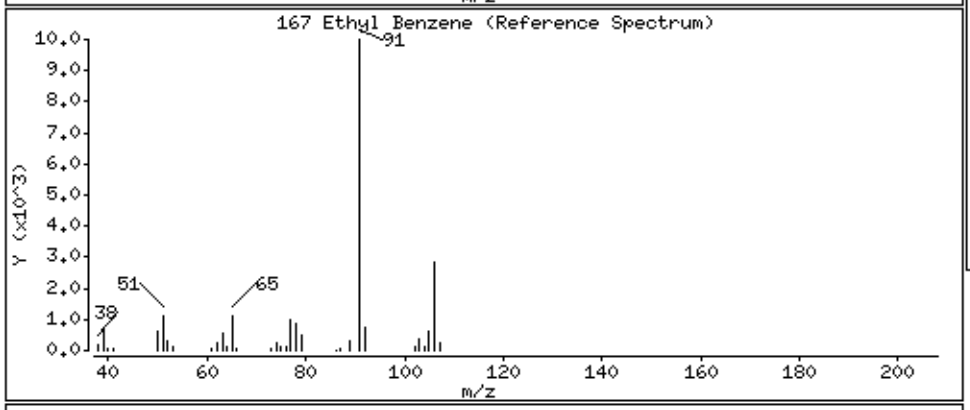
Concentration: 0.3190 PPBV

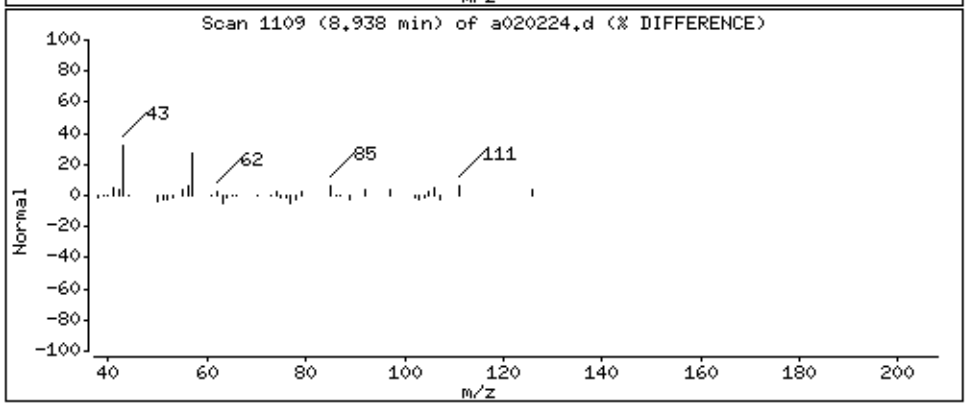












Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

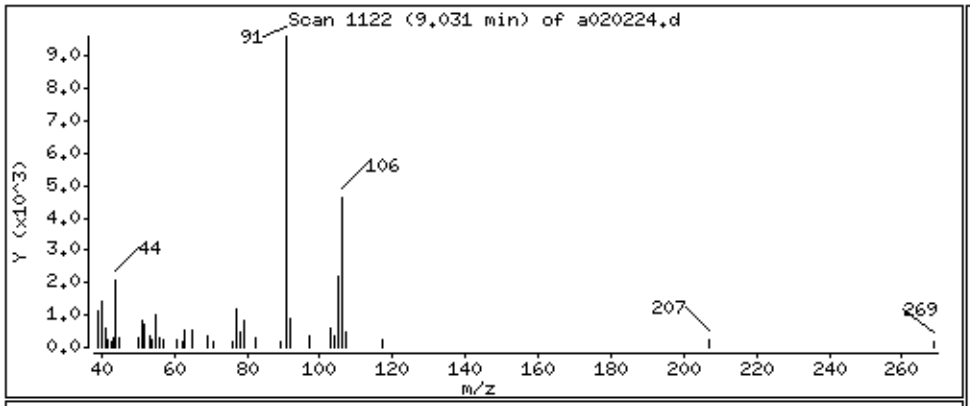
Operator: jlf

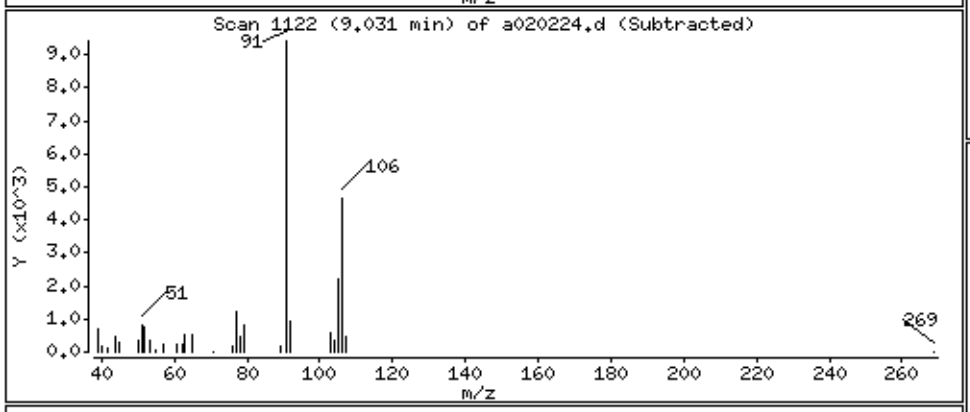
Column phase: RTX-624

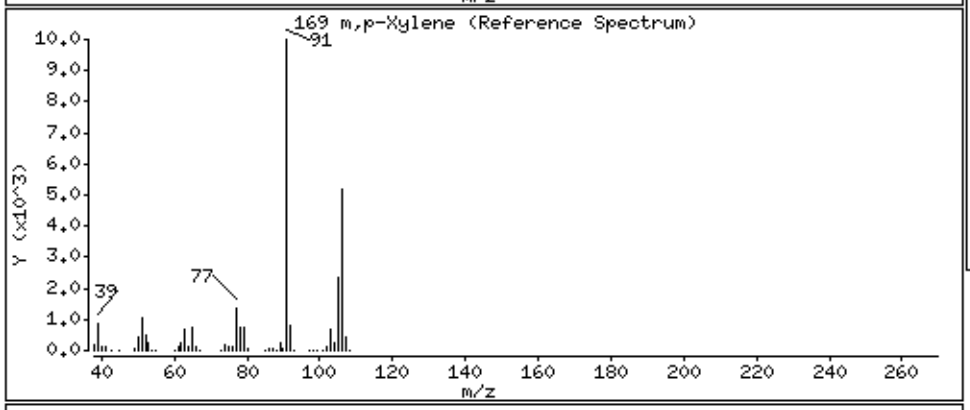
Column diameter: 0.25

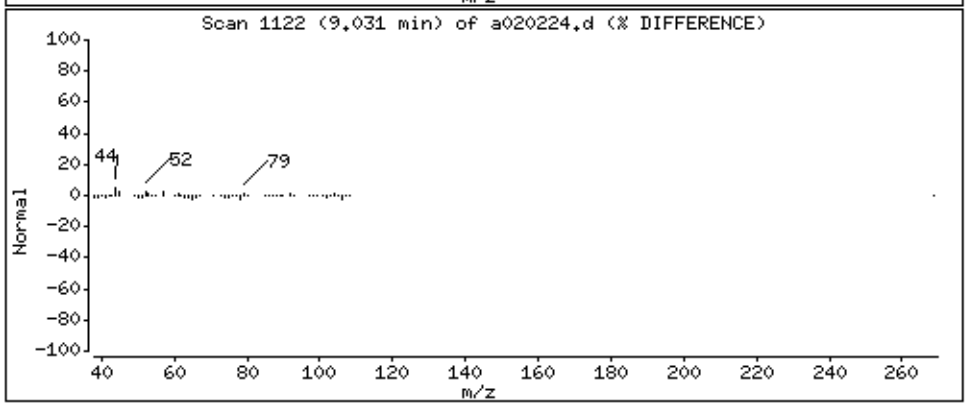
169 m,p-Xylene

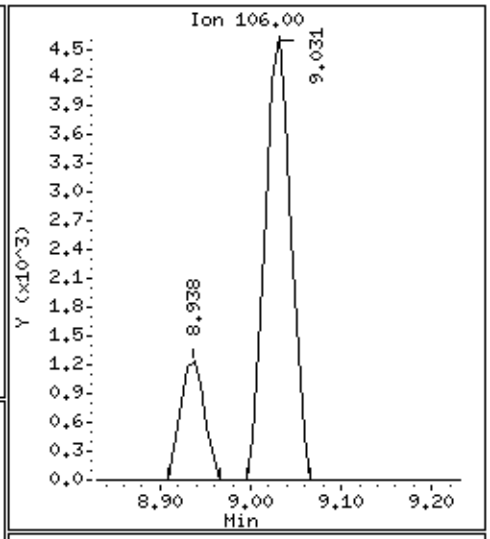
Concentration: 1.048 PPBV

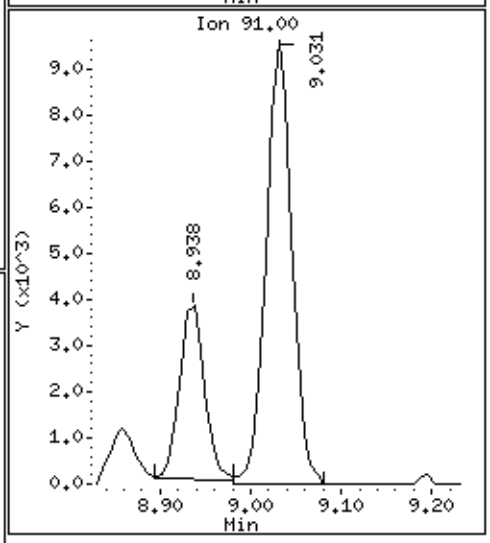












Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

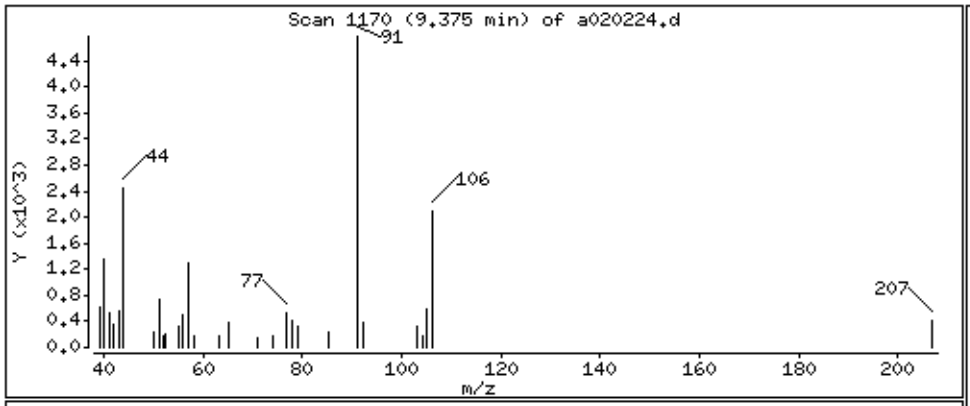
Operator: jlf

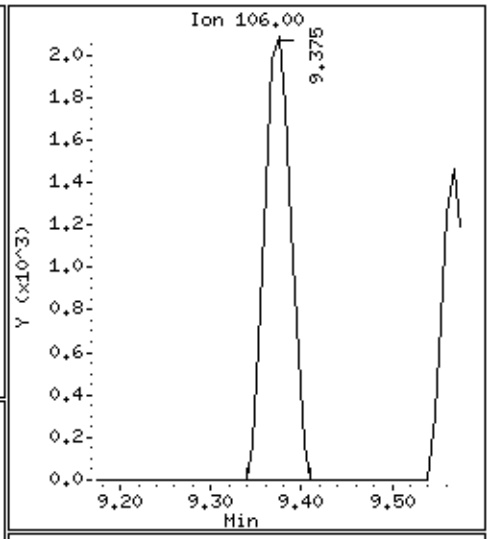
Column phase: RTX-624

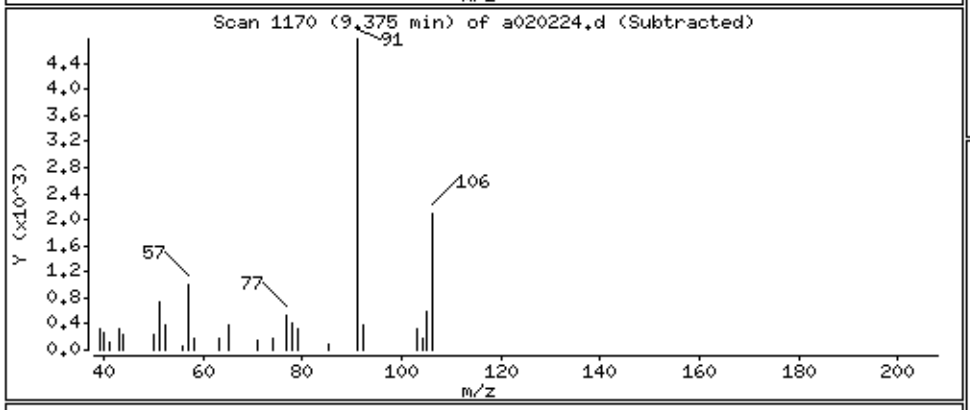
Column diameter: 0.25

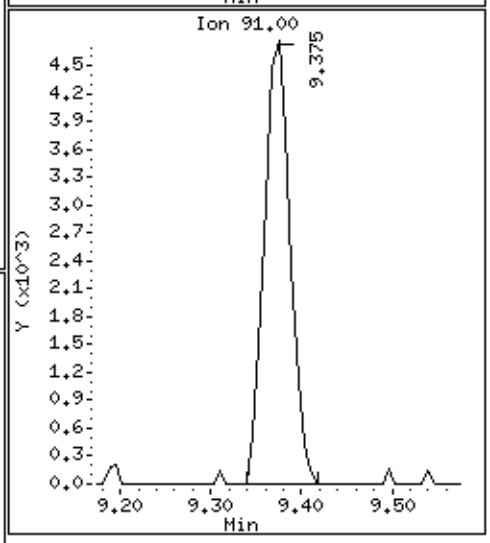
171 o-Xylene

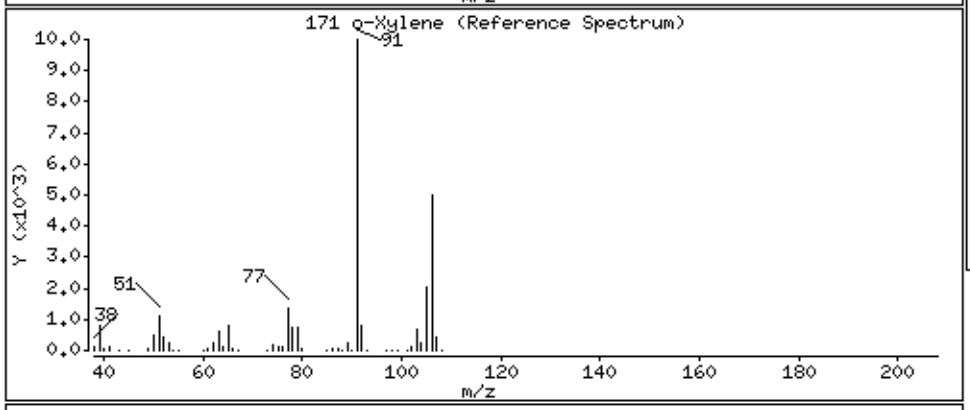
Concentration: 0.4962 PPBV

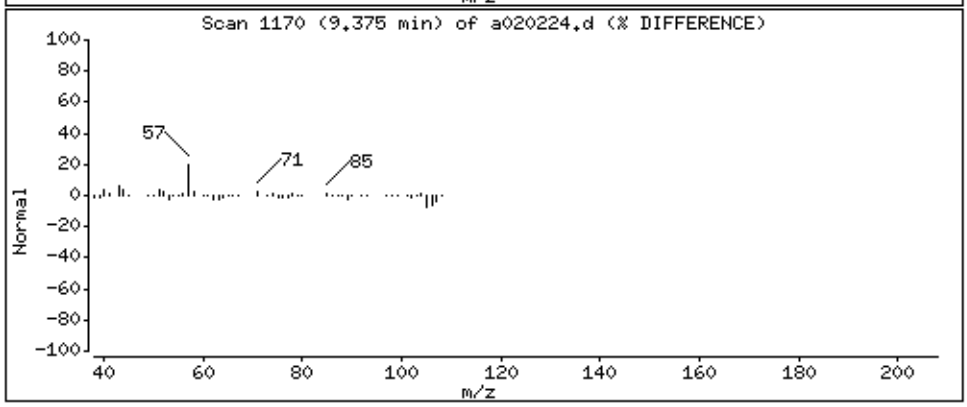












Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

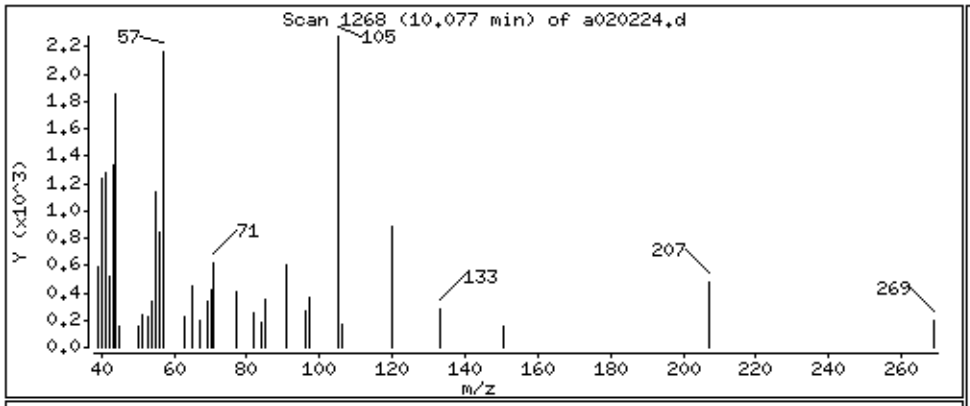
Operator: jlf

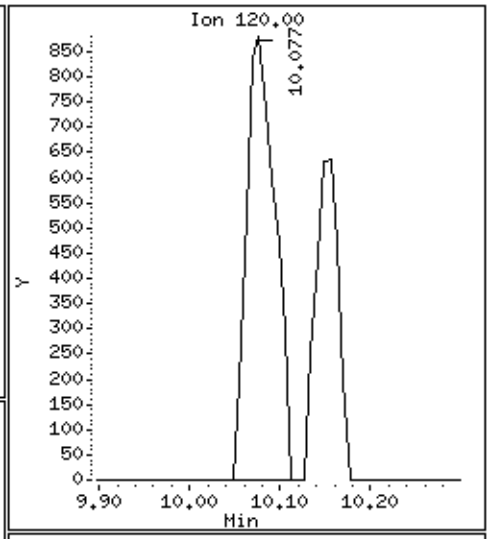
Column phase: RTX-624

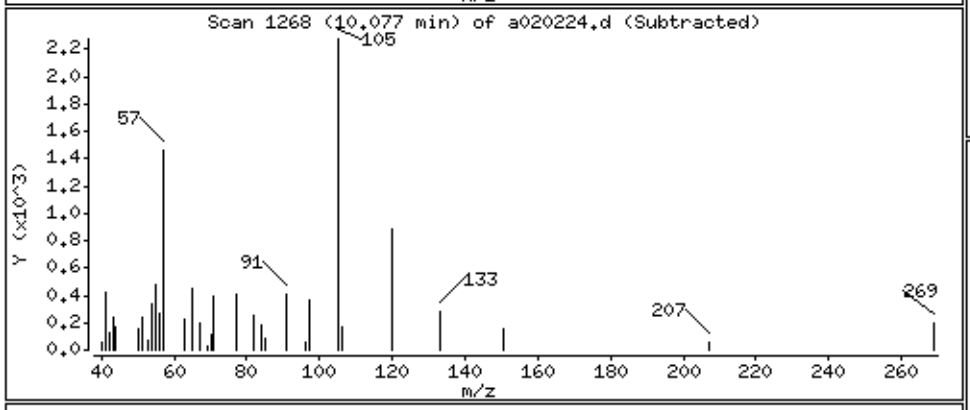
Column diameter: 0.25

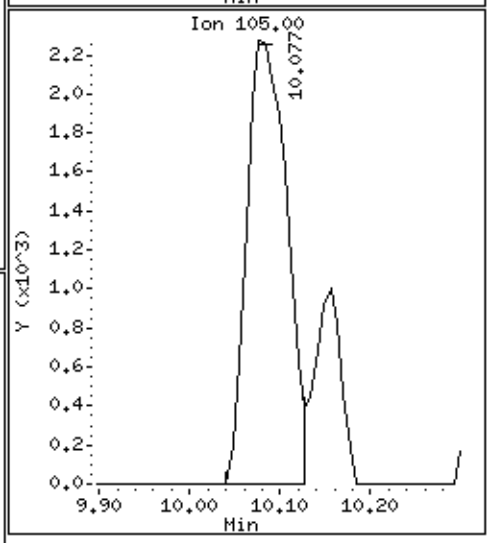
188 4-Ethyltoluene

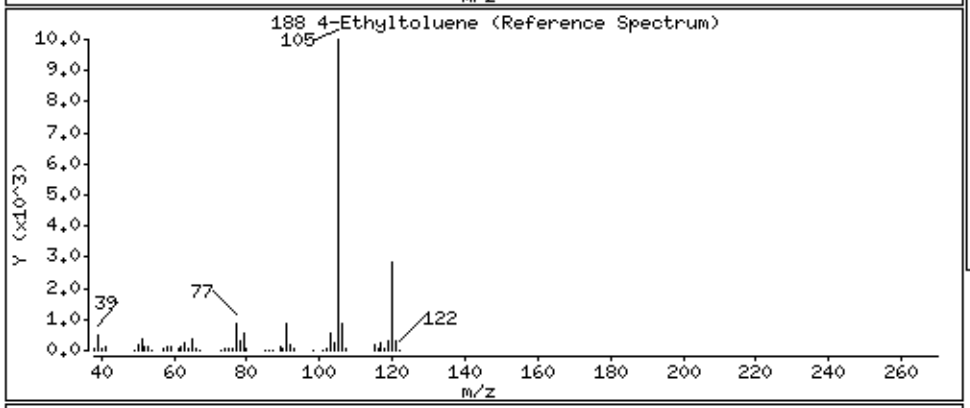
Concentration: 0.2308 PPBV

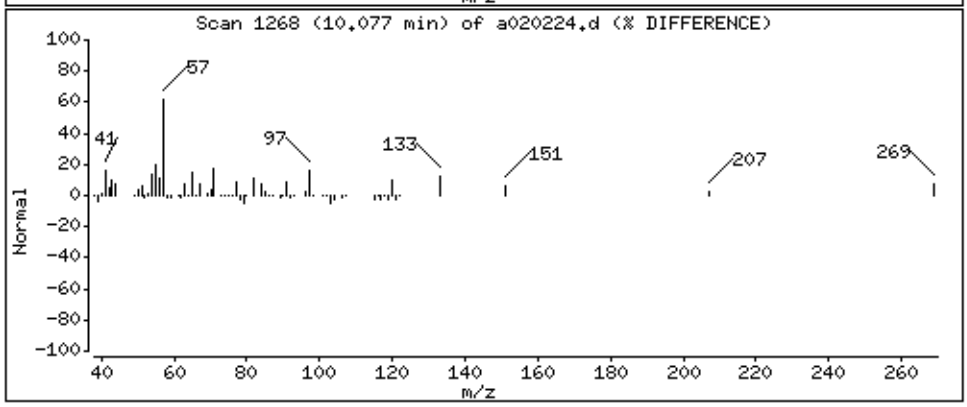












Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

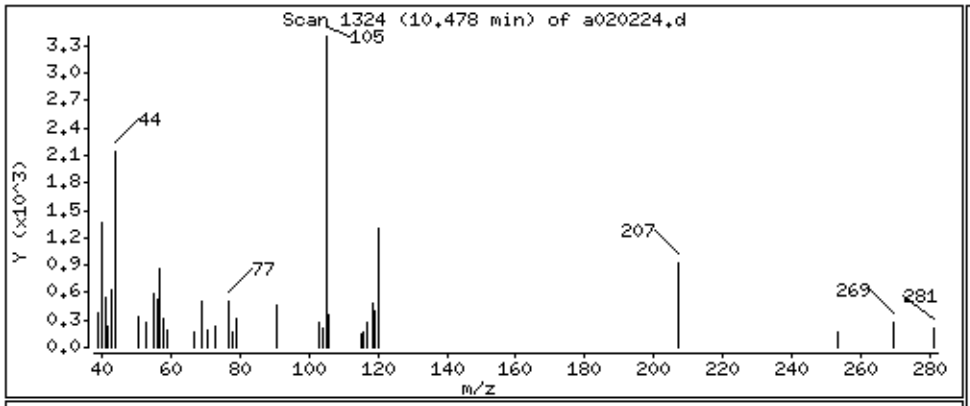
Operator: jlf

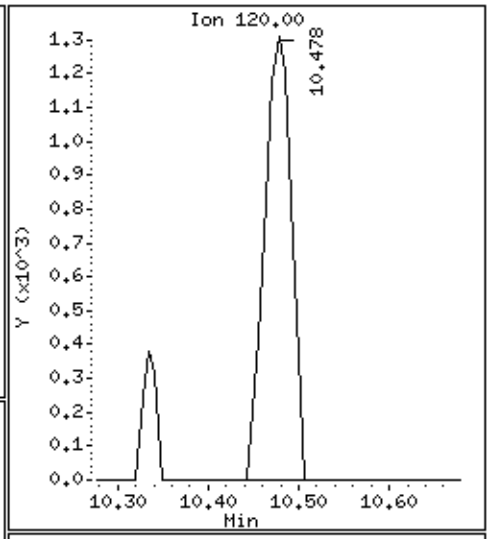
Column phase: RTX-624

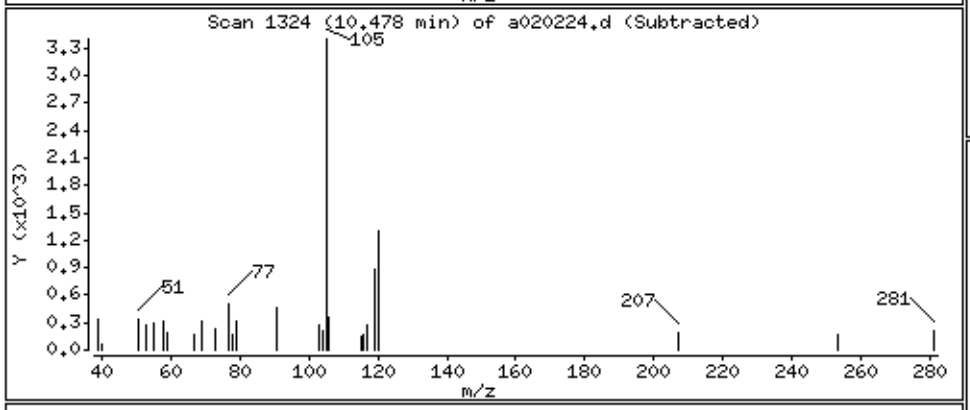
Column diameter: 0.25

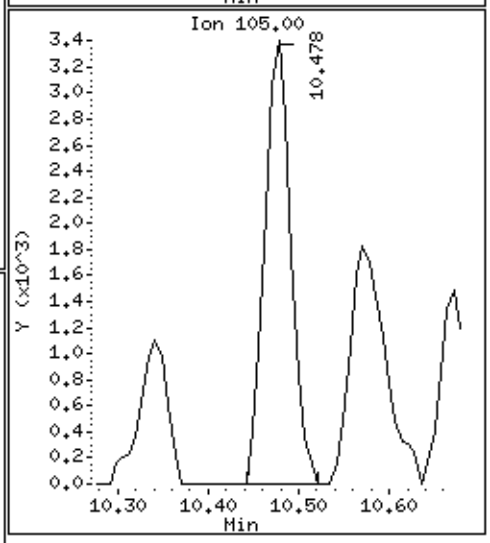
196 1,2,4-Trimethylbenzene

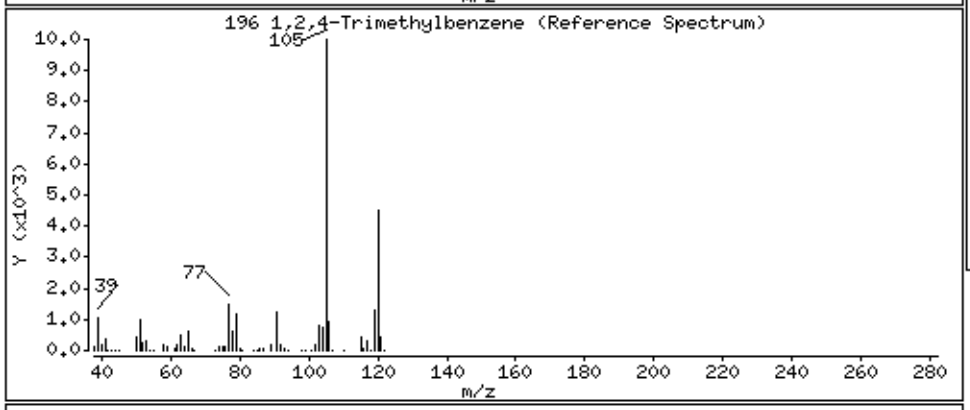
Concentration: 0.2544 PPBV

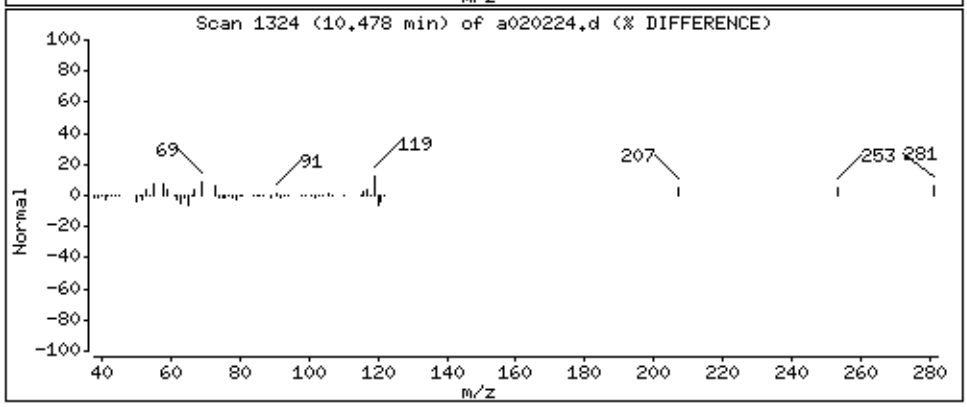












Data File: /chem/msda.i/02feb17.b/a020224.d

Date : 03-FEB-2017 01:54

Client ID:

Instrument: msda.i

Sample Info: 200mL 1L1720

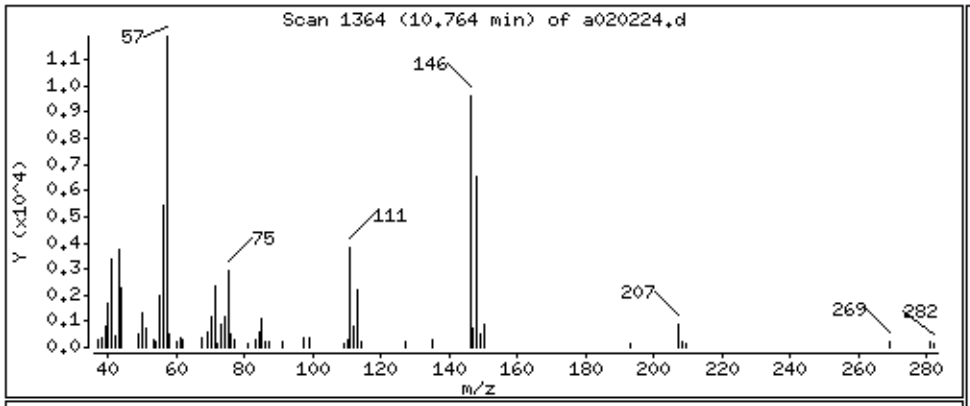
Operator: jlf

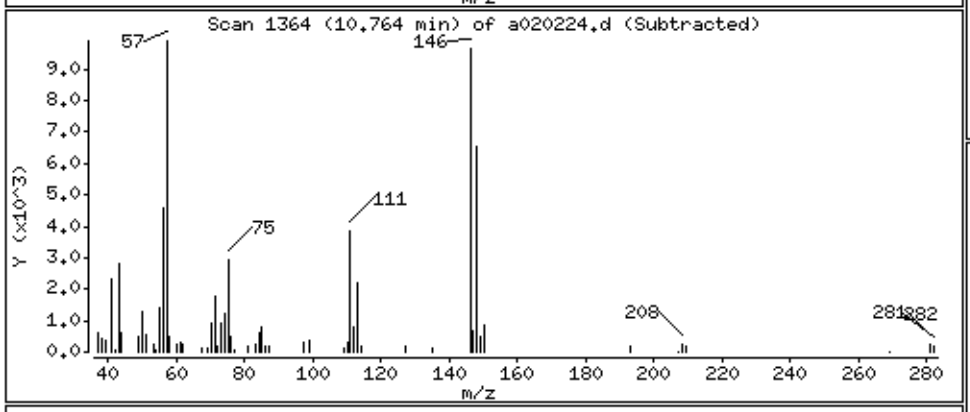
Column phase: RTX-624

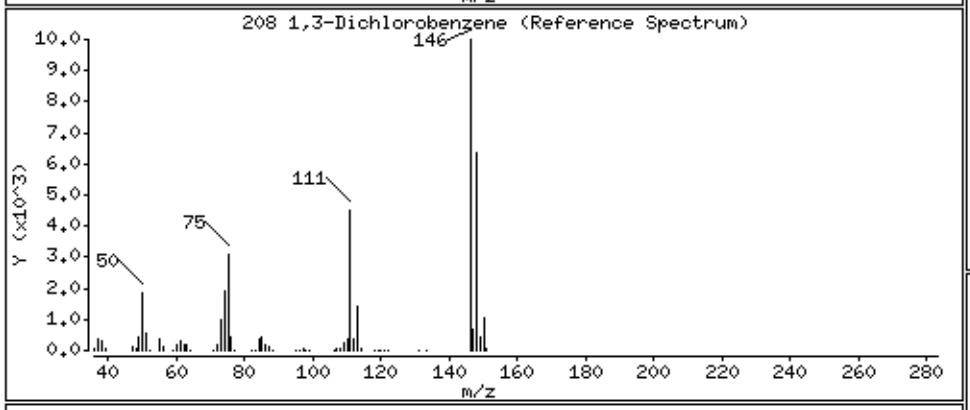
Column diameter: 0.25

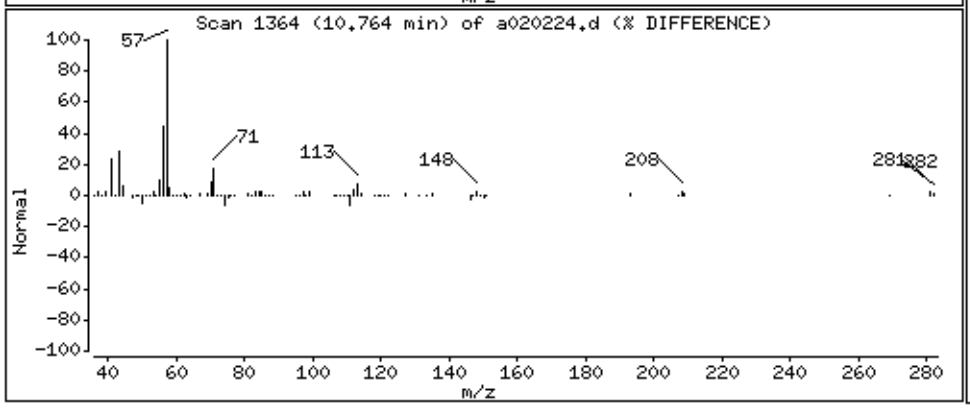
208 1,3-Dichlorobenzene

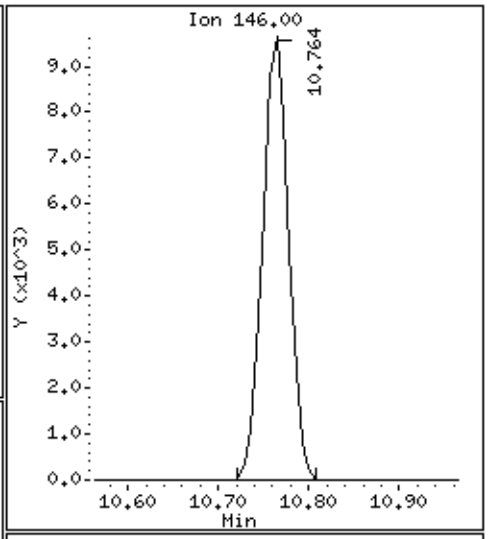
Concentration: 1.194 PPBV

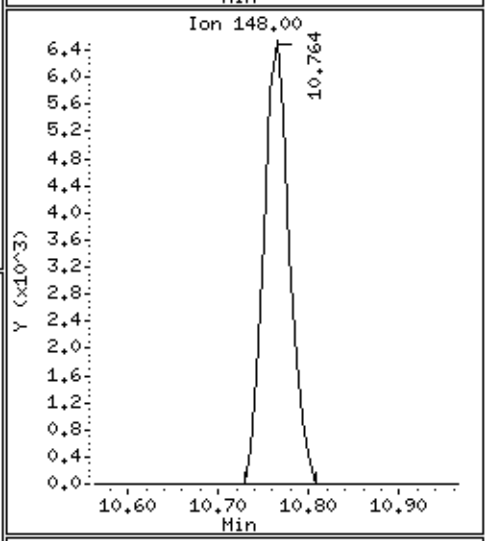


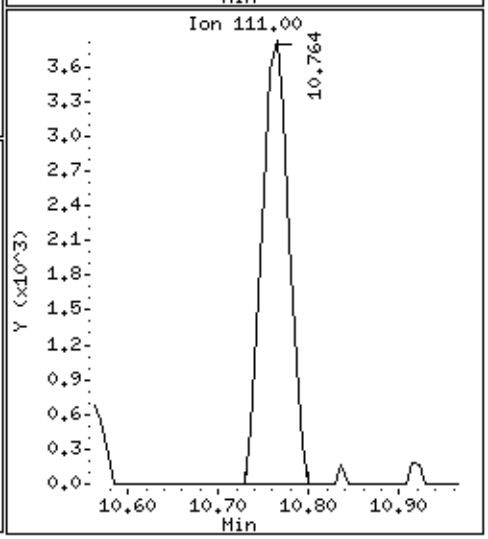












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B18SS-1Dup-012617

Lab ID#: 1701428B-19A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	0.50 J	6.1	2.5 J
Freon 11	1.2	1.6	6.9	9.2
Ethanol	4.9	240	9.3	460
Acetone	12	20	29	47
2-Propanol	4.9	360	12	880
Hexane	1.2	0.37 J	4.3	1.3 J
2-Butanone (Methyl Ethyl Ketone)	4.9	4.6 J	14	13 J
Tetrahydrofuran	1.2	0.15 J	3.6	0.45 J
2,2,4-Trimethylpentane	1.2	0.32 J	5.7	1.5 J
Benzene	1.2	0.21 J	3.9	0.67 J
Heptane	1.2	0.48 J	5.0	2.0 J
4-Methyl-2-pentanone	1.2	1.9	5.0	7.8
Toluene	1.2	2.2	4.6	8.1
trans-1,3-Dichloropropene	1.2	3.7	5.6	17
1,1,2-Trichloroethane	1.2	0.58 J	6.7	3.1 J
2-Hexanone	4.9	0.54 J	20	2.2 J
Ethyl Benzene	1.2	0.47 J	5.3	2.0 J
m,p-Xylene	1.2	1.8	5.3	7.8
o-Xylene	1.2	0.89 J	5.3	3.9 J
Styrene	1.2	0.15 J	5.2	0.64 J
Cumene	1.2	0.29 J	6.0	1.4 J
1,1,2,2-Tetrachloroethane	1.2	0.070 J	8.4	0.48 J
Propylbenzene	1.2	0.13 J	6.0	0.66 J
4-Ethyltoluene	1.2	0.62 J	6.0	3.1 J
1,3,5-Trimethylbenzene	1.2	0.15 J	6.0	0.74 J
1,2,4-Trimethylbenzene	1.2	0.55 J	6.0	2.7 J
1,3-Dichlorobenzene	1.2	2.5	7.4	15
1,4-Dichlorobenzene	1.2	2.4	7.4	14

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Client Sample ID: B18SS-1Dup-012617

Lab ID#: 1701428B-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a020311**	**Date of Collection:**	**1/26/17 5:30:00 PM**
Dil. Factor:	**2.46**	**Date of Analysis:**	**2/3/17 06:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	0.50 J	6.1	2.5 J
Freon 114	1.2	Not Detected	8.6	Not Detected
Chloromethane	12	Not Detected	25	Not Detected
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,3-Butadiene	1.2	Not Detected	2.7	Not Detected
Bromomethane	12	Not Detected	48	Not Detected
Chloroethane	4.9	Not Detected	13	Not Detected
Freon 11	1.2	1.6	6.9	9.2
Ethanol	4.9	240	9.3	460
Freon 113	1.2	Not Detected	9.4	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Acetone	12	20	29	47
2-Propanol	4.9	360	12	880
Carbon Disulfide	4.9	Not Detected	15	Not Detected
3-Chloropropene	4.9	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
Methyl tert-butyl ether	4.9	Not Detected	18	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Hexane	1.2	0.37 J	4.3	1.3 J
1,1-Dichloroethane	1.2	Not Detected	5.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.9	4.6 J	14	13 J
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrahydrofuran	1.2	0.15 J	3.6	0.45 J
Chloroform	1.2	Not Detected	6.0	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.7	Not Detected
Cyclohexane	1.2	Not Detected	4.2	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.7	Not Detected
2,2,4-Trimethylpentane	1.2	0.32 J	5.7	1.5 J
Benzene	1.2	0.21 J	3.9	0.67 J
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Heptane	1.2	0.48 J	5.0	2.0 J
Trichloroethene	1.2	Not Detected	6.6	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.7	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected
Bromodichloromethane	1.2	Not Detected	8.2	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.6	Not Detected
4-Methyl-2-pentanone	1.2	1.9	5.0	7.8
Toluene	1.2	2.2	4.6	8.1
trans-1,3-Dichloropropene	1.2	3.7	5.6	17
1,1,2-Trichloroethane	1.2	0.58 J	6.7	3.1 J
Tetrachloroethene	1.2	Not Detected	8.3	Not Detected
2-Hexanone	4.9	0.54 J	20	2.2 J

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Client Sample ID: B18SS-1Dup-012617

Lab ID#: 1701428B-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a020311**	**Date of Collection:**	**1/26/17 5:30:00 PM**
Dil. Factor:	**2.46**	**Date of Analysis:**	**2/3/17 06:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.2	Not Detected	10	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.4	Not Detected
Chlorobenzene	1.2	Not Detected	5.7	Not Detected
Ethyl Benzene	1.2	0.47 J	5.3	2.0 J
m,p-Xylene	1.2	1.8	5.3	7.8
o-Xylene	1.2	0.89 J	5.3	3.9 J
Styrene	1.2	0.15 J	5.2	0.64 J
Bromoform	1.2	Not Detected	13	Not Detected
Cumene	1.2	0.29 J	6.0	1.4 J
1,1,2,2-Tetrachloroethane	1.2	0.070 J	8.4	0.48 J
Propylbenzene	1.2	0.13 J	6.0	0.66 J
4-Ethyltoluene	1.2	0.62 J	6.0	3.1 J
1,3,5-Trimethylbenzene	1.2	0.15 J	6.0	0.74 J
1,2,4-Trimethylbenzene	1.2	0.55 J	6.0	2.7 J
1,3-Dichlorobenzene	1.2	2.5	7.4	15
1,4-Dichlorobenzene	1.2	2.4	7.4	14
alpha-Chlorotoluene	1.2	Not Detected	6.4	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.4	Not Detected
1,2,4-Trichlorobenzene	4.9	Not Detected	36	Not Detected
Hexachlorobutadiene	4.9	Not Detected	52	Not Detected
Naphthalene	2.5	Not Detected	13	Not Detected

J = Estimated value.

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

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

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/03feb17.b/a020311.d
Lab Smp Id: 1701428B-19A
Inj Date : 03-FEB-2017 18:37
Operator : jg Inst ID: msda.i
Smp Info : 200ml N1929
Misc Info : 5.5 Hg->14.8 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/03feb17.b/a17q0116a.m
Meth Date : 03-Feb-2017 14:51 jscarbro Quant Type: ISTD
Cal Date : 16-JAN-2017 18:50 Cal File: a011609.d
Als bottle: 5
Dil Factor: 2.46000
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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.521	5.521 (1.000)	130	245682	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	189997			50.57- 110.57	77.33
5.521	5.521 (1.000)	49	373205			118.90- 178.90	151.91
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	1067456	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	161026			0.00- 45.14	15.09
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	985574	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	491568			21.31- 81.31	49.88
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.058	6.058 (1.097)	65	323686	24.9538	24.954	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	167164			29.46- 89.46	51.64
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.620	7.627 (1.189)	98	1139182	25.5323	25.532	80.00- 120.00	100.00
7.620	7.627 (1.189)	70	114072			0.00- 39.82	10.01

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

$ 146 Toluene-d8 (continued)
  7.620   7.627 (1.189)   100    737076                    36.19-  96.19    64.70
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
  9.847   9.847 (1.112)   174    609645 25.5977   25.598  80.00- 120.00   100.00
  9.840   9.847 (1.111)    95    738163                   92.19- 152.19   121.08
  9.847   9.847 (1.112)   176    622841                   71.02- 131.02   102.16
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.553   1.560 (0.281)    85      4556 0.20436   0.5027  80.00- 120.00   100.00(a)
  1.560   1.560 (0.283)    87      2061                    2.19-  62.19    45.23
-------------------------------------------------------------------------------
   35 Freon 11                                      CAS #: 75-69-4
  2.641   2.649 (0.478)   101     16037 0.66430    1.634  80.00- 120.00   100.00
  2.634   2.649 (0.477)   103      9678                   34.98-  94.98    60.35
-------------------------------------------------------------------------------
   42 Ethanol                                       CAS #: 64-17-5
  2.978   2.985 (0.539)    45    480249 98.3312   241.89  80.00- 120.00   100.00
  2.978   2.985 (0.539)    46    184704                    9.25-  69.25    38.46
-------------------------------------------------------------------------------
   52 Acetone                                       CAS #: 67-64-1
  3.479   3.479 (0.630)    58     44934 8.05975   19.827  80.00- 120.00   100.00
  3.479   3.479 (0.630)    43    145024                  267.70- 327.70   322.75
-------------------------------------------------------------------------------
   57 2-Propanol                                    CAS #: 67-63-0
  3.637   3.644 (0.659)    45   2977978 144.877   356.40  80.00- 120.00   100.00
  3.637   3.644 (0.659)    43    479821                    0.00-  46.48    16.11
  3.637   3.644 (0.659)    59    113653                    0.00-  33.95     3.82
-------------------------------------------------------------------------------
   92 2-Butanone                                    CAS #: 78-93-3
  5.320   5.320 (0.964)    72      9631 1.85087    4.553  80.00- 120.00   100.00(a)
  5.328   5.320 (0.965)    43    113054                  492.83- 552.83  1173.75
  5.320   5.320 (0.964)    57      4183                   11.22-  71.22    43.43
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                        CAS #: 540-84-1
  6.015   6.015 (1.090)    57      9396 0.13071   0.3215  80.00- 120.00   100.00(a)
  6.015   6.015 (1.090)    56      6275                    0.93-  60.93    66.78
  6.001   6.015 (1.087)    41      2250                    0.00-  52.07    23.95
-------------------------------------------------------------------------------
  116 Benzene                                       CAS #: 71-43-2
  6.030   6.037 (0.941)    78      2908 0.08545   0.2102  80.00- 120.00   100.00(a)
  6.037   6.037 (0.942)    77      1477                    0.00-  52.91    50.81
-------------------------------------------------------------------------------
  121 Heptane                                       CAS #: 142-82-5
  6.180   6.187 (0.964)    71      2380 0.19600   0.4822  80.00- 120.00   100.00(a)
  6.180   6.187 (0.964)    43      5816                  192.75- 252.75   244.33
```

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

  121 Heptane (continued)
  6.187   6.187 (0.965)    57      2995                    92.77- 152.77   125.86
-------------------------------------------------------------------------------
  147 Toluene                                      CAS #: 108-88-3
  7.677   7.677 (1.198)    91     40581 0.87507    2.153  80.00- 120.00   100.00
  7.677   7.677 (1.198)    92     22463                    28.71-  88.71    55.35
-------------------------------------------------------------------------------
  158 2-Hexanone                                   CAS #: 591-78-6
  8.243   8.243 (0.930)    58      4717 0.21874   0.5381  80.00- 120.00   100.00(a)
  8.243   8.243 (0.930)    43      7828                   152.24- 212.24   165.97
  8.250   8.243 (0.931)   100       407                     0.00-  47.15     8.63
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.931   8.931 (1.008)   106      4203 0.19122   0.4704  80.00- 120.00   100.00(a)
  8.931   8.931 (1.008)    91     14205                   278.30- 338.30   337.98
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  9.031   9.031 (1.019)   106     19781 0.73265    1.802  80.00- 120.00   100.00
  9.024   9.031 (1.019)    91     40397                   162.42- 222.42   204.22
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.375   9.375 (1.058)   106      9531 0.36289   0.8927  80.00- 120.00   100.00(a)
  9.368   9.375 (1.057)    91     19976                   175.73- 235.73   209.59
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.389   9.396 (1.060)   104      2638 0.06158   0.1515  80.00- 120.00   100.00(a)
  9.375   9.396 (1.058)    78      1800                    16.95-  76.95    68.25
-------------------------------------------------------------------------------
  182 Propylbenzene                                CAS #: 103-65-1
 10.005  10.005 (1.129)    91      5058 0.05425   0.1335  80.00- 120.00   100.00(a)
 10.005  10.005 (1.129)   120      1030                     0.00-  54.88    20.38
 10.005  10.005 (1.129)   105       140                     0.00-  33.79     2.78
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                               CAS #: 622-96-8
 10.077  10.105 (1.137)   120      6546 0.25417   0.6252  80.00- 120.00   100.00(a)
 10.077  10.105 (1.137)   105     16816                   289.38- 349.38   256.88
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 10.148  10.155 (1.146)   120      2194 0.06131   0.1508  80.00- 120.00   100.00(a)
 10.148  10.155 (1.146)   105      4533                   171.33- 231.33   206.57
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                       CAS #: 95-63-6
 10.478  10.478 (1.183)   120      7300 0.22396   0.5509  80.00- 120.00   100.00(a)
 10.471  10.478 (1.182)   105     16001                   182.43- 242.43   219.20
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                          CAS #: 541-73-1
 10.764  10.764 (1.215)   146     50073 1.01553    2.498  80.00- 120.00   100.00
```

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
208 1,3-Dichlorobenzene (continued)								
10.764	10.764	(1.215)	148	32277			33.68- 93.68	64.46
10.757	10.764	(1.214)	111	20228			10.08- 70.08	40.40

QC Flag Legend

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

Report Date: 09-Feb-2017 14:53

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a020311.d
Lab Smp Id: 1701428B-19A
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msda.i/03feb17.b/a17q0116a.m
Misc Info: 5.5 Hg->14.8 psi

Calibration Date: 03-FEB-2017
Calibration Time: 11:13

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	192825	115695	269955	245682	27.41
123 1,4-Difluorobenze	821788	493073	1150503	1067456	29.89
163 Chlorobenzene-d5	778694	467216	1090172	985574	26.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	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: 09-Feb-2017 14:53

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03feb17
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1701428B-19A
Level: LOW
Operator: jg
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT12ethanol.spk
Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msda.i/03feb17.b/a17q0116a.m
Misc Info: 5.5 Hg->14.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.954	99.82	70-130
$ 146 Toluene-d8	25.000	25.532	102.13	70-130
$ 177 4-Bromofluorobenze	25.000	25.598	102.39	70-130

Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

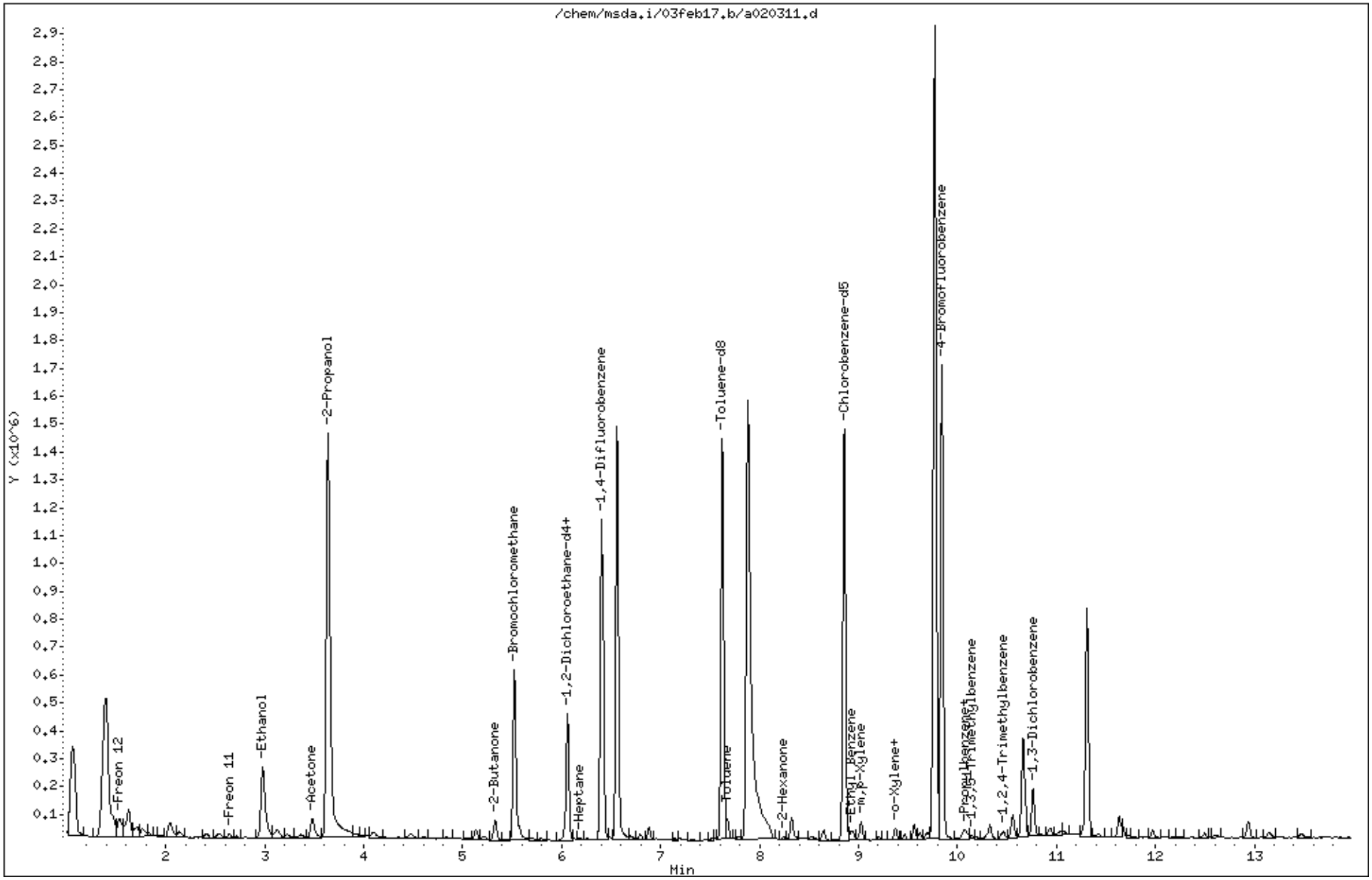
Sample Info: 200ml N1929

Column phase: RTX-624

Instrument: msda.i

Operator: jg

Column diameter: 0.25



Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

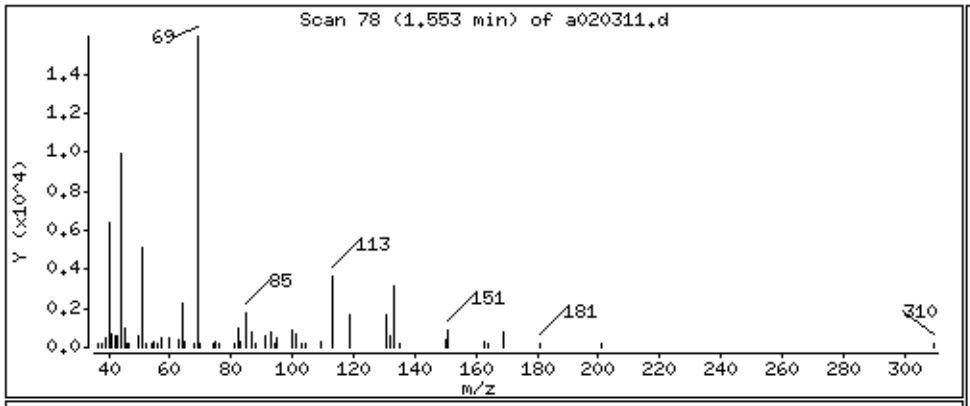
Operator: jg

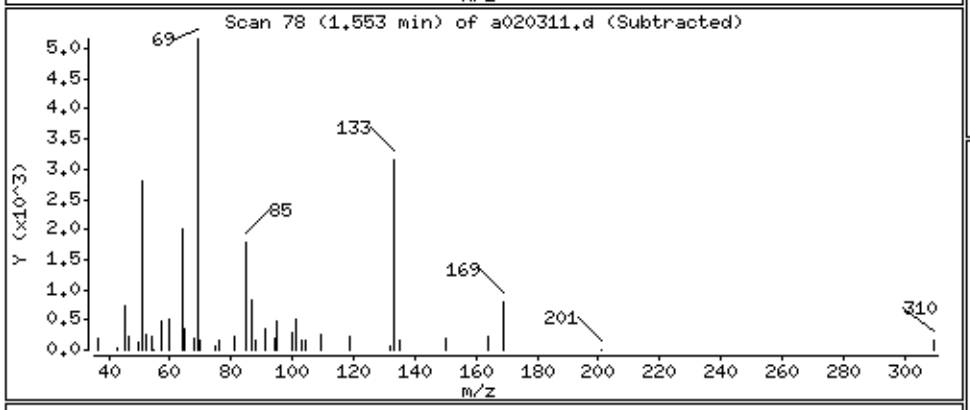
Column phase: RTX-624

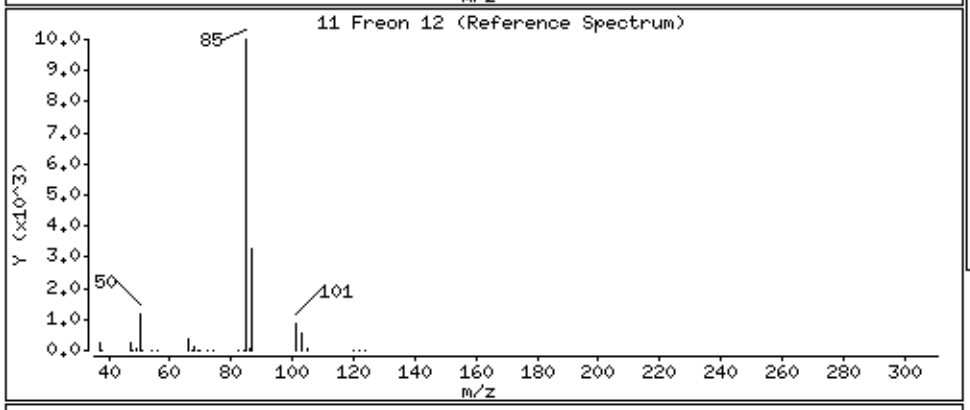
Column diameter: 0.25

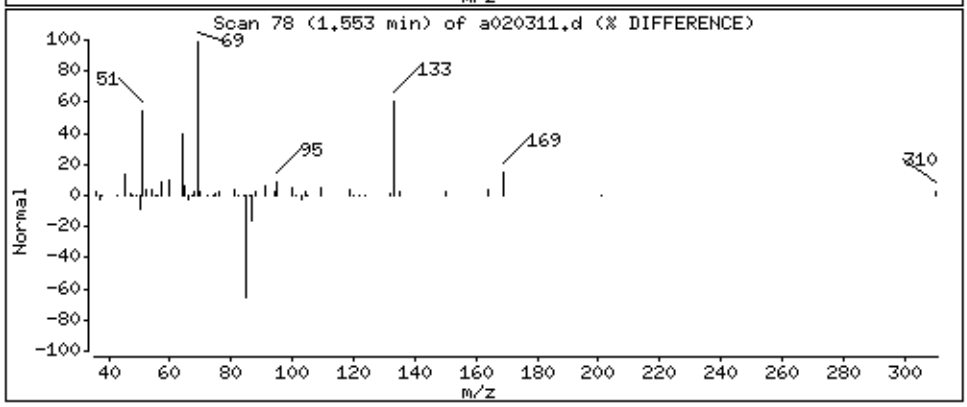
11 Freon 12

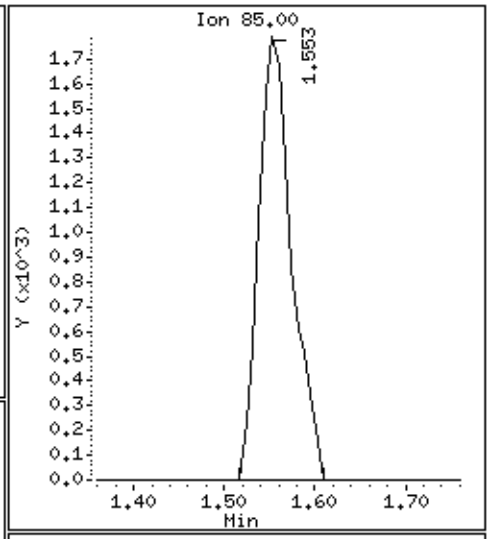
Concentration: 0.5027 PPBV

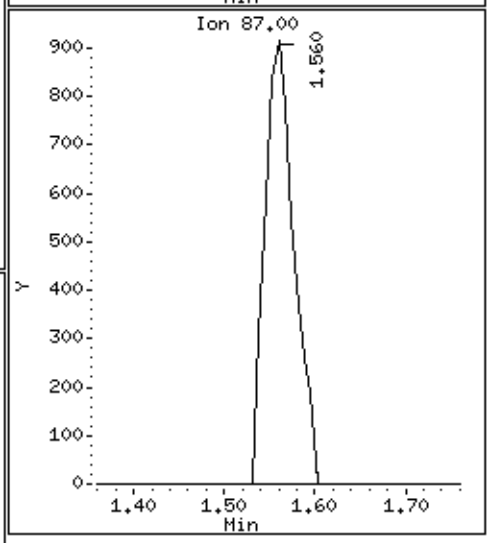












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

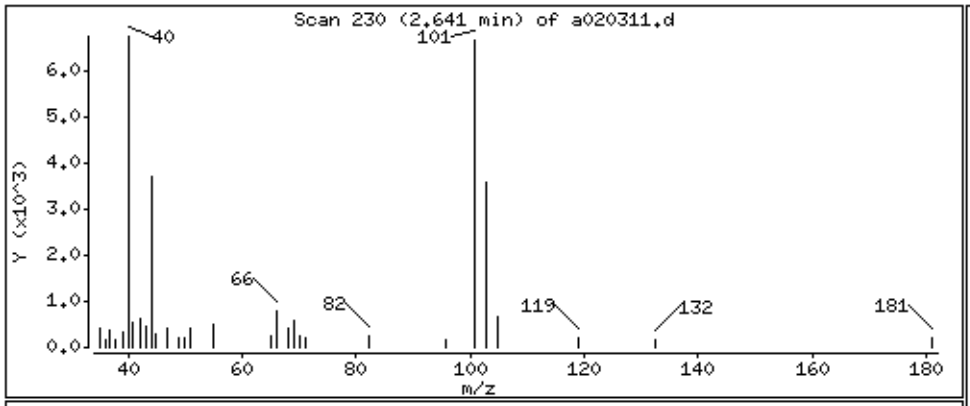
Operator: jg

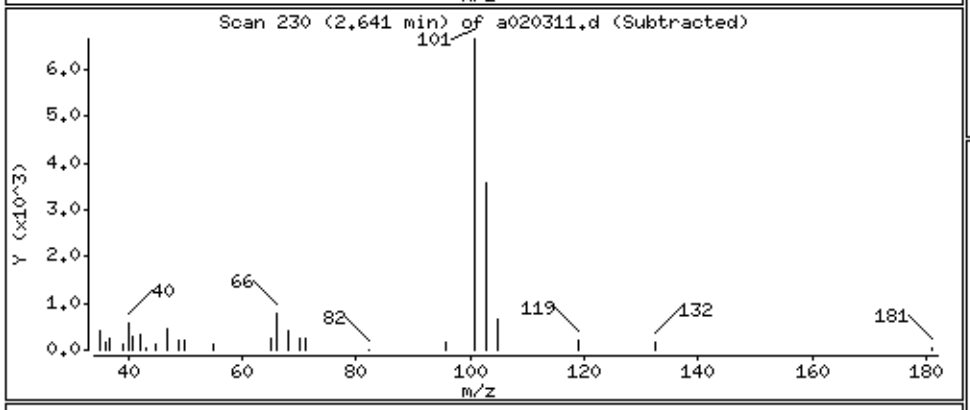
Column phase: RTX-624

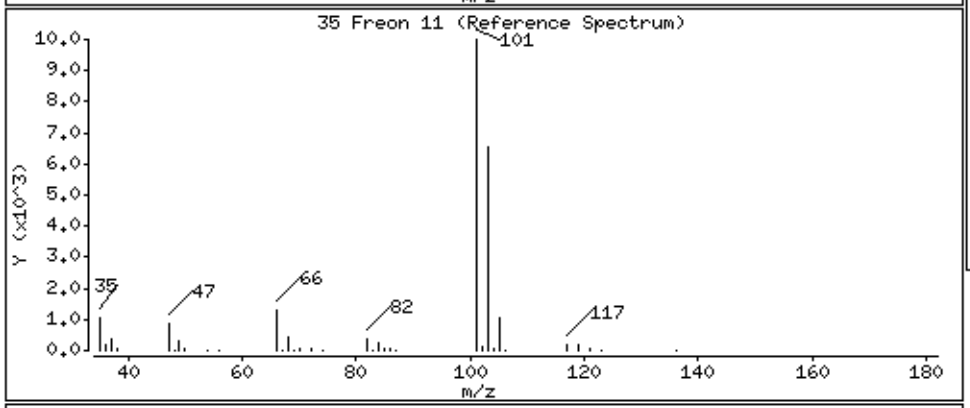
Column diameter: 0.25

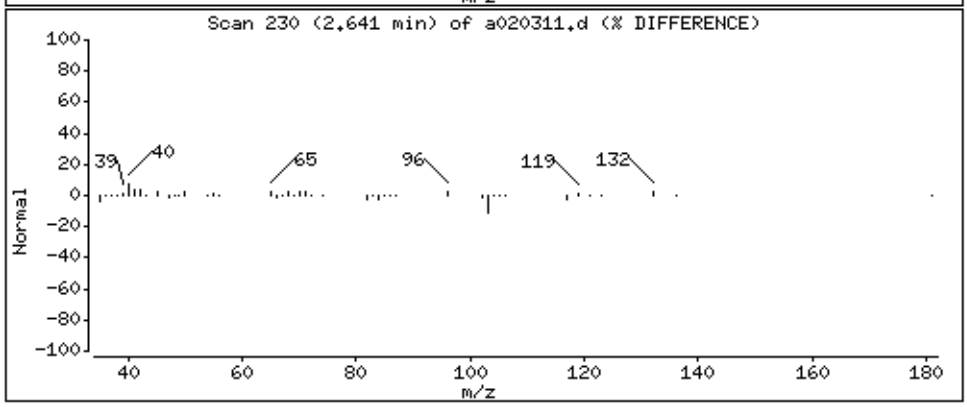
35 Freon 11

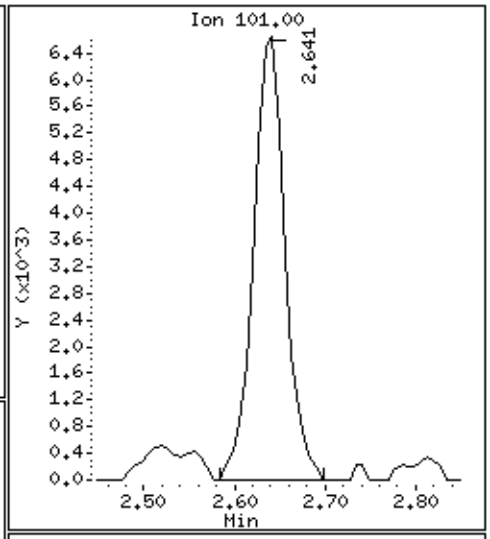
Concentration: 1.634 PPBV

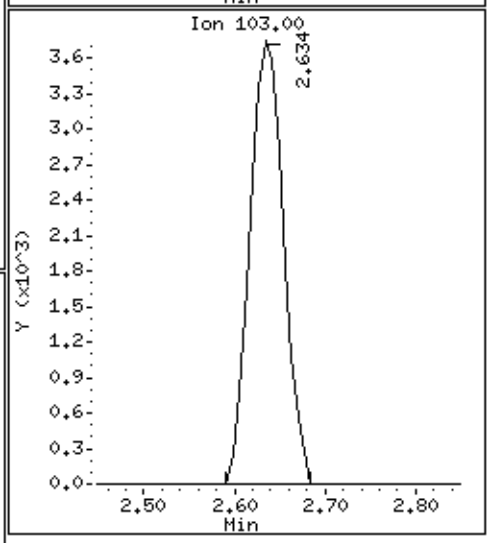












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

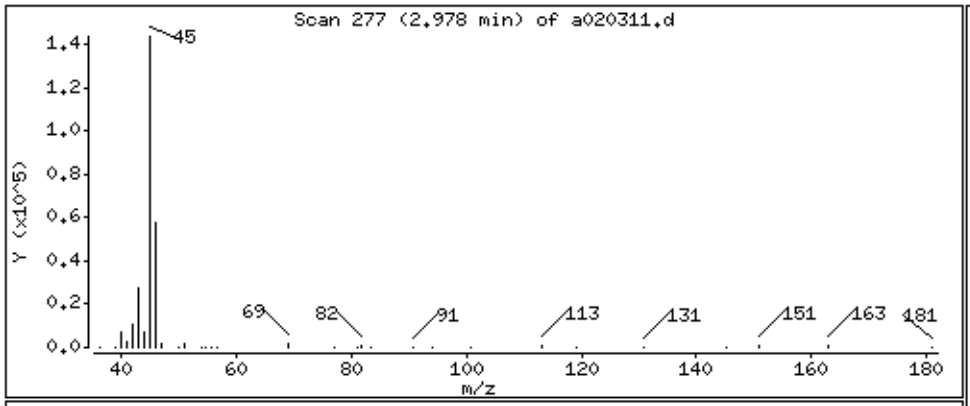
Operator: jg

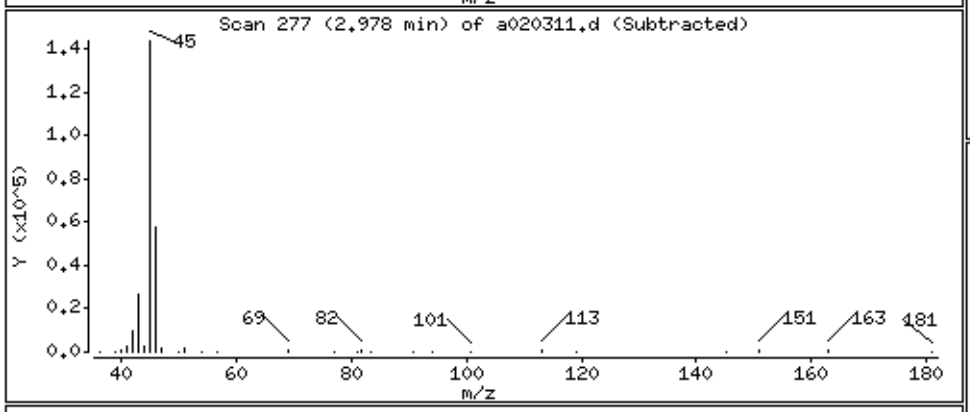
Column phase: RTX-624

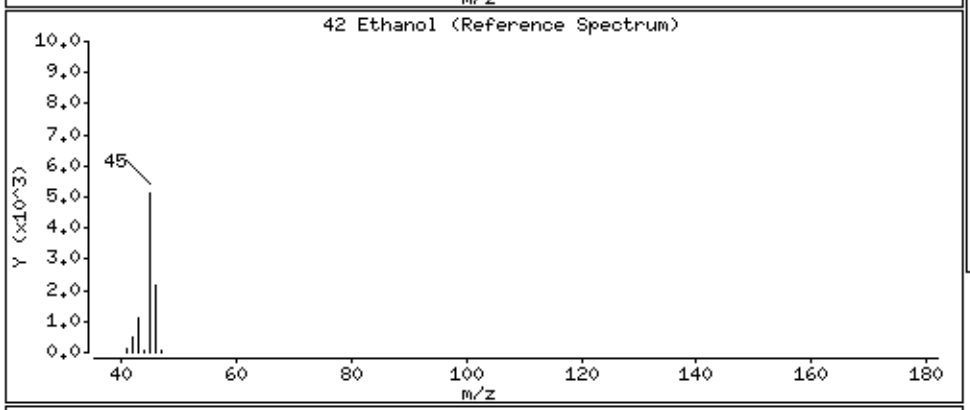
Column diameter: 0.25

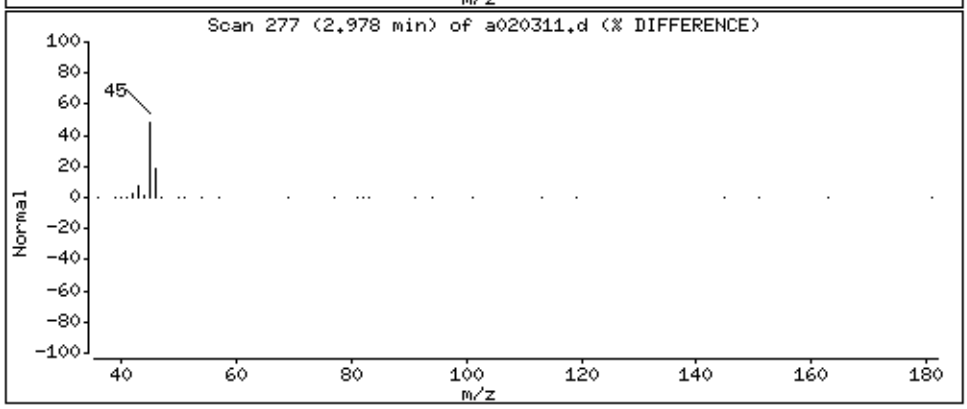
42 Ethanol

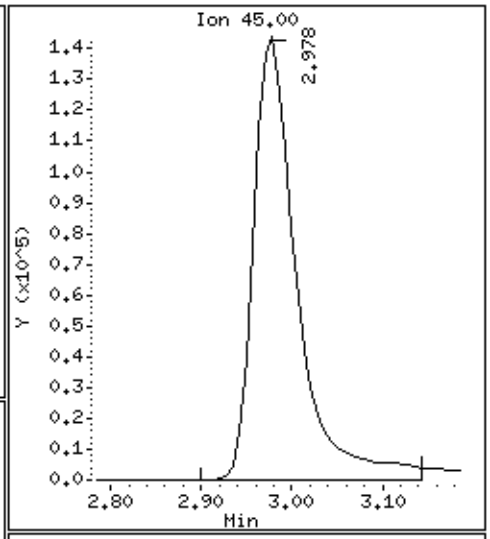
Concentration: 241.89 PPBV

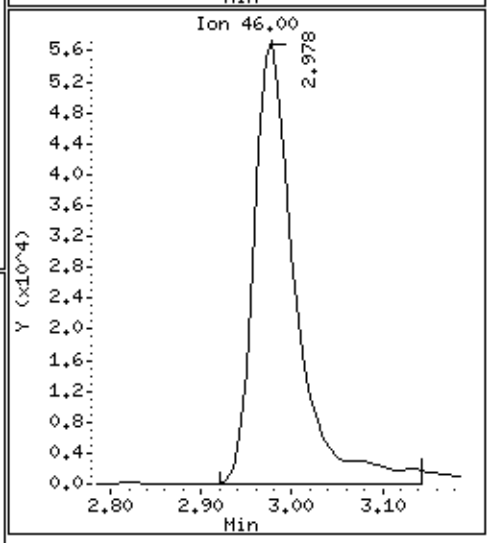












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

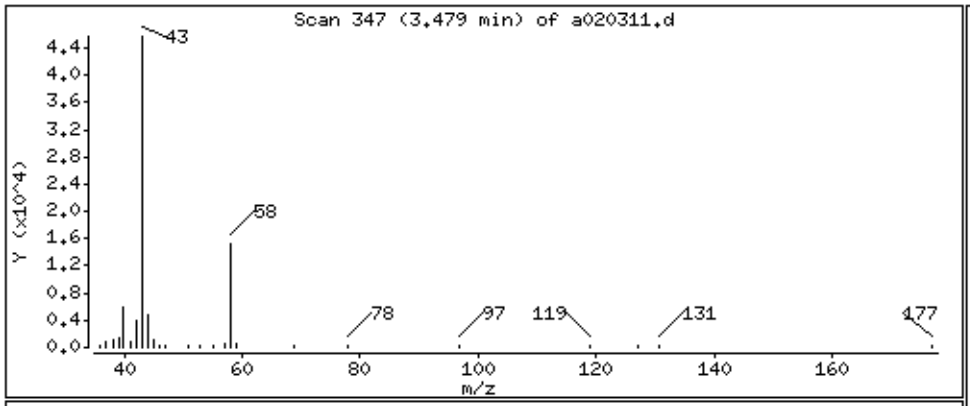
Operator: jg

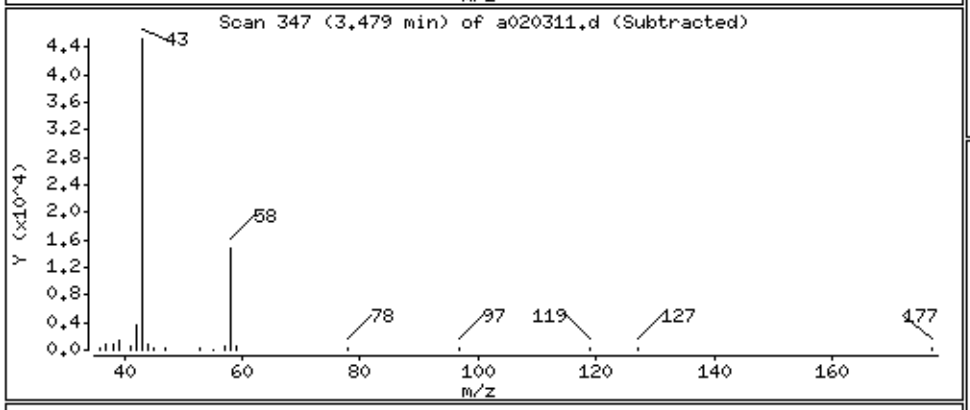
Column phase: RTX-624

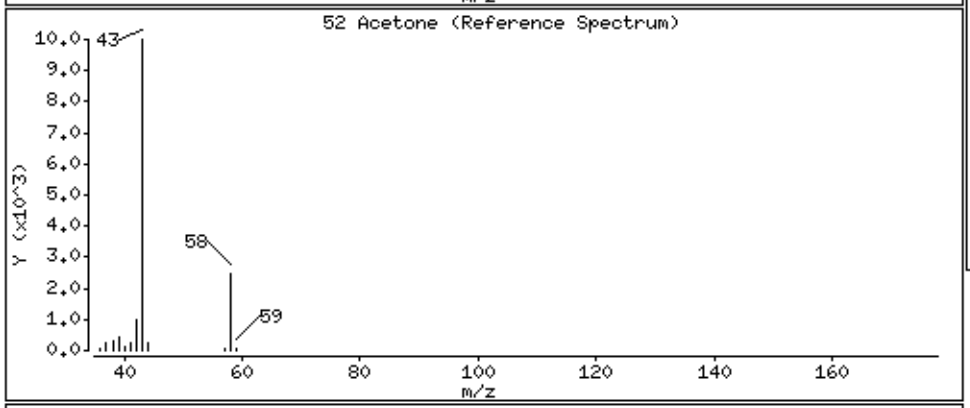
Column diameter: 0.25

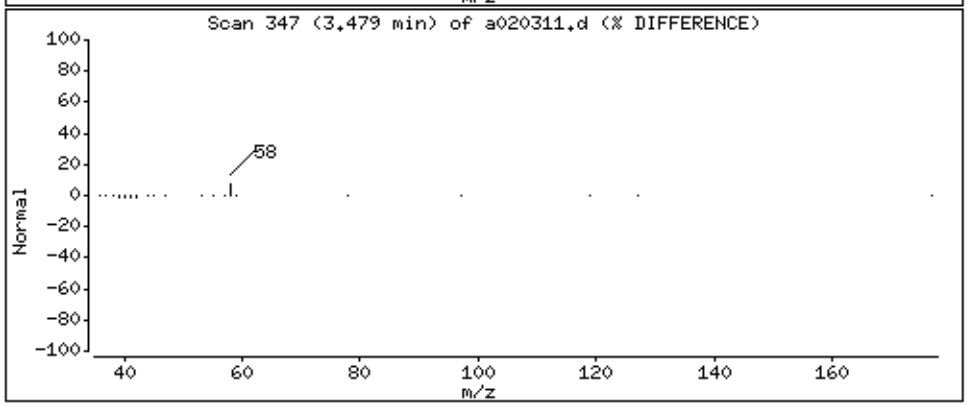
52 Acetone

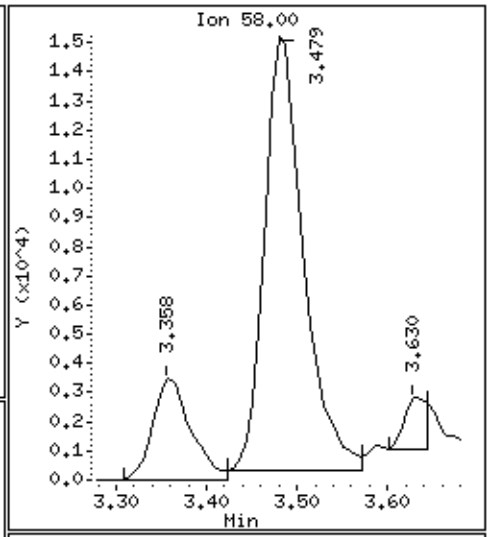
Concentration: 19.827 PPBV

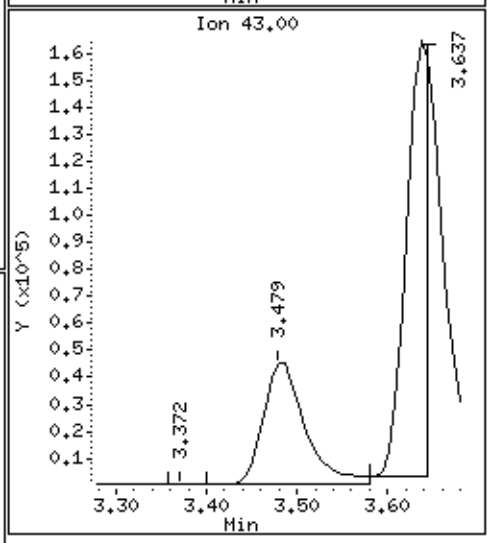












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

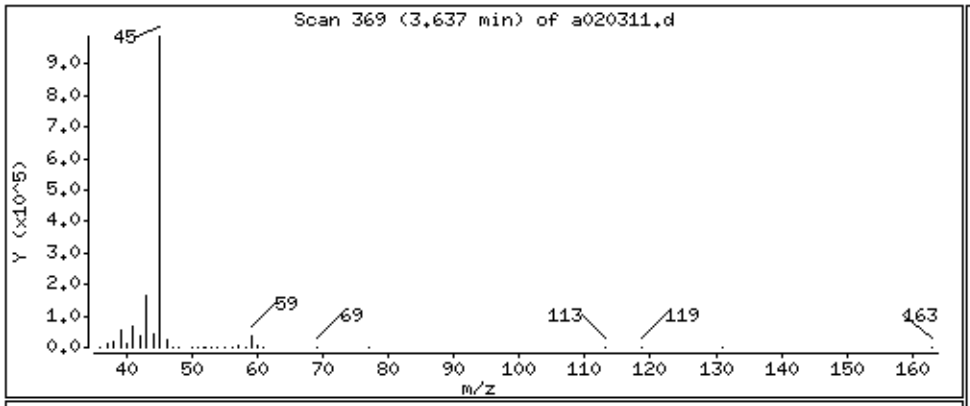
Operator: jg

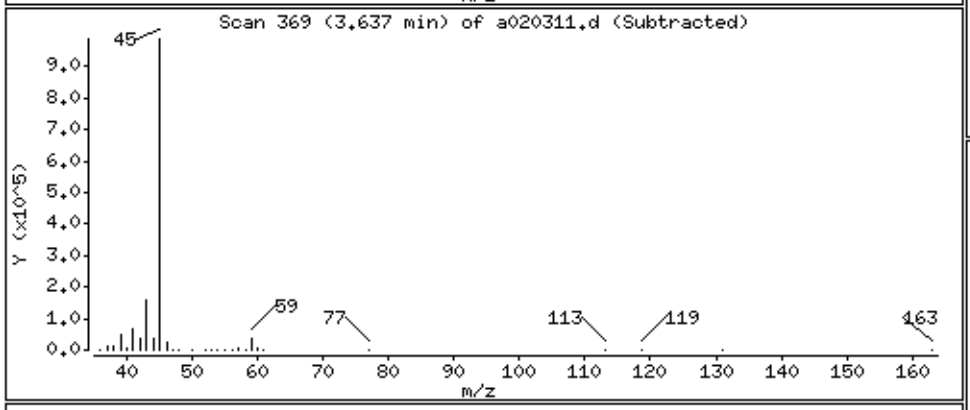
Column phase: RTX-624

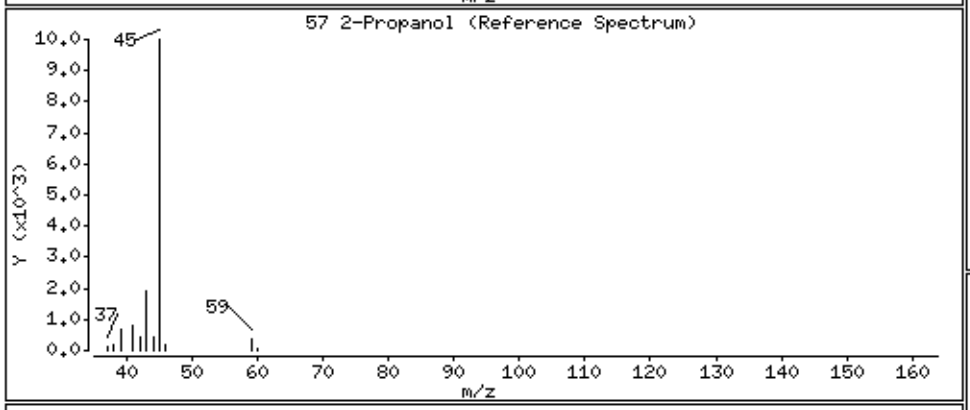
Column diameter: 0.25

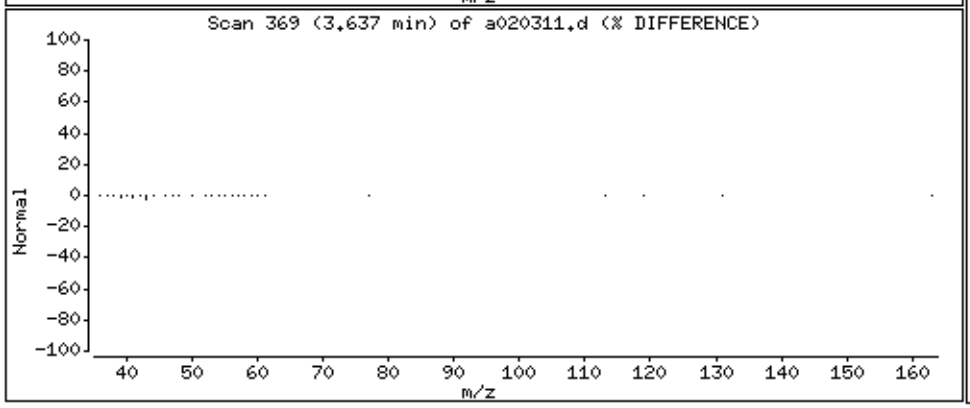
57 2-Propanol

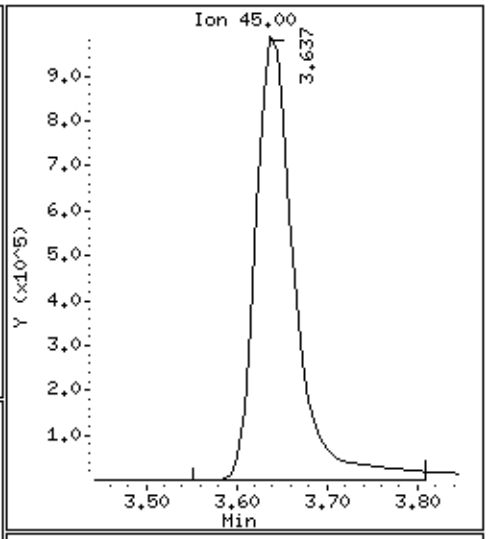
Concentration: 356.40 PPBV

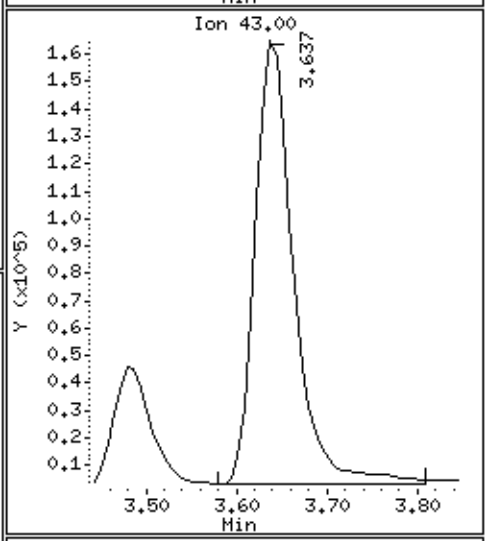


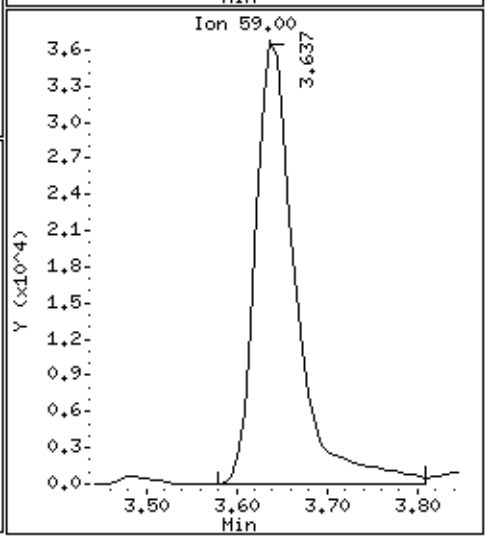












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

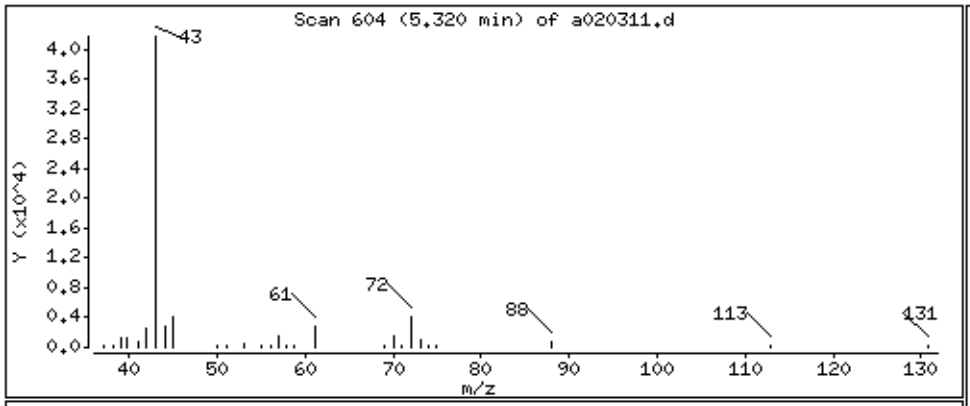
Operator: jg

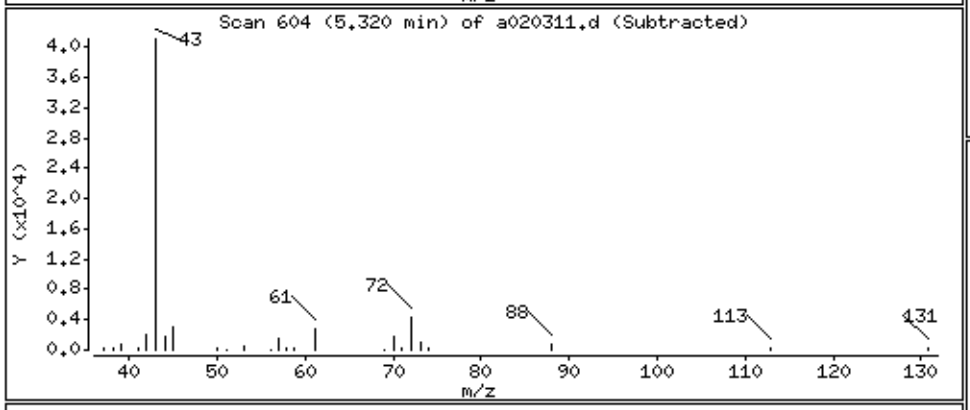
Column phase: RTX-624

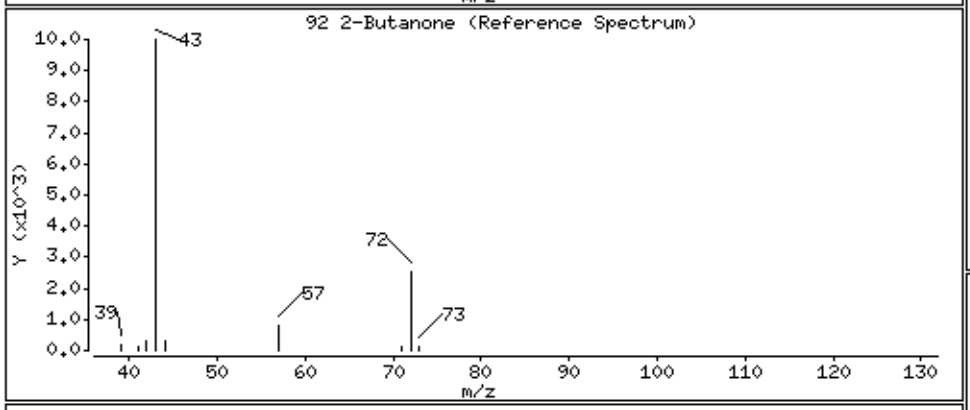
Column diameter: 0.25

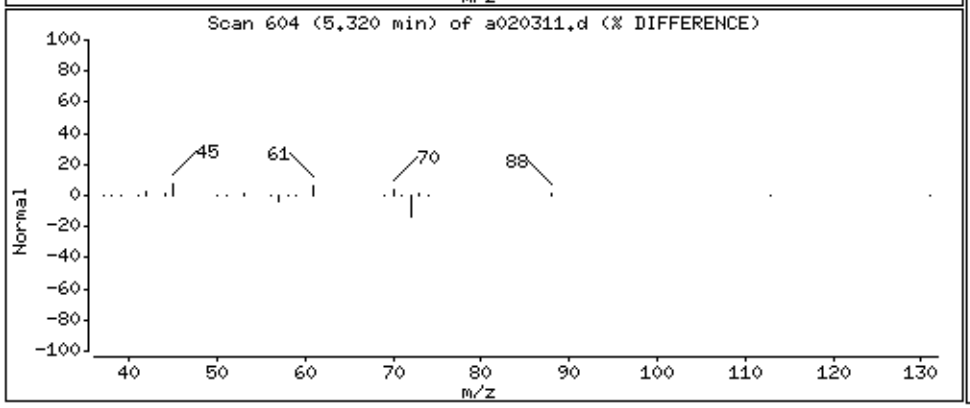
92 2-Butanone

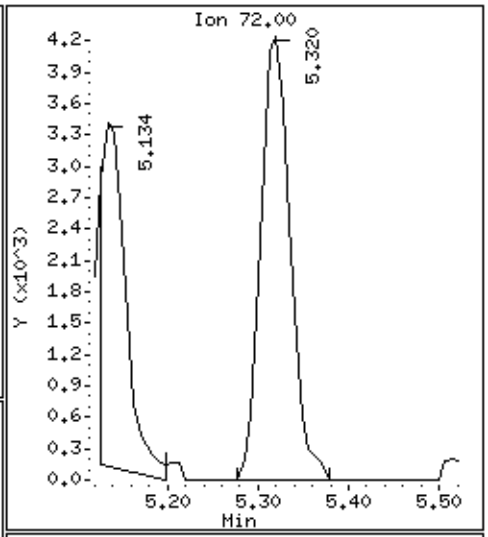
Concentration: 4.553 PPBV

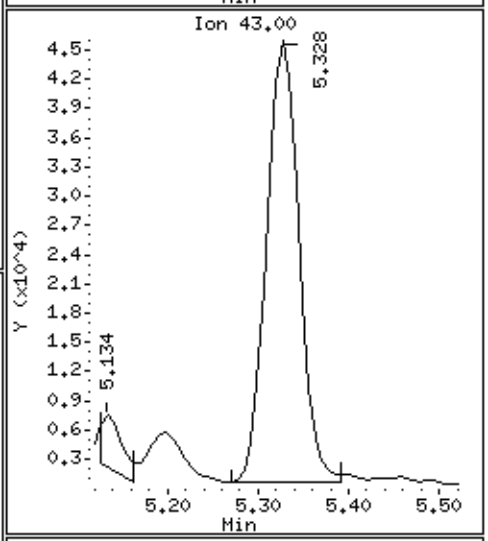


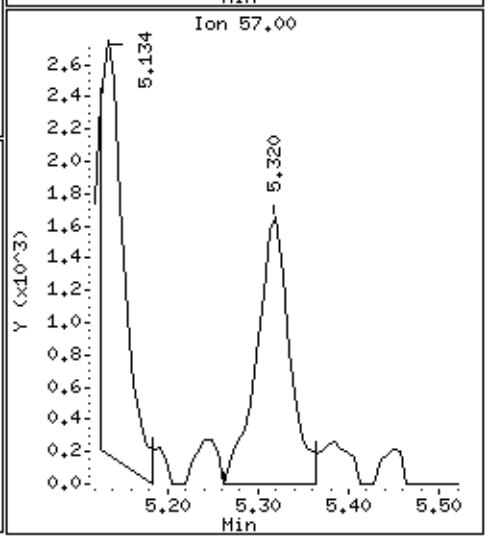












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

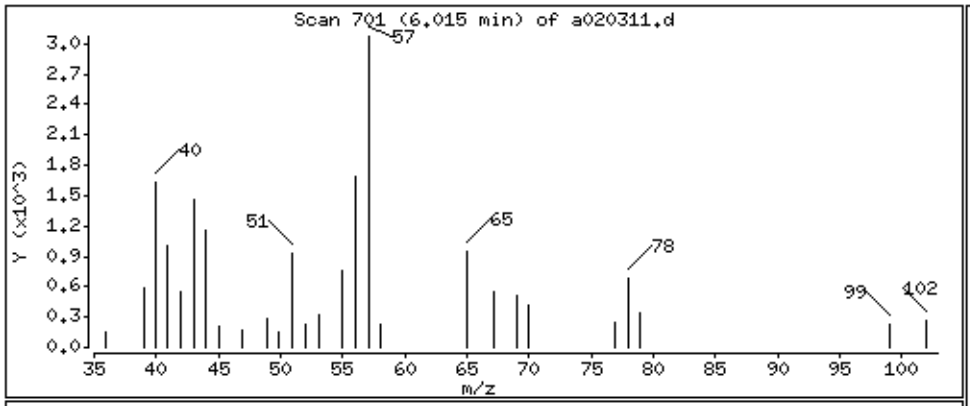
Operator: jg

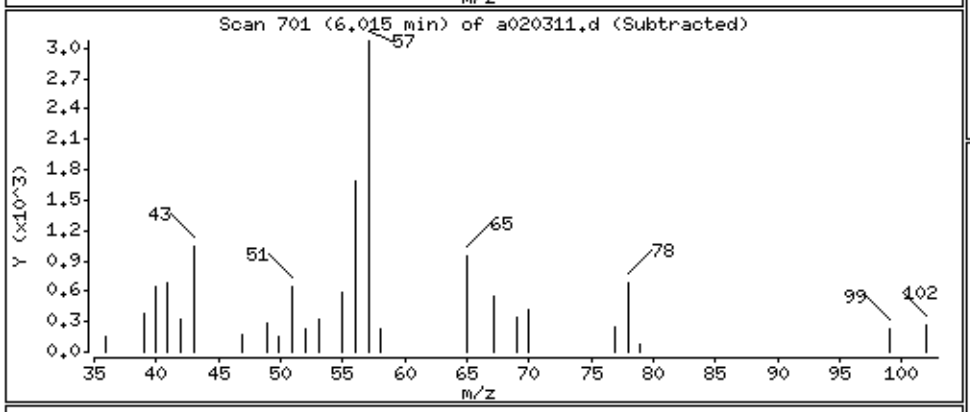
Column phase: RTX-624

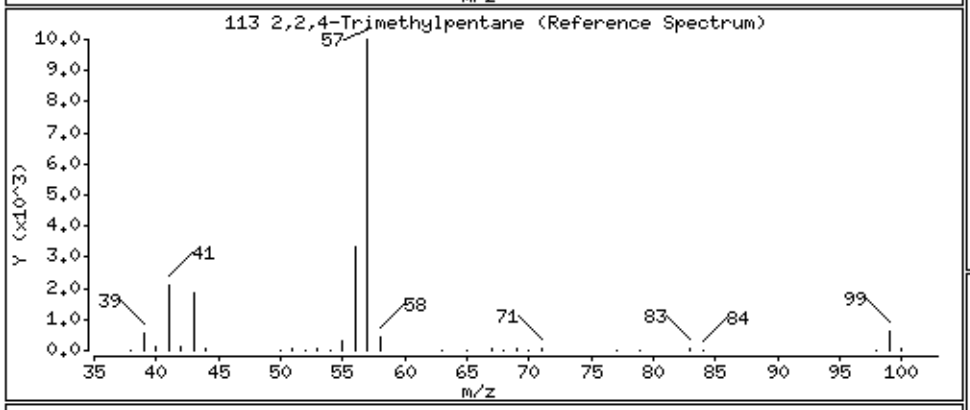
Column diameter: 0.25

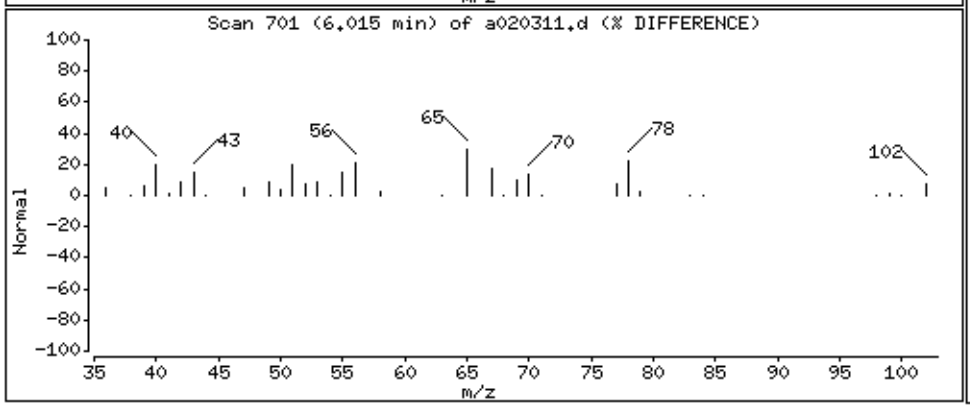
113 2,2,4-Trimethylpentane

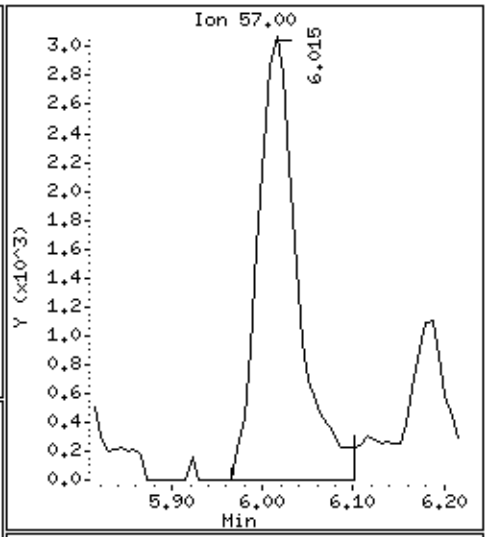
Concentration: 0.3215 PPBV

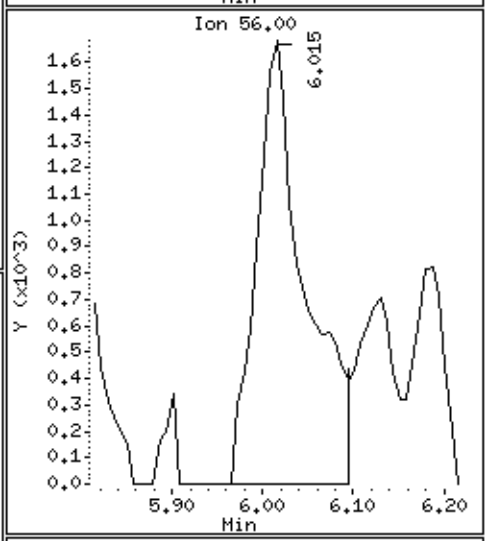


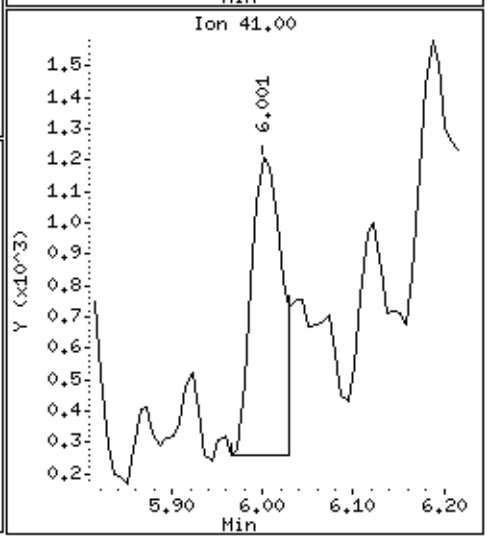












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

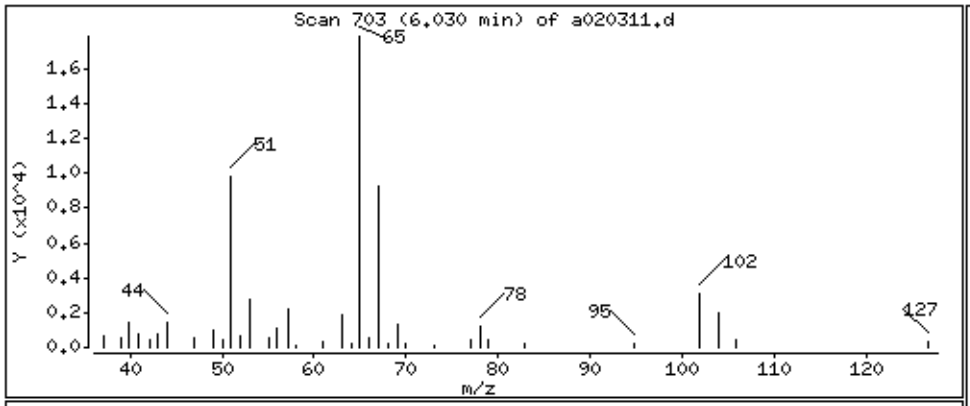
Operator: jg

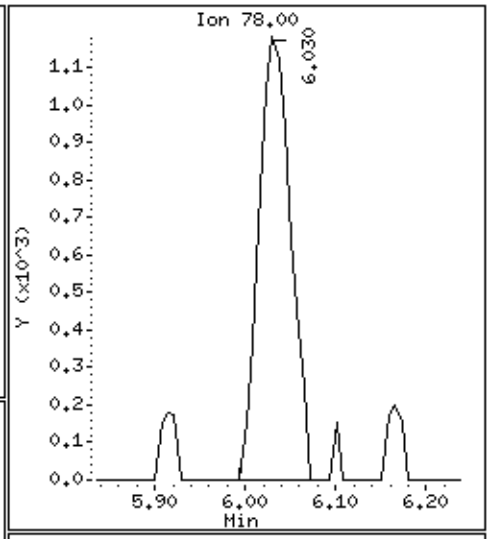
Column phase: RTX-624

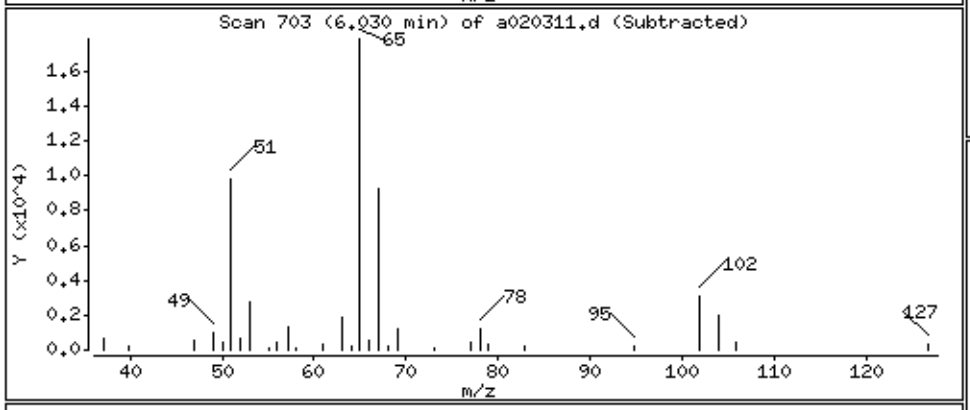
Column diameter: 0.25

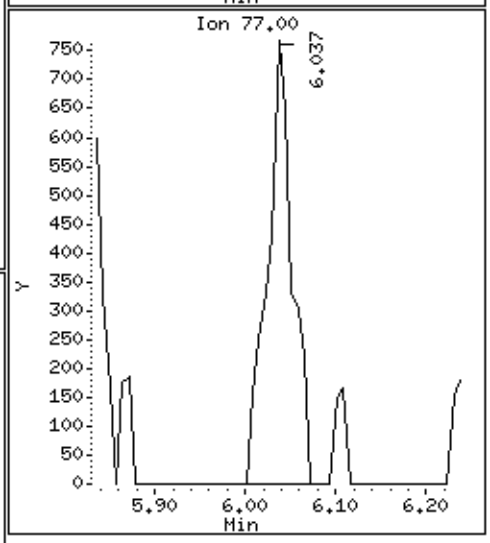
116 Benzene

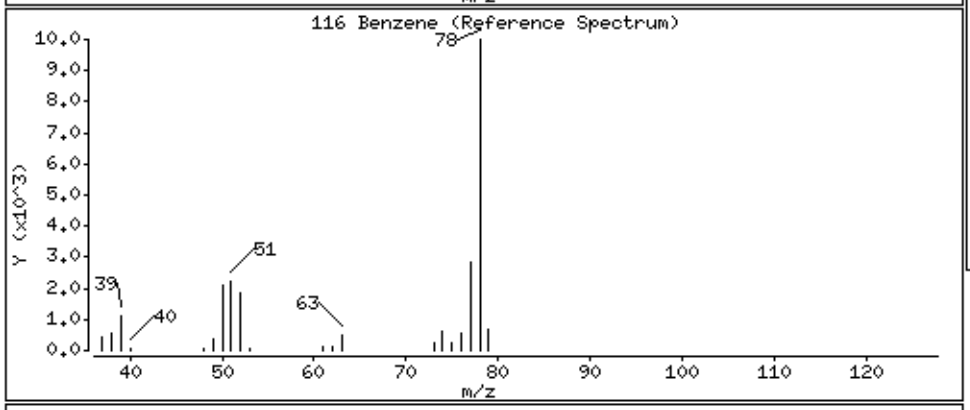
Concentration: 0.2102 PPBV

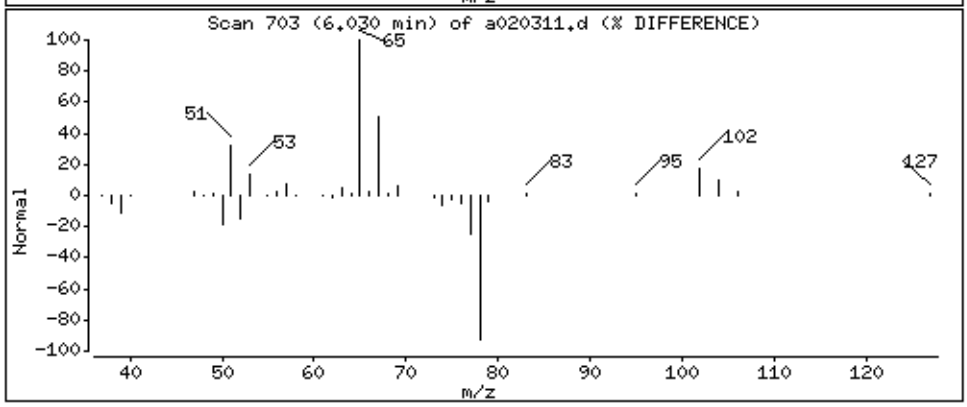












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

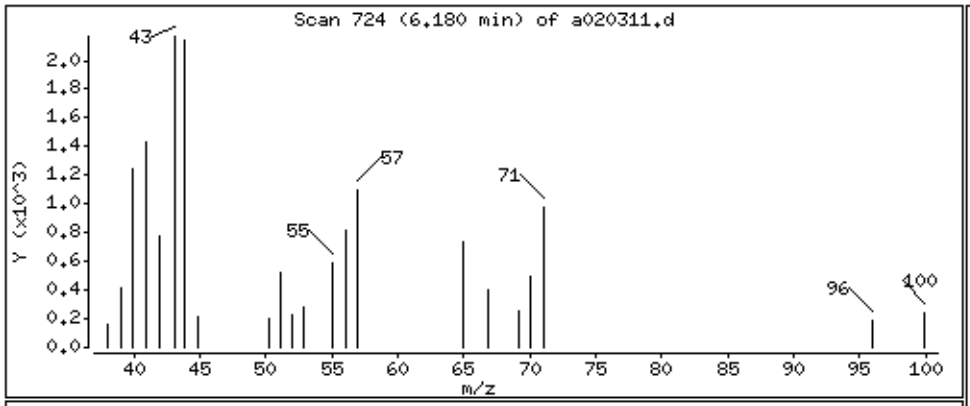
Operator: jg

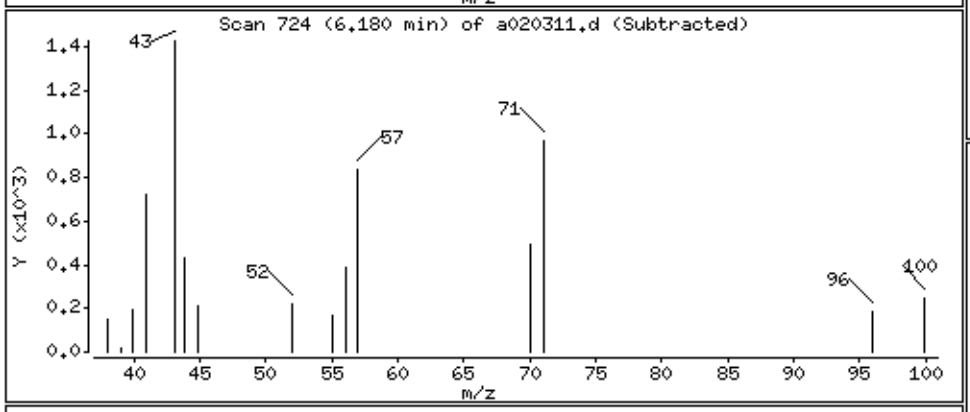
Column phase: RTX-624

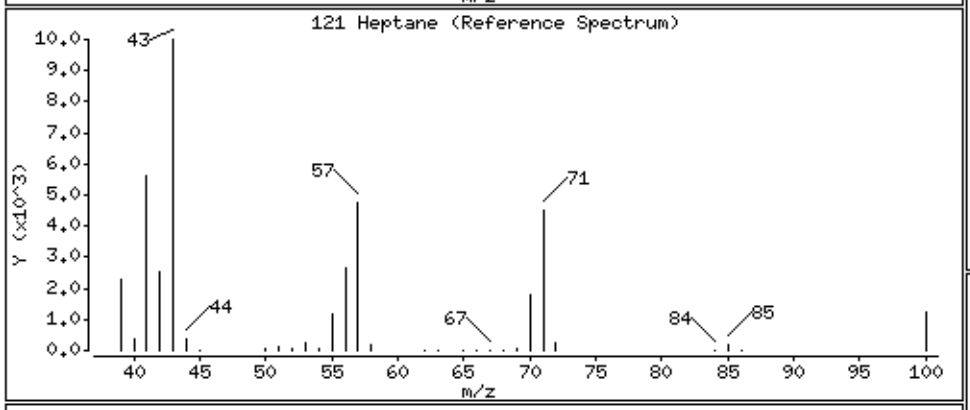
Column diameter: 0.25

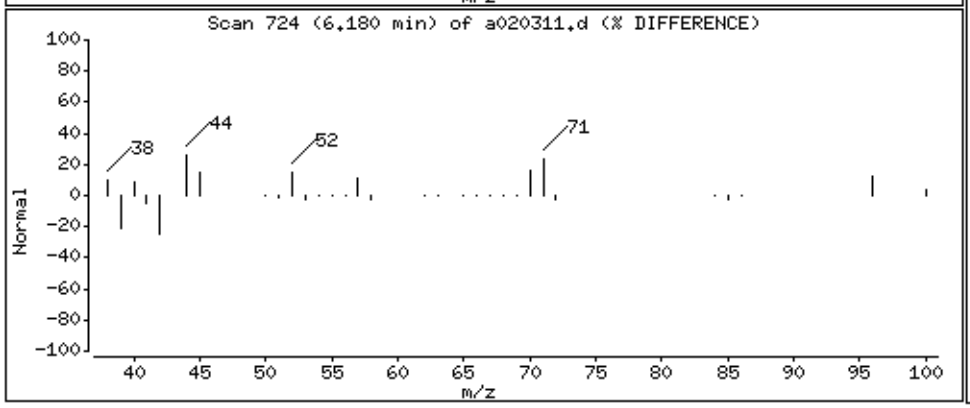
121 Heptane

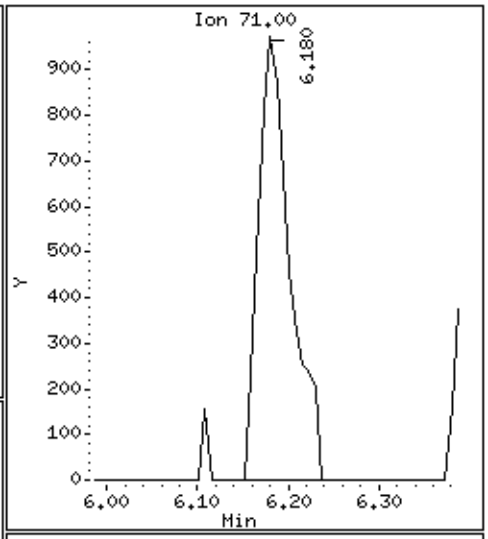
Concentration: 0.4822 PPBV

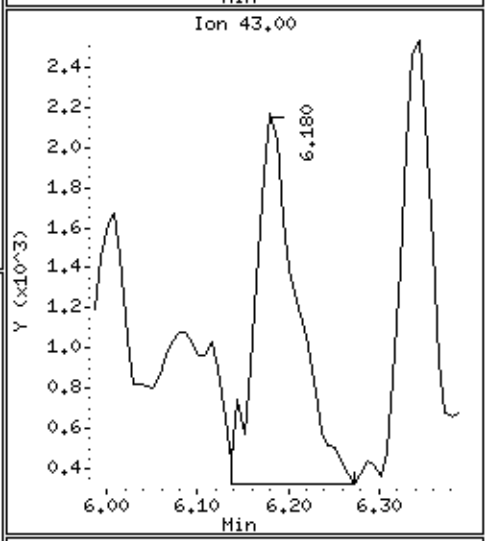


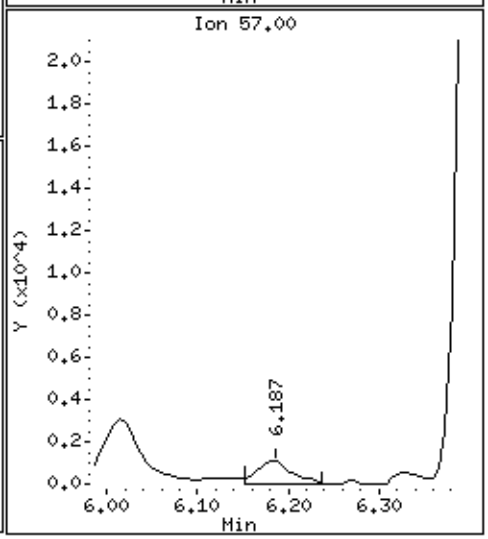












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

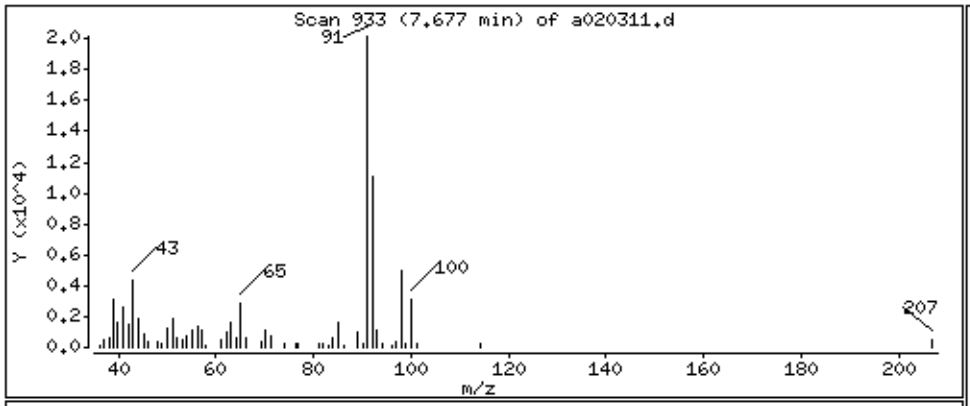
Operator: jg

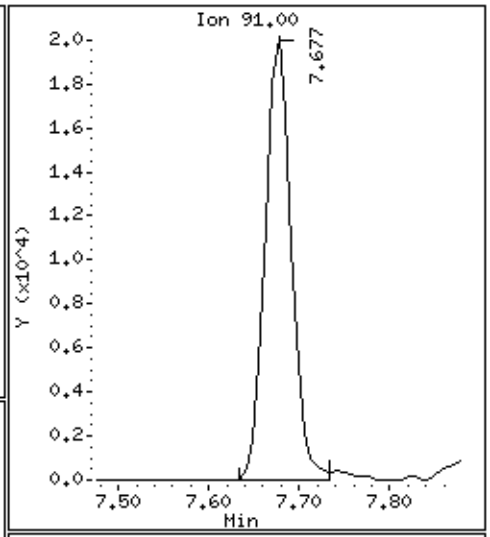
Column phase: RTX-624

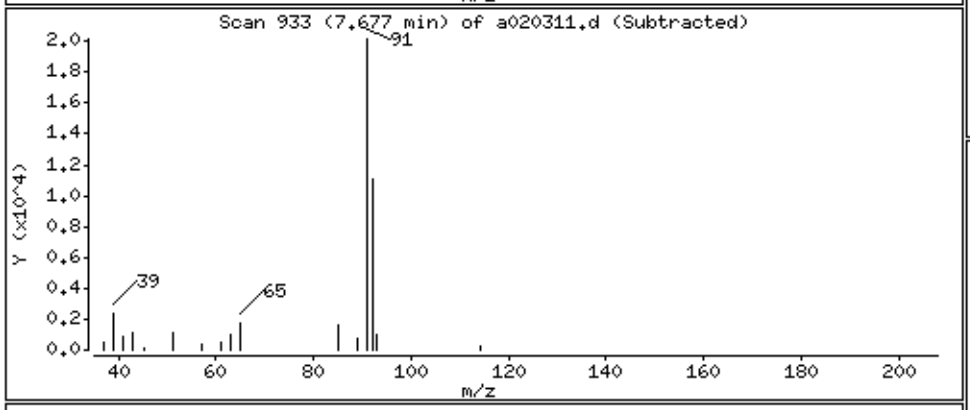
Column diameter: 0.25

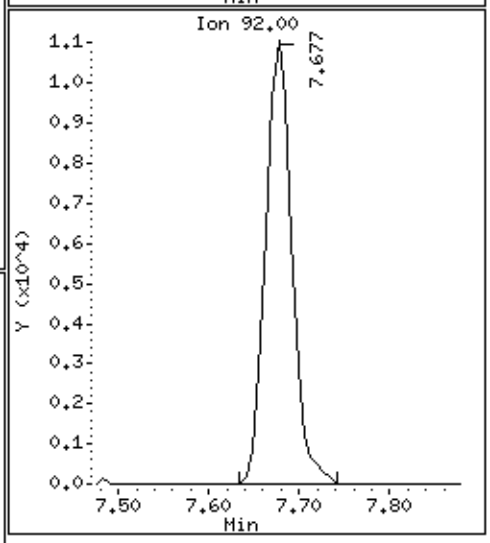
147 Toluene

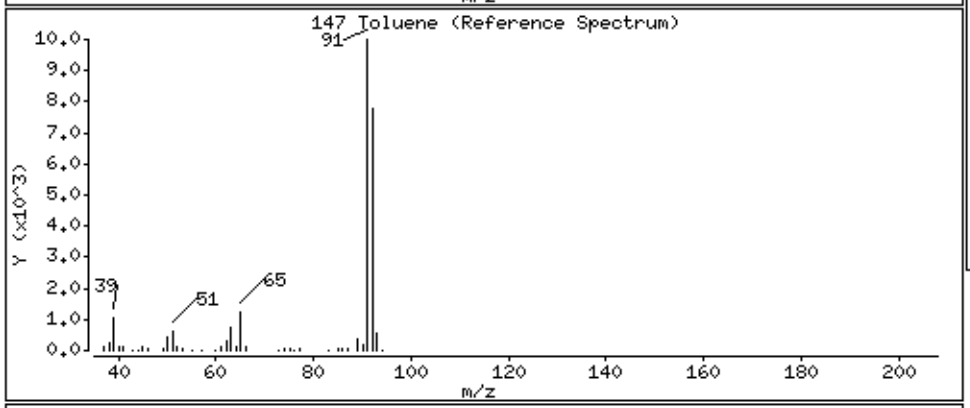
Concentration: 2.153 PPBV

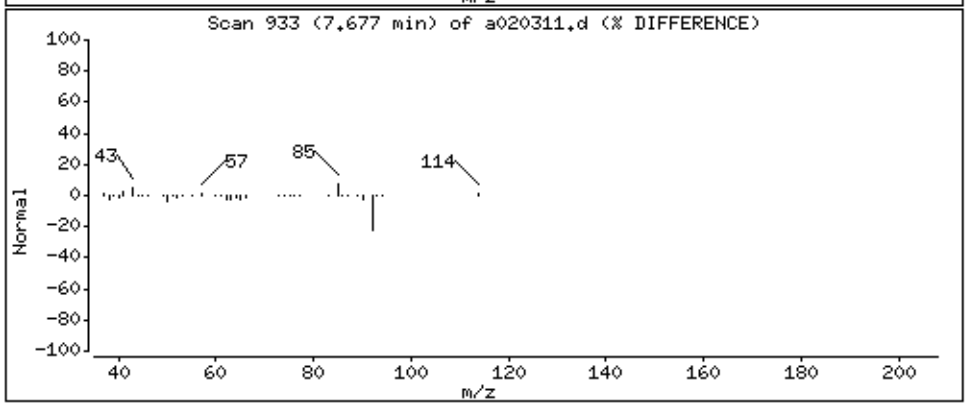












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

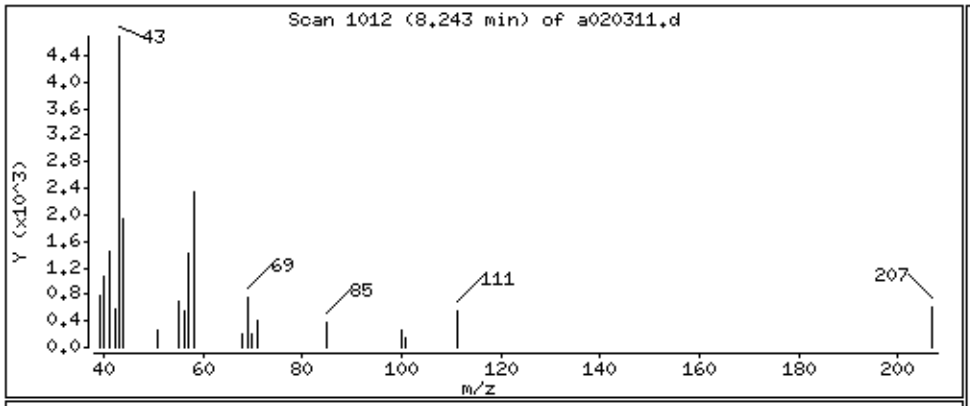
Operator: jg

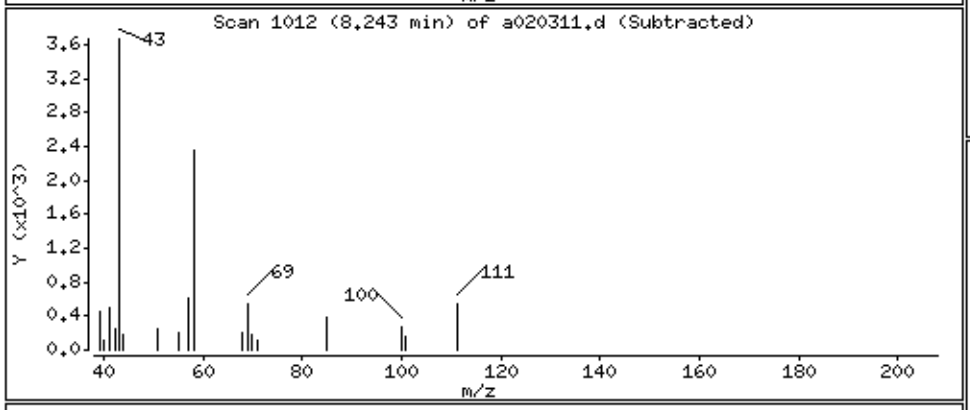
Column phase: RTX-624

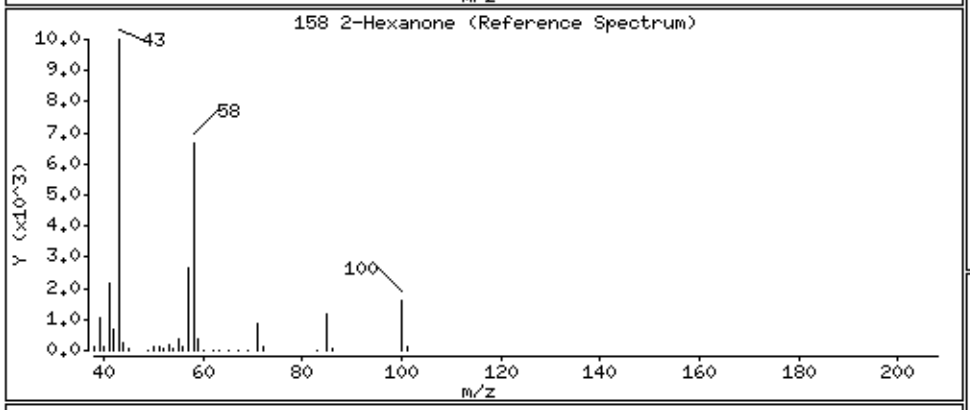
Column diameter: 0.25

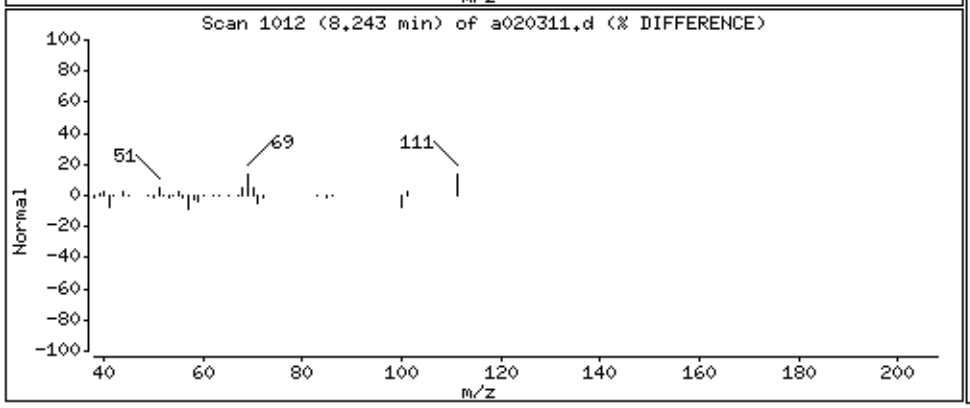
158 2-Hexanone

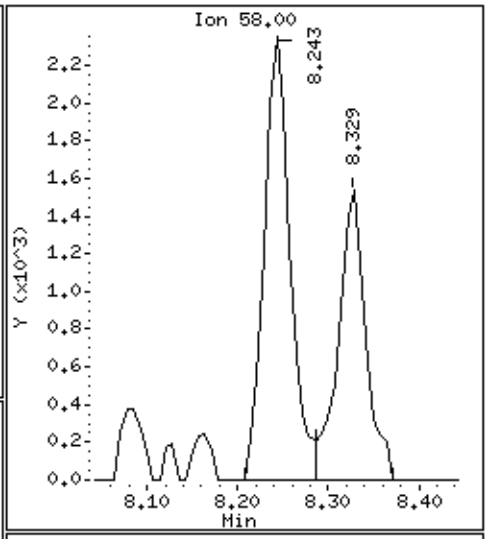
Concentration: 0.5381 PPBV

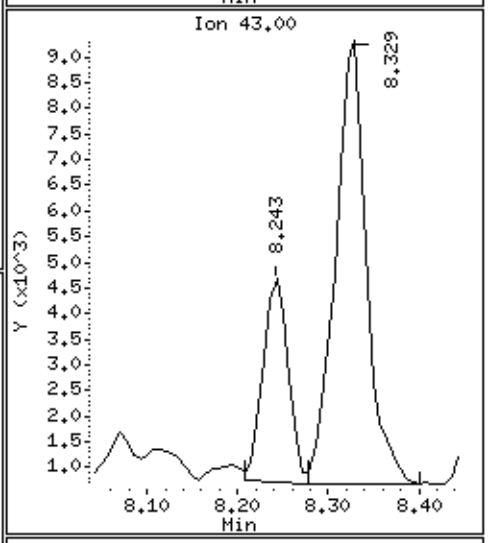


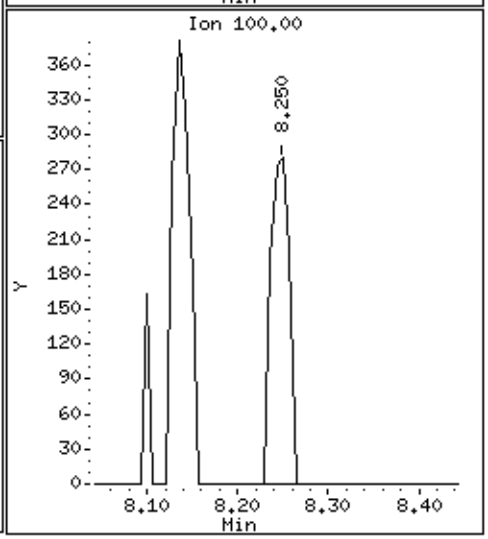












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

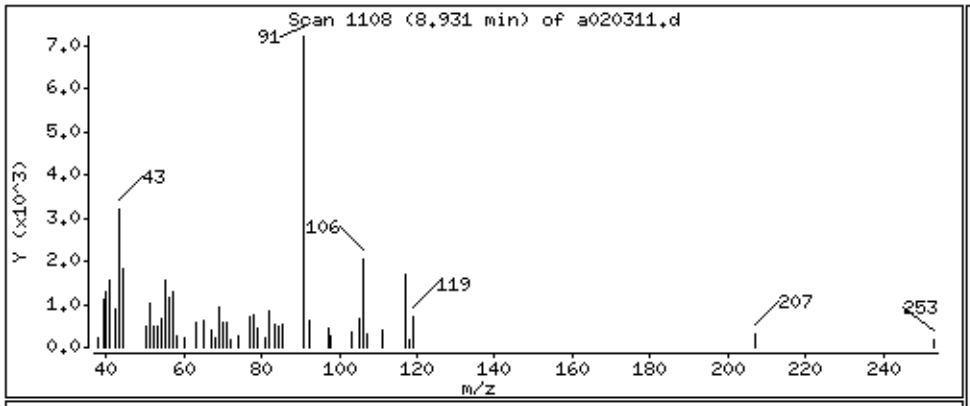
Operator: jg

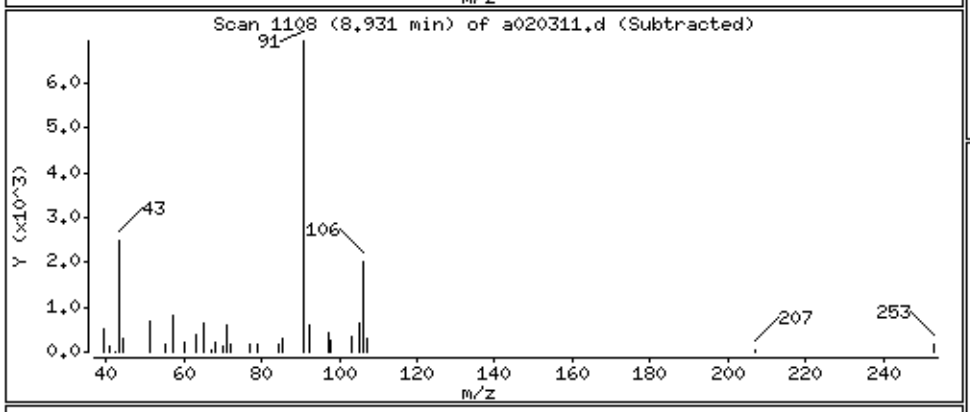
Column phase: RTX-624

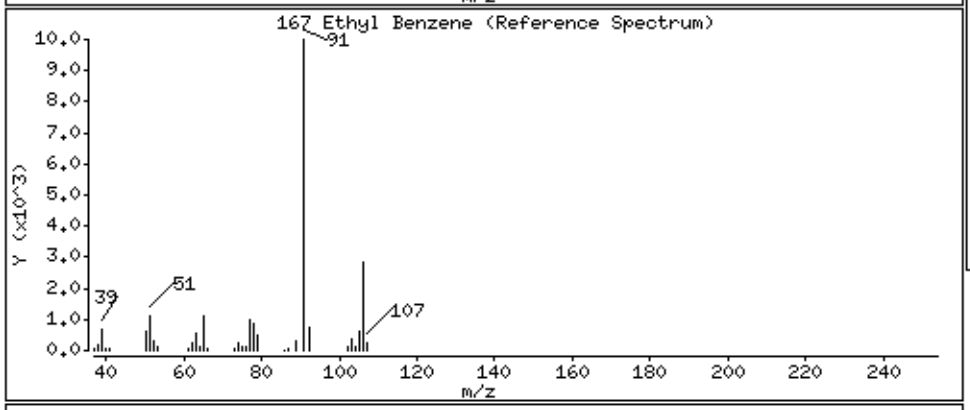
Column diameter: 0.25

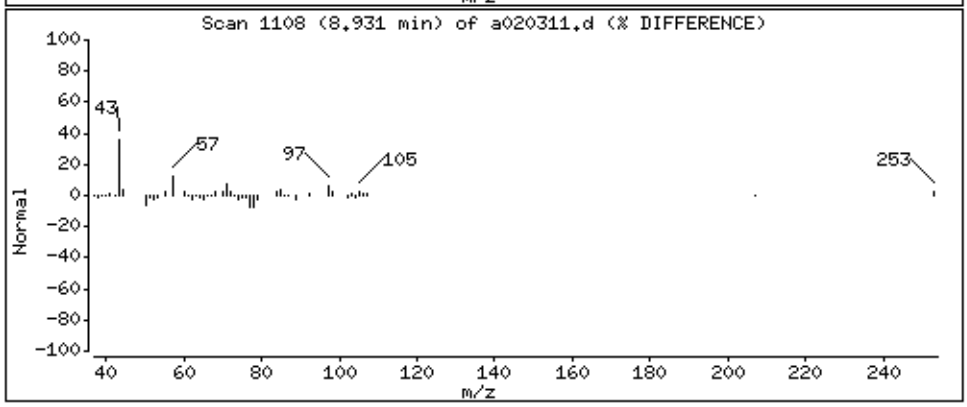
167 Ethyl Benzene

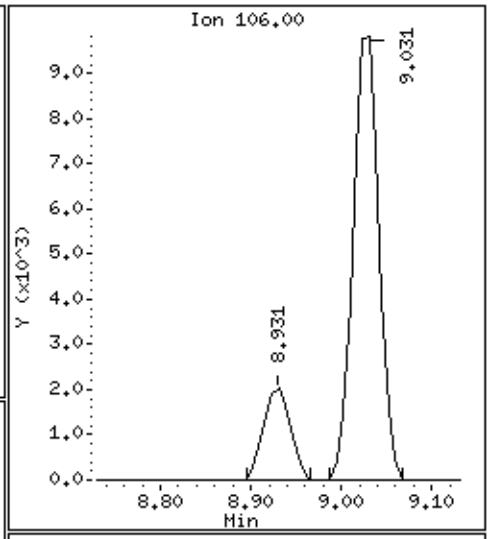
Concentration: 0.4704 PPBV

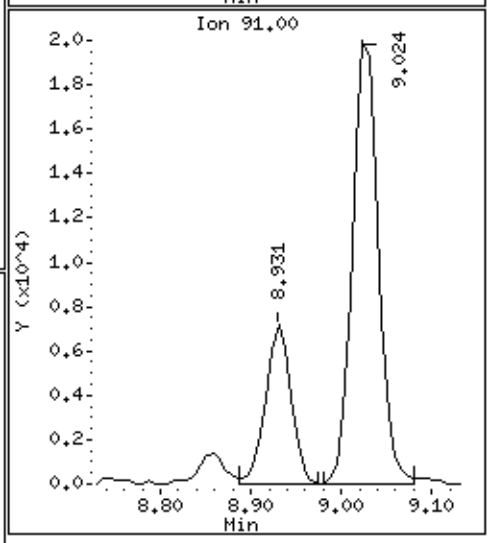












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

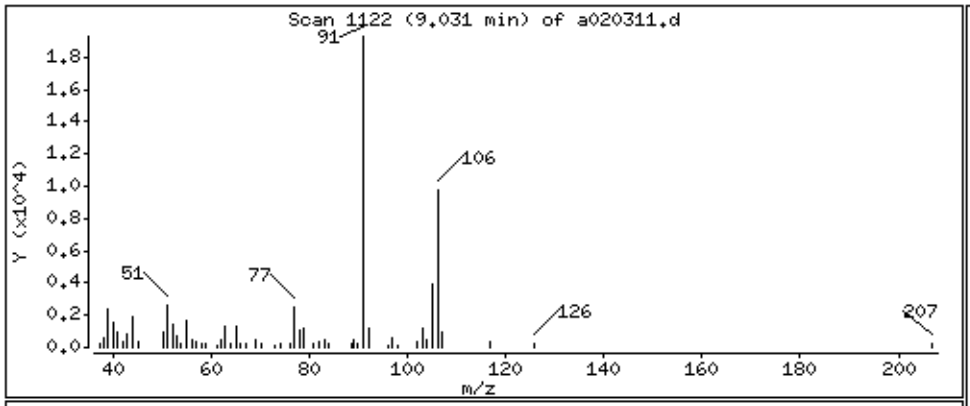
Operator: jg

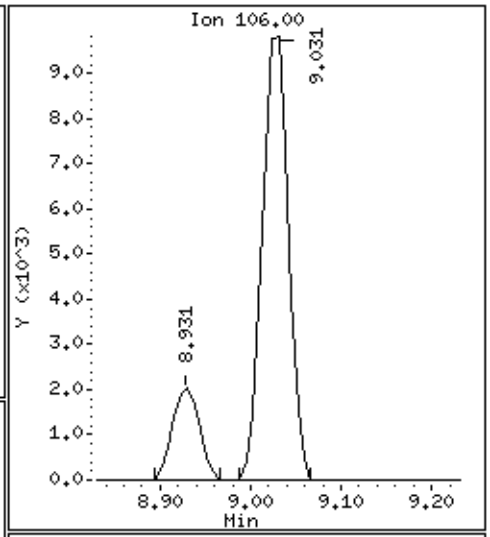
Column phase: RTX-624

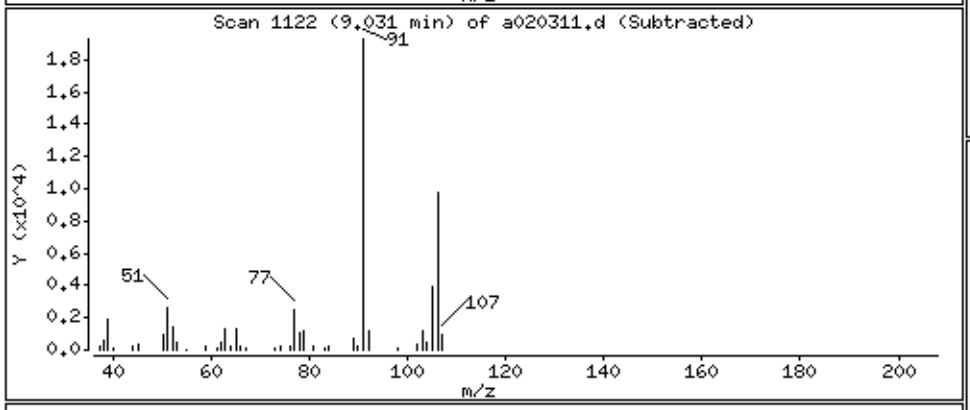
Column diameter: 0.25

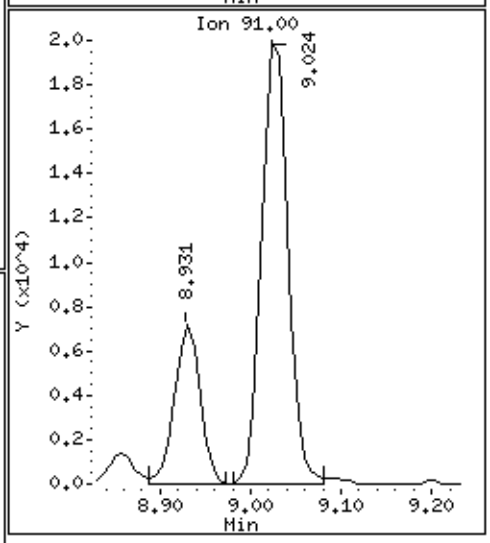
169 m,p-Xylene

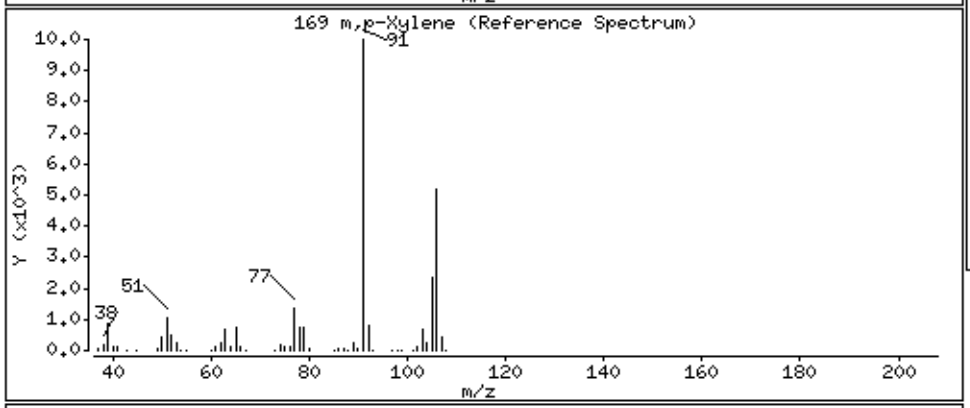
Concentration: 1.802 PPBV

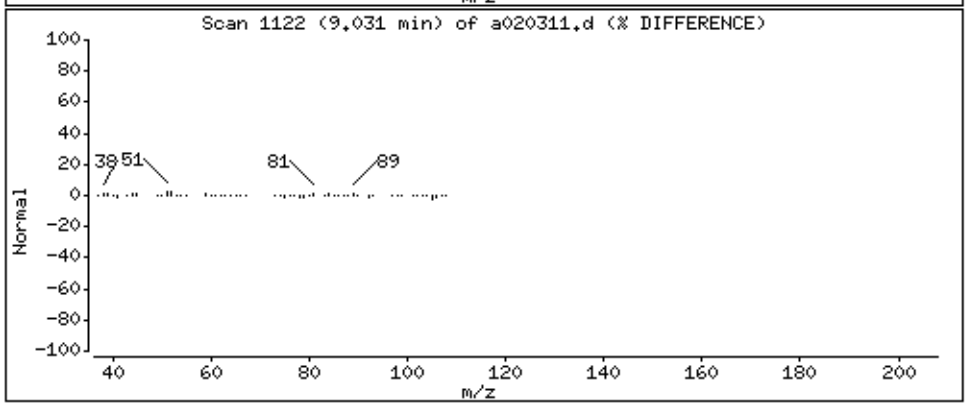












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

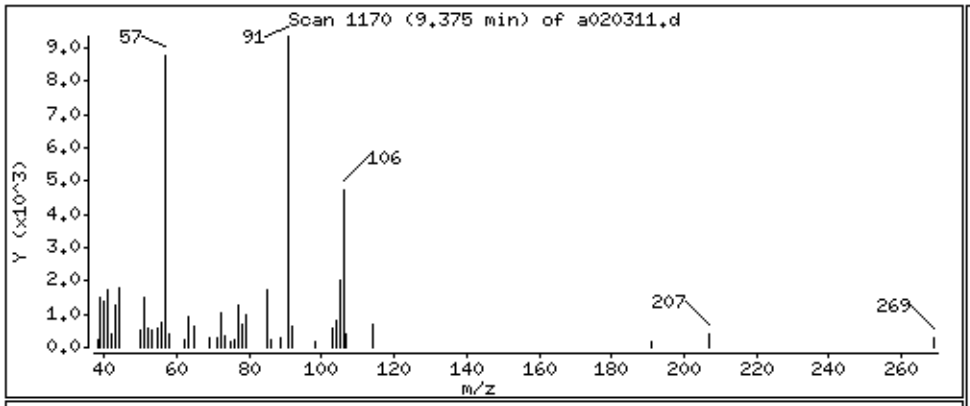
Operator: jg

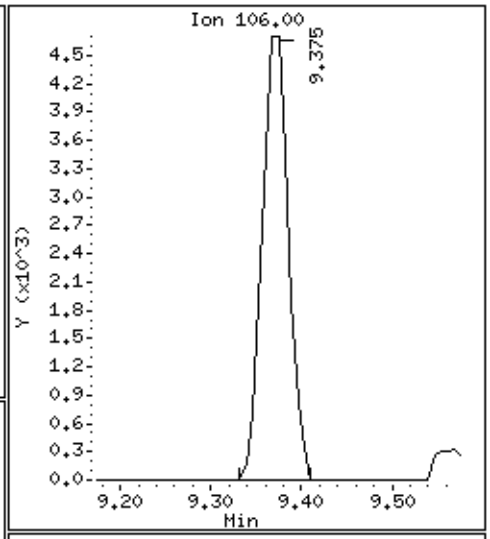
Column phase: RTX-624

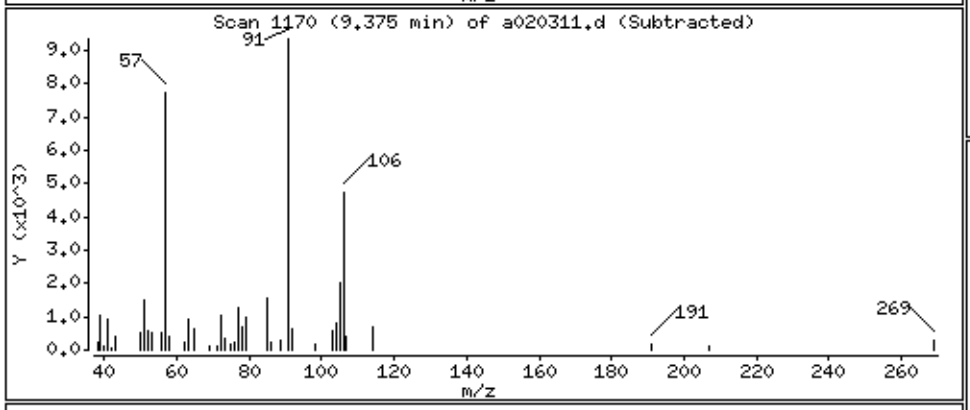
Column diameter: 0.25

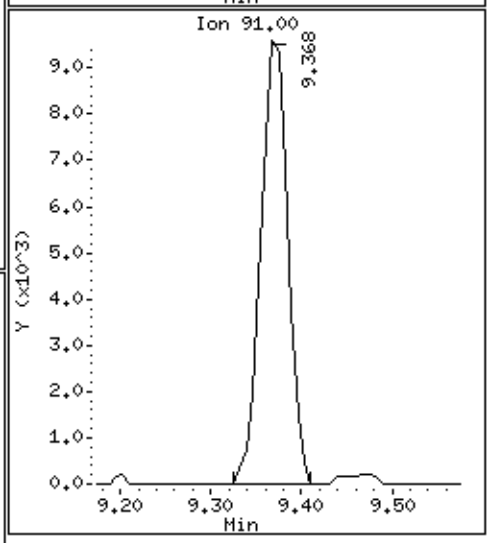
171 o-Xylene

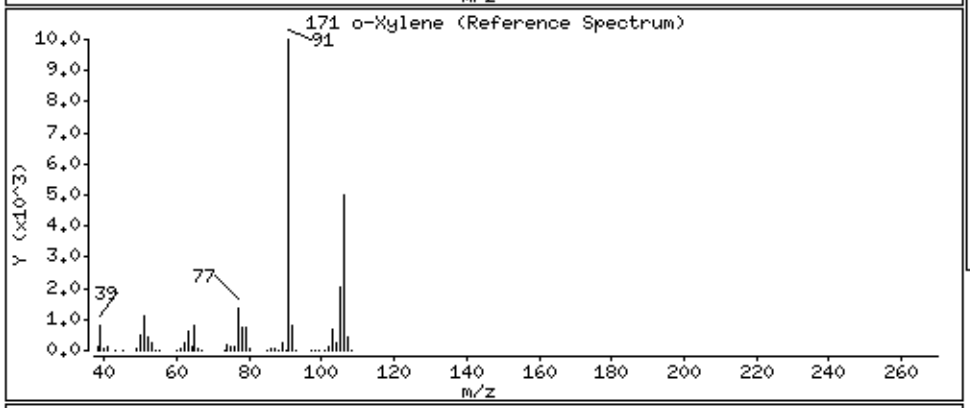
Concentration: 0.8927 PPBV

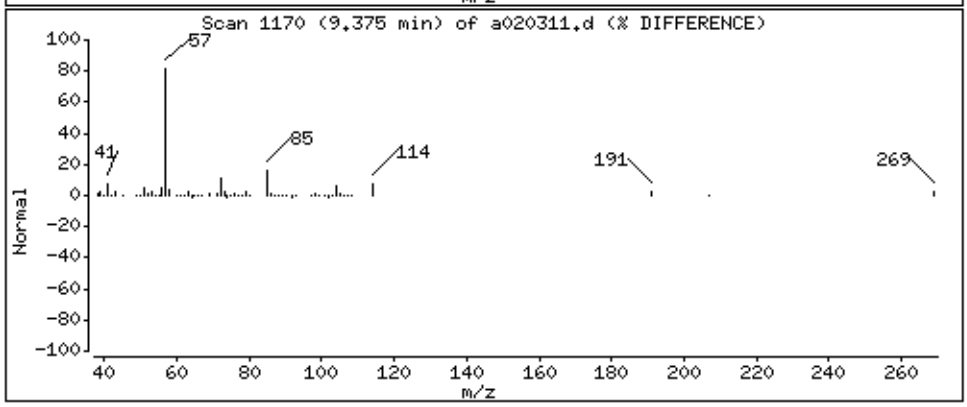












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

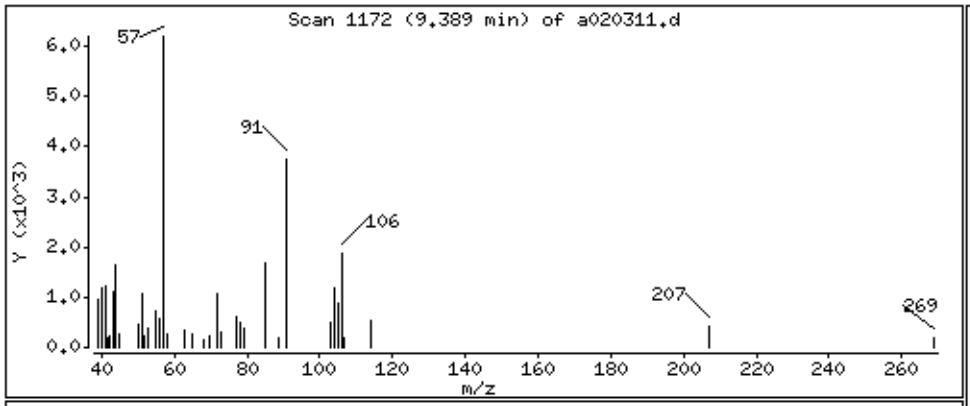
Operator: jg

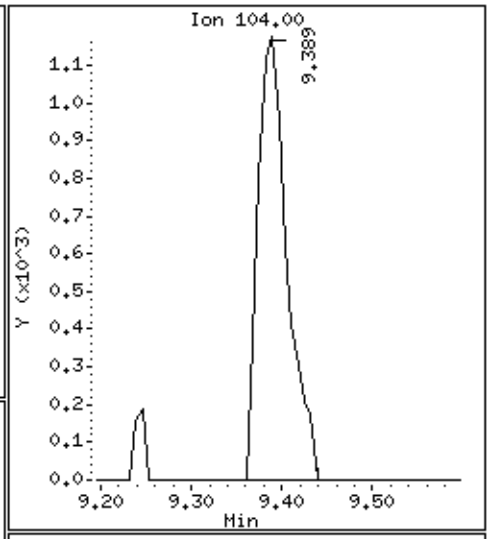
Column phase: RTX-624

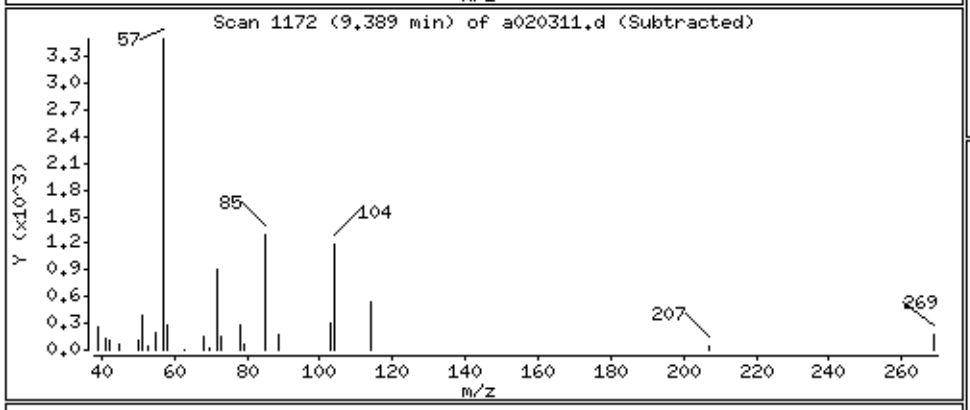
Column diameter: 0.25

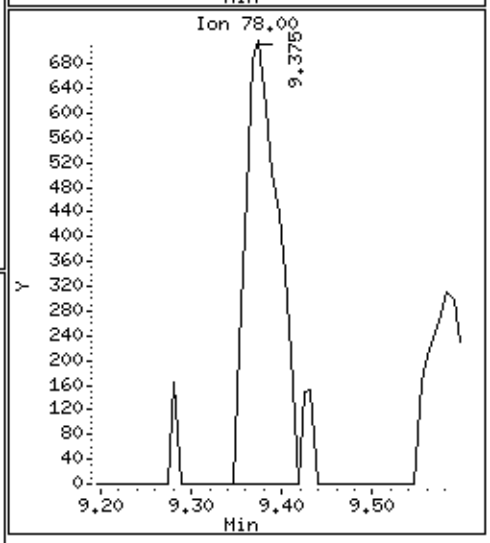
172 Styrene

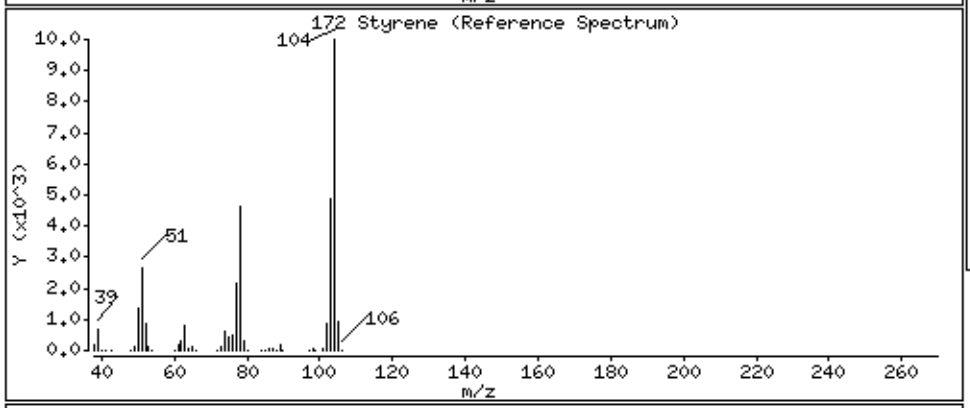
Concentration: 0.1515 PPBV

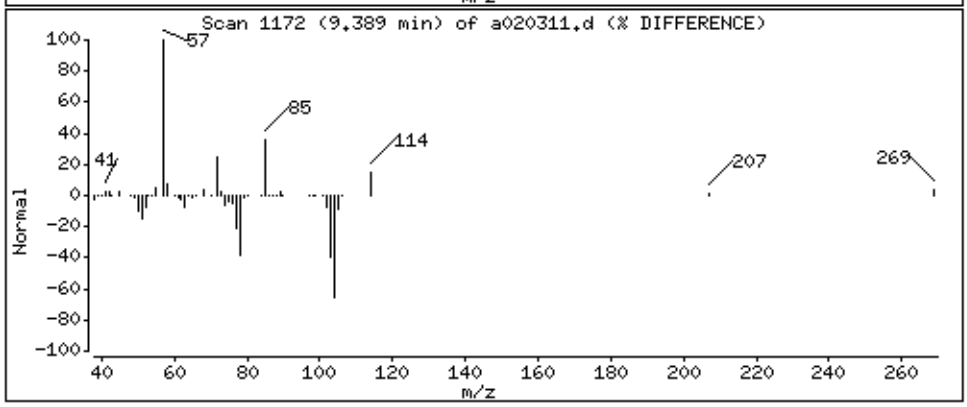












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

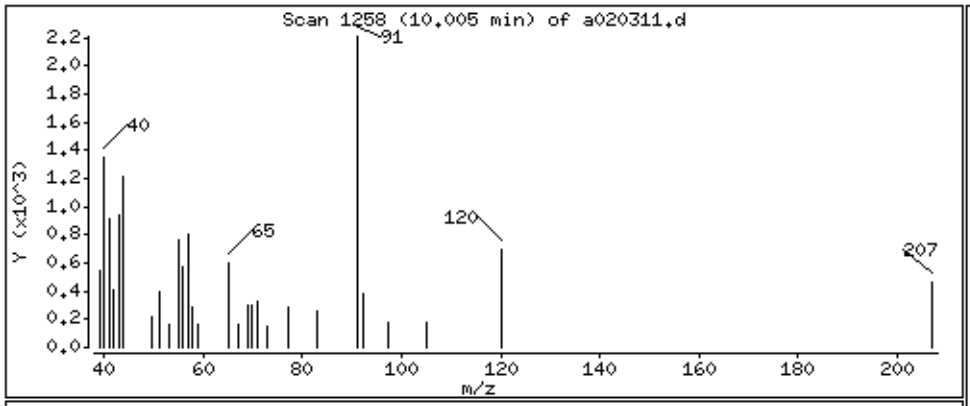
Operator: jg

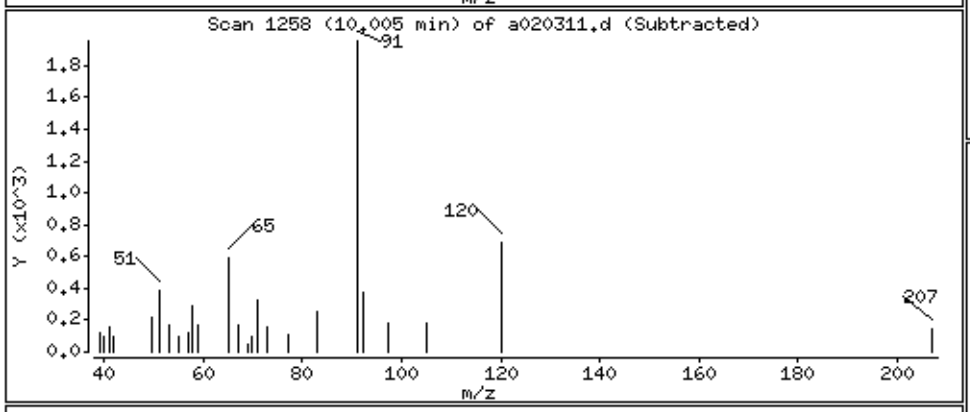
Column phase: RTX-624

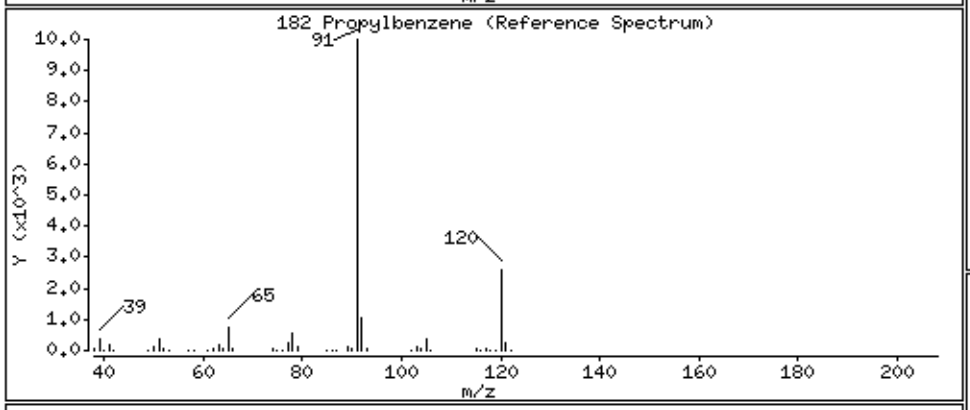
Column diameter: 0.25

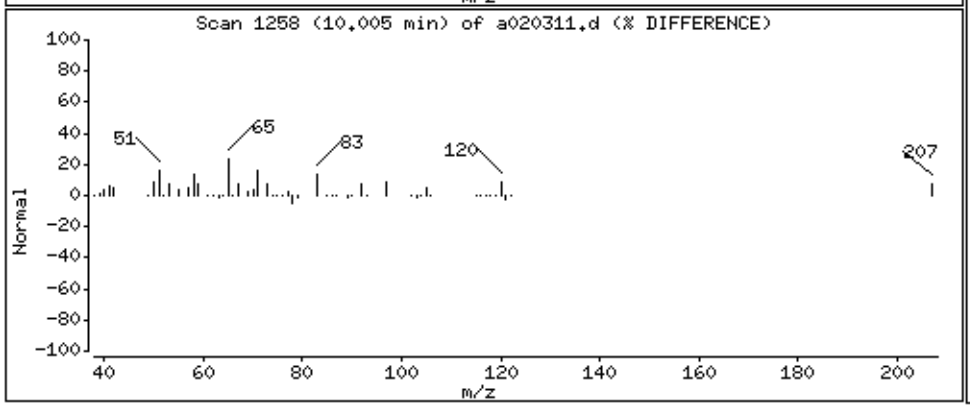
182 Propylbenzene

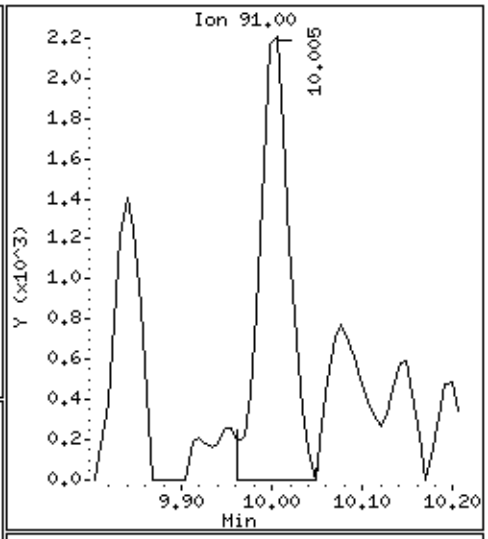
Concentration: 0.1335 PPBV

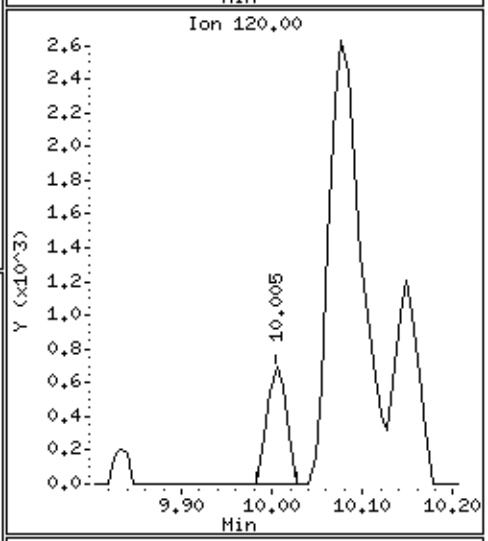


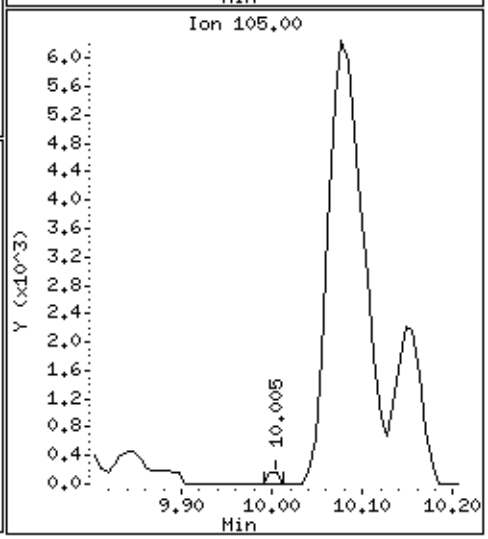












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

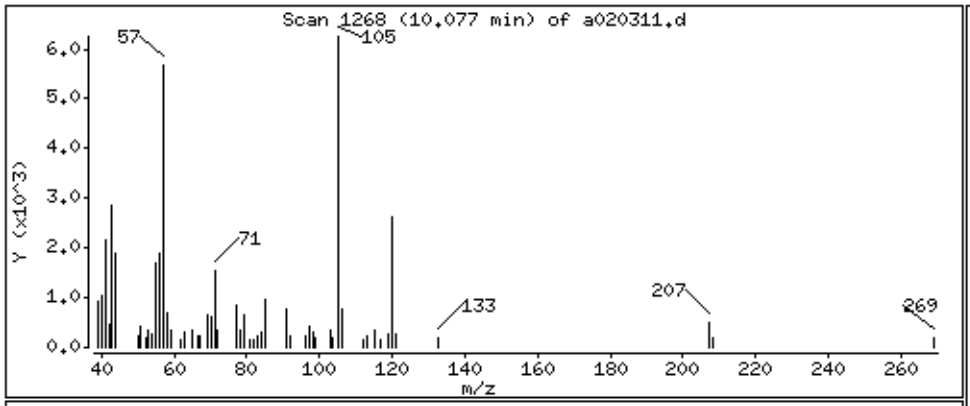
Operator: jg

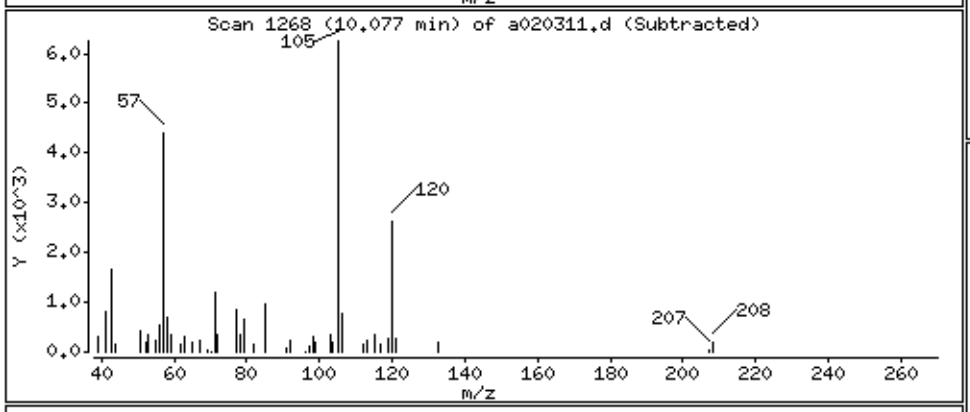
Column phase: RTX-624

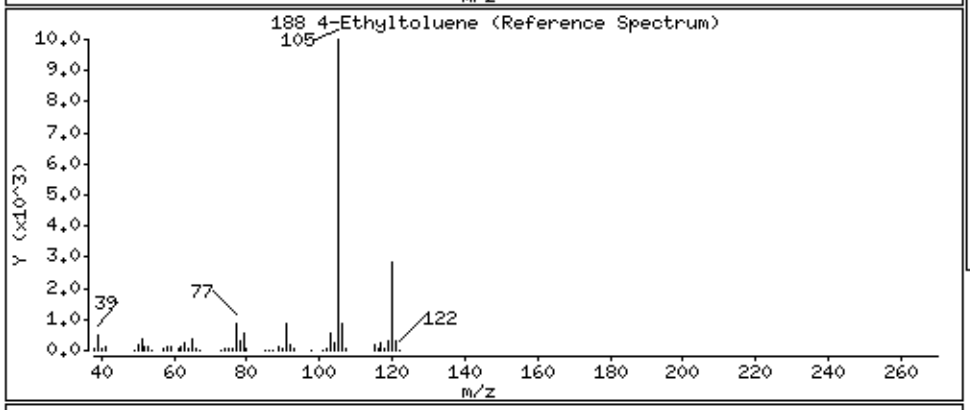
Column diameter: 0.25

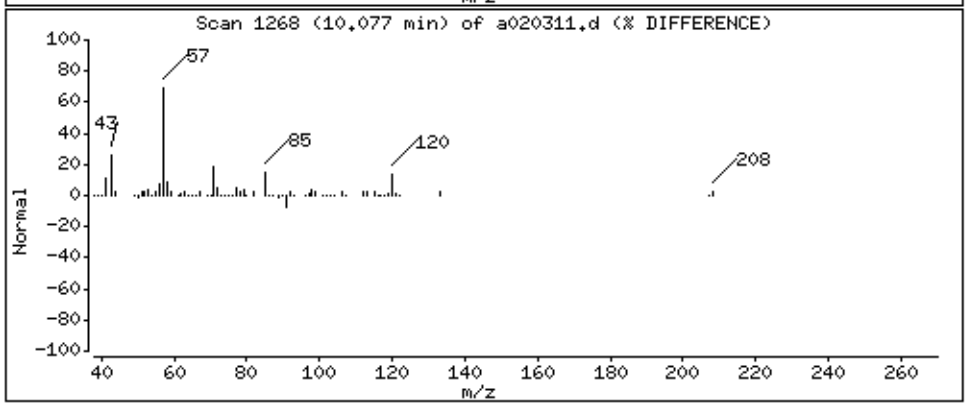
188 4-Ethyltoluene

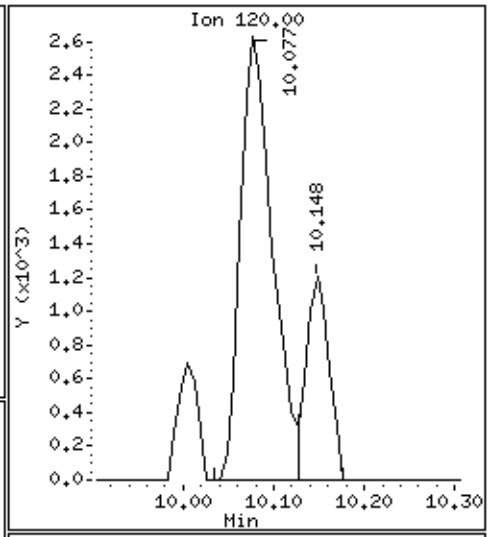
Concentration: 0.6252 PPBV

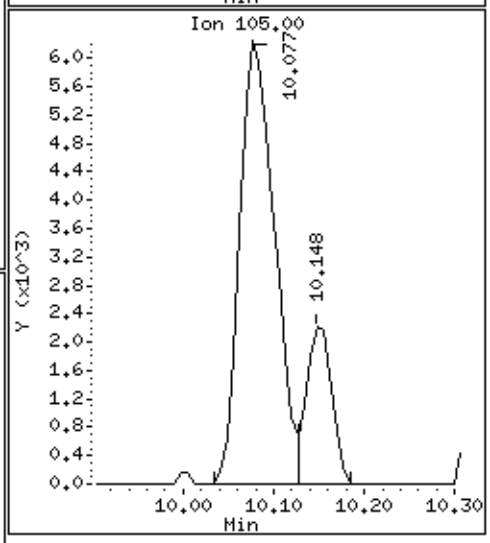












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

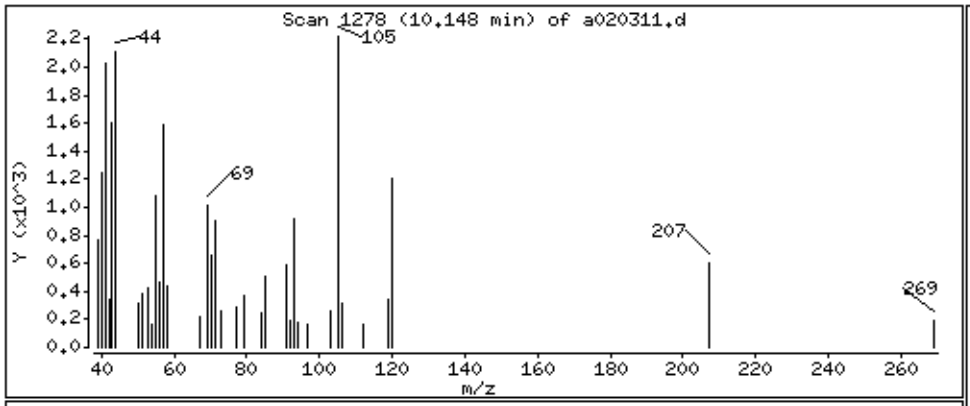
Operator: jg

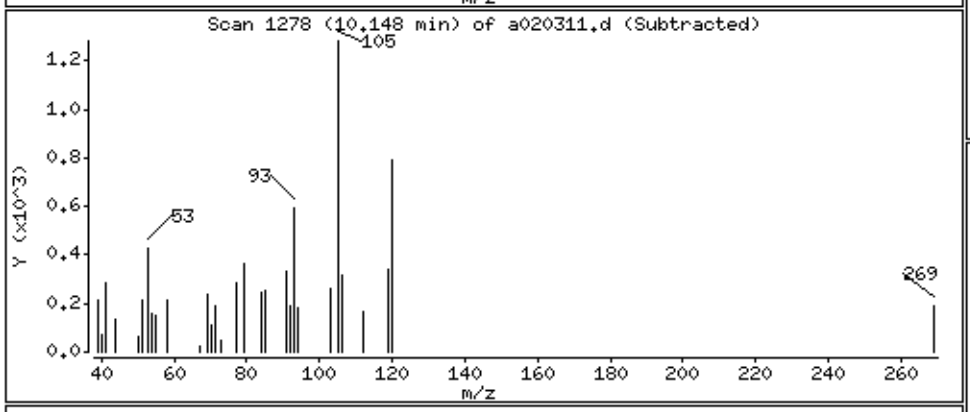
Column phase: RTX-624

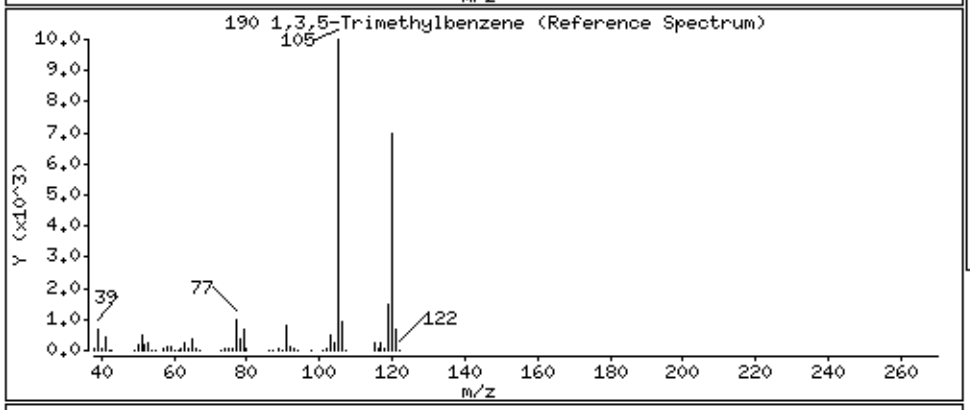
Column diameter: 0.25

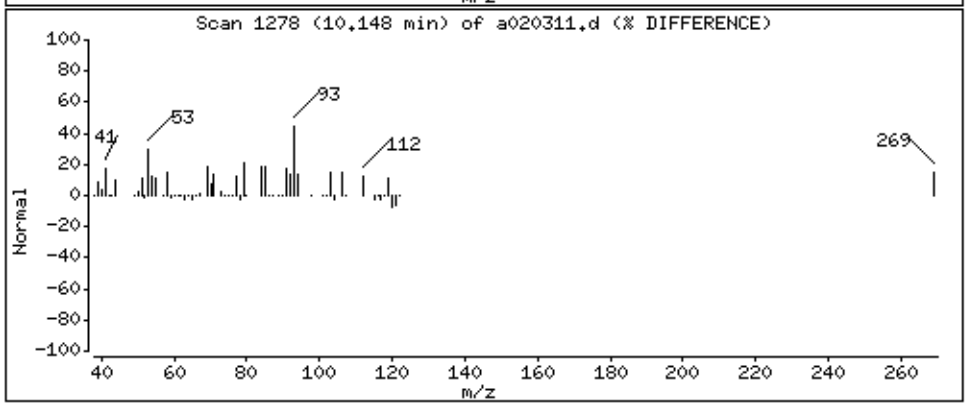
190 1,3,5-Trimethylbenzene

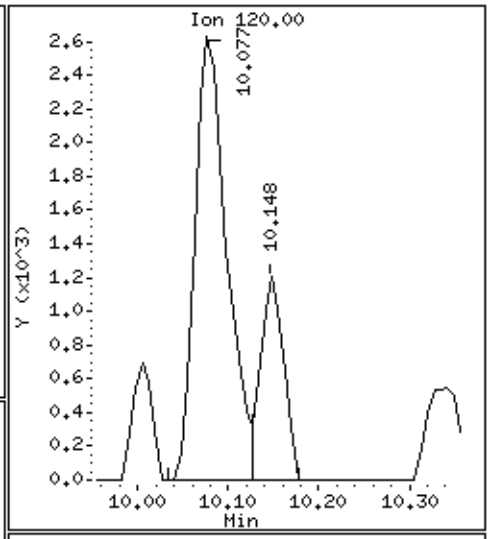
Concentration: 0.1508 PPBV

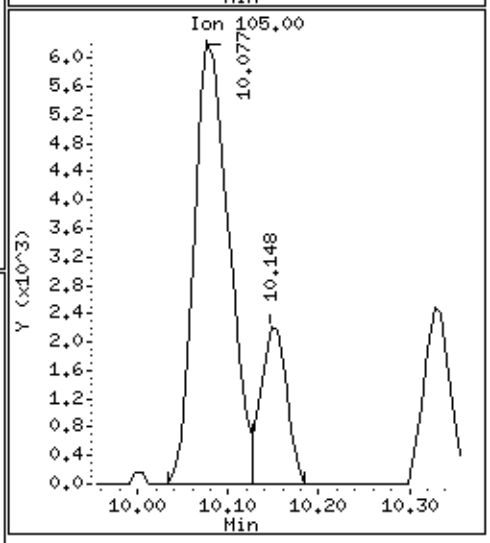












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

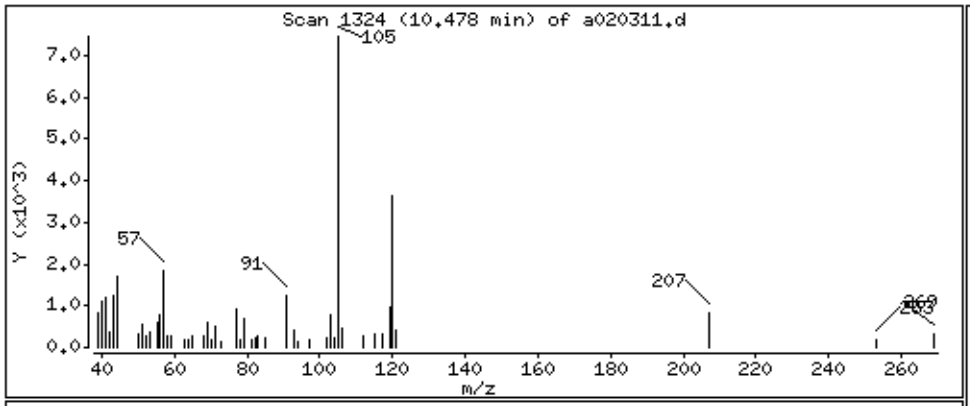
Operator: jg

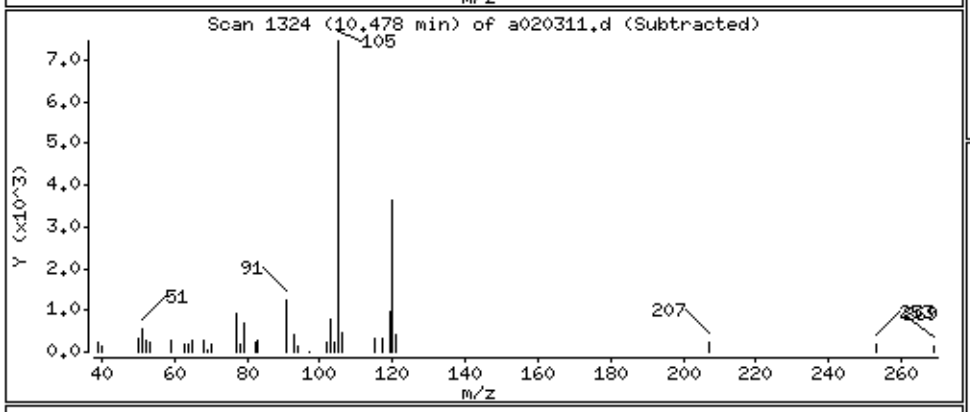
Column phase: RTX-624

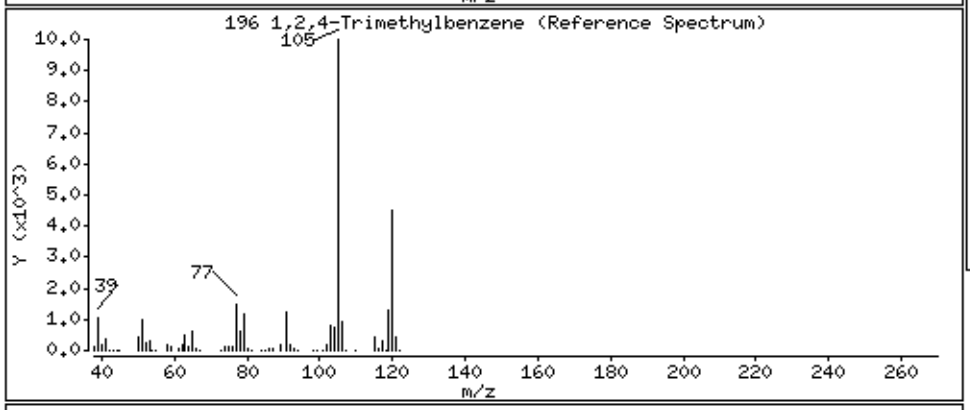
Column diameter: 0.25

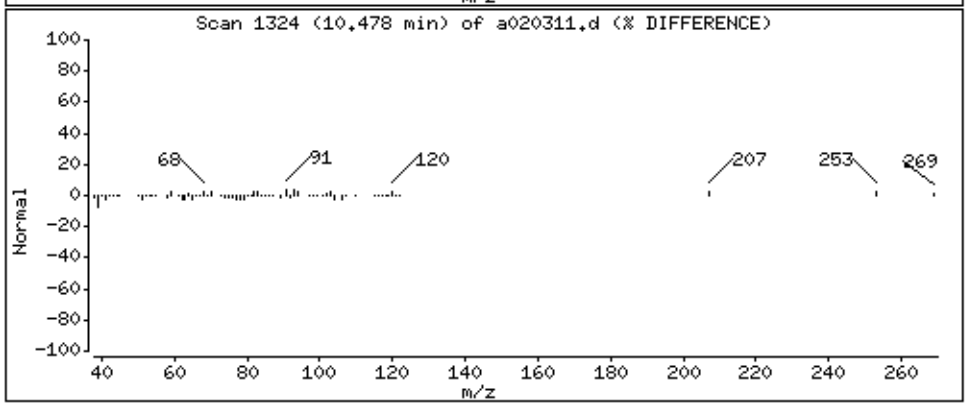
196 1,2,4-Trimethylbenzene

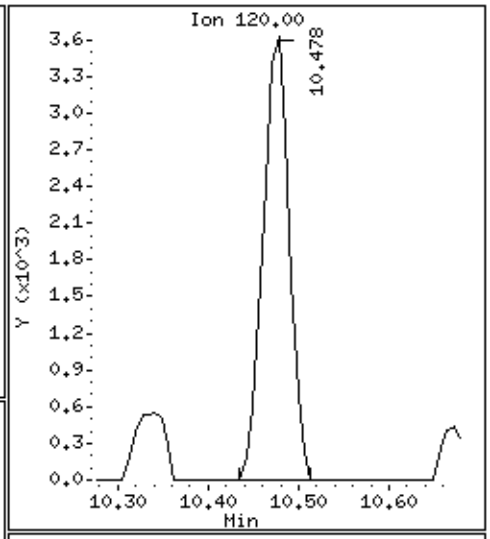
Concentration: 0.5509 PPBV

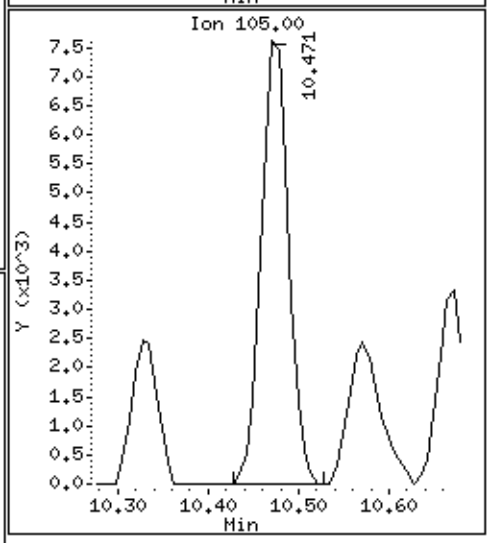












Data File: /chem/msda.i/03feb17.b/a020311.d

Date : 03-FEB-2017 18:37

Client ID:

Instrument: msda.i

Sample Info: 200ml N1929

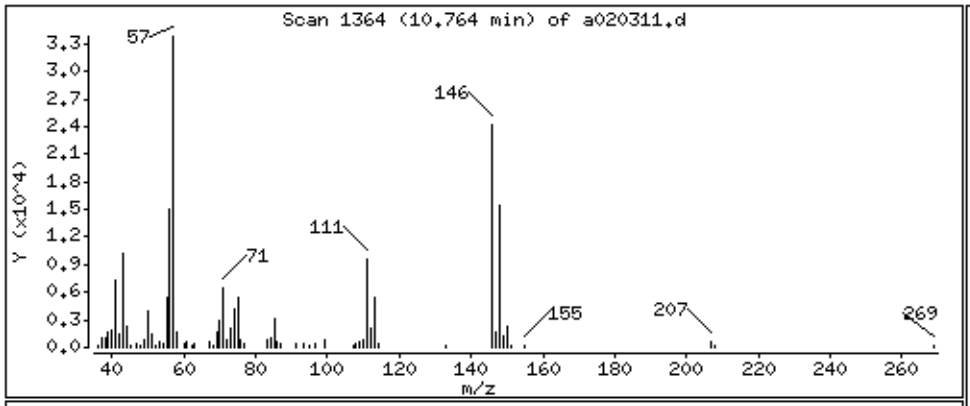
Operator: jg

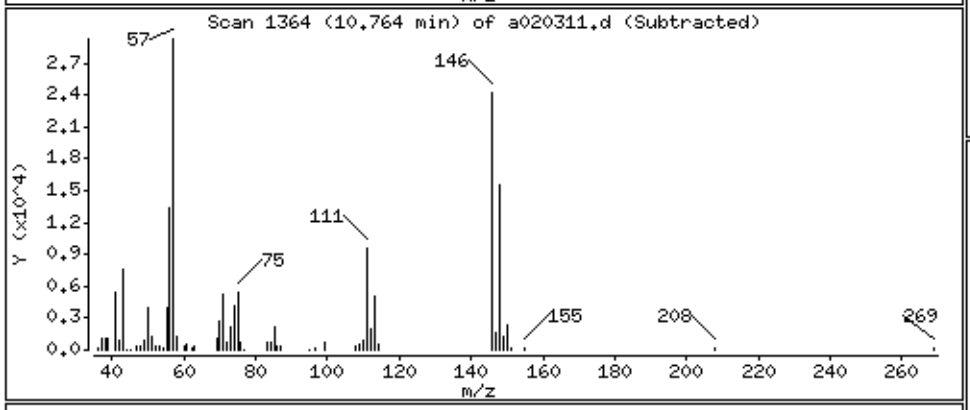
Column phase: RTX-624

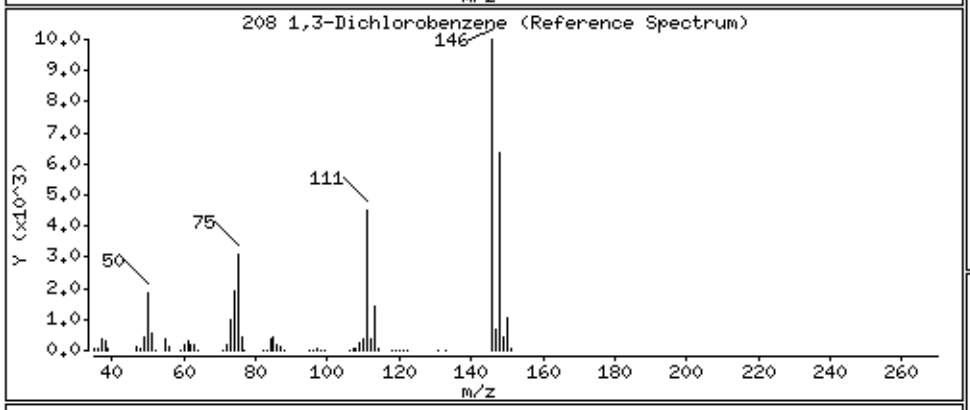
Column diameter: 0.25

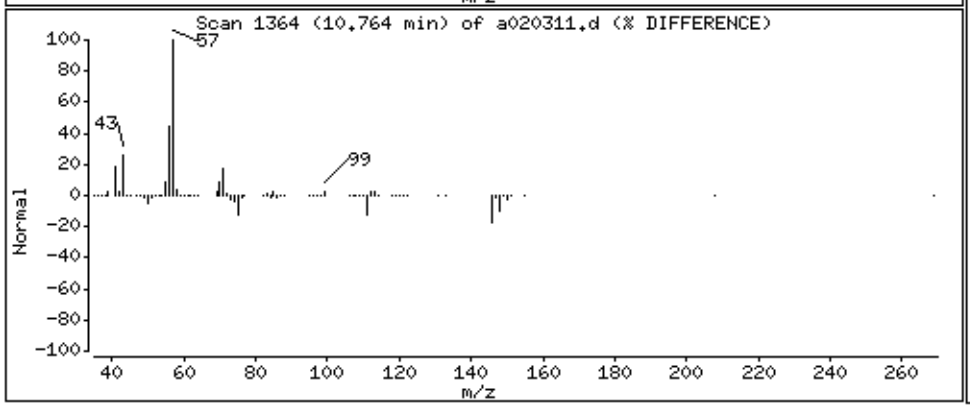
208 1,3-Dichlorobenzene

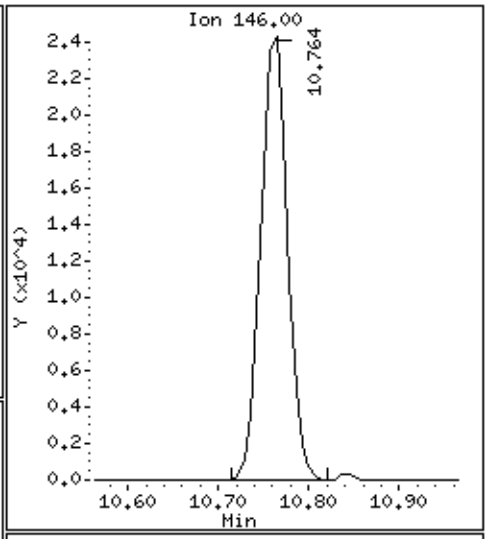
Concentration: 2.498 PPBV

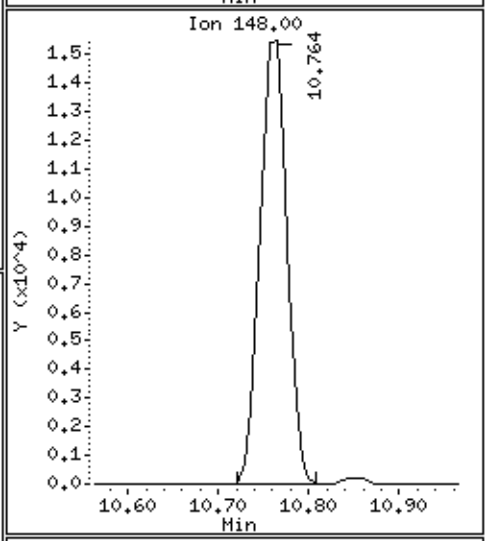


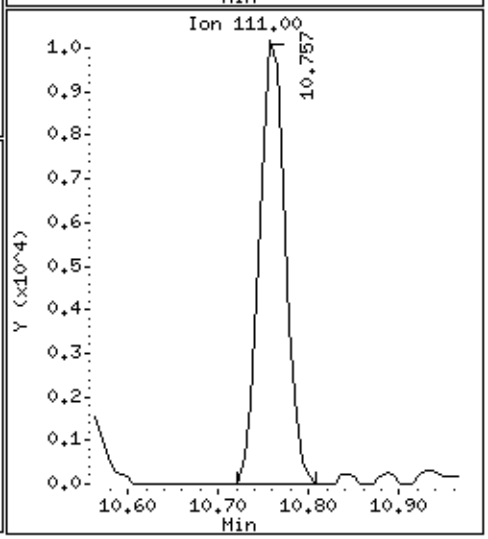












QC Results and Raw Data

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1701428B-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a020305a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/3/17 02:48 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	0.58 J	12	1.4 J
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	0.072 J	1.6	0.23 J
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1701428B-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a020305a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/3/17 02:48 PM**	

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

J = Estimated value.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	103	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/03feb17.b/a020305a.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 03-FEB-2017 14:48
Operator : jg Inst ID: msda.i
Smp Info : 200mL #34185
Misc Info : Humid
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/03feb17.b/a17q0116a.m
Meth Date : 03-Feb-2017 14:51 jscarbro Quant Type: ISTD
Cal Date : 16-JAN-2017 18:50 Cal File: a011609.d
Als bottle: 12 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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.521	5.521 (1.000)	130	216884	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	167305			50.57- 110.57	77.14
5.521	5.521 (1.000)	49	333201			118.90- 178.90	153.63
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	949174	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	135932			0.00- 45.14	14.32
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	895293	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	446429			21.31- 81.31	49.86
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.058	6.058 (1.097)	65	289547	25.2858	25.286	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	148201			29.46- 89.46	51.18
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.620	7.627 (1.189)	98	1020392	25.7198	25.720	80.00- 120.00	100.00
7.620	7.627 (1.189)	70	99395			0.00- 39.82	9.74

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8 (continued)							
7.620	7.627 (1.189)	100	654068			36.19- 96.19	64.10
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.847	9.847 (1.112)	174	557893	25.7869	25.787	80.00- 120.00	100.00
9.847	9.847 (1.112)	95	668297			92.19- 152.19	119.79
9.847	9.847 (1.112)	176	552161			71.02- 131.02	98.97
52 Acetone					CAS #: 67-64-1		
3.479	3.479 (0.630)	58	2859	0.58091	0.5809	80.00- 120.00	100.00(a)
3.487	3.479 (0.632)	43	9638			267.70- 327.70	337.06
116 Benzene					CAS #: 71-43-2		
6.044	6.037 (0.943)	78	2167	0.07161	0.07161	80.00- 120.00	100.00(a)
6.037	6.037 (0.942)	77	620			0.00- 52.91	28.64

QC Flag Legend

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

Report Date: 03-Feb-2017 15:18

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a020305a.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msda.i/03feb17.b/a17q0116a.m
Misc Info: Humid

Calibration Date: 03-FEB-2017
Calibration Time: 11:13
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	192825	115695	269955	216884	12.48
123 1,4-Difluorobenze	821788	493073	1150503	949174	15.50
163 Chlorobenzene-d5	778694	467216	1090172	895293	14.97

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	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: 03-Feb-2017 15:18

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03feb17
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Level: LOW
Operator: jg
Data Type: MS DATA
SampleType: BLANK
SpikeList File: AT12ethanol.spk
Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msda.i/03feb17.b/a17q0116a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.286	101.14	70-130
$ 146 Toluene-d8	25.000	25.720	102.88	70-130
$ 177 4-Bromofluorobenze	25.000	25.787	103.15	70-130

Data File: /chem/msda.i/03feb17.b/a020305a.d

Date : 03-FEB-2017 14:48

Client ID: Lab Blank

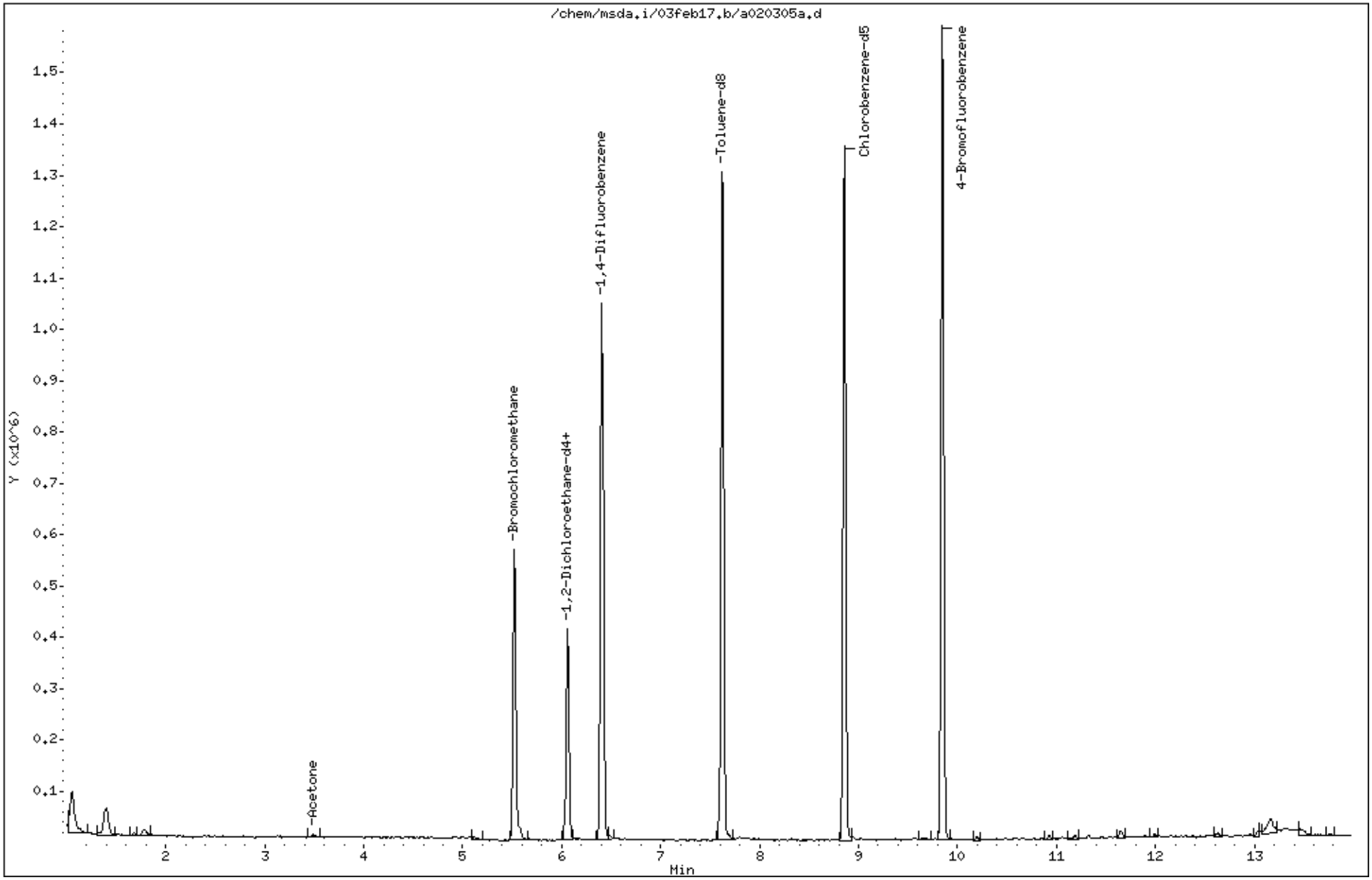
Sample Info: 200mL #34185

Column phase: RTX-624

Instrument: msda.i

Operator: jg

Column diameter: 0.25



Data File: /chem/msda.i/03feb17.b/a020305a.d

Date : 03-FEB-2017 14:48

Client ID: Lab Blank

Instrument: msda.i

Sample Info: 200mL #34185

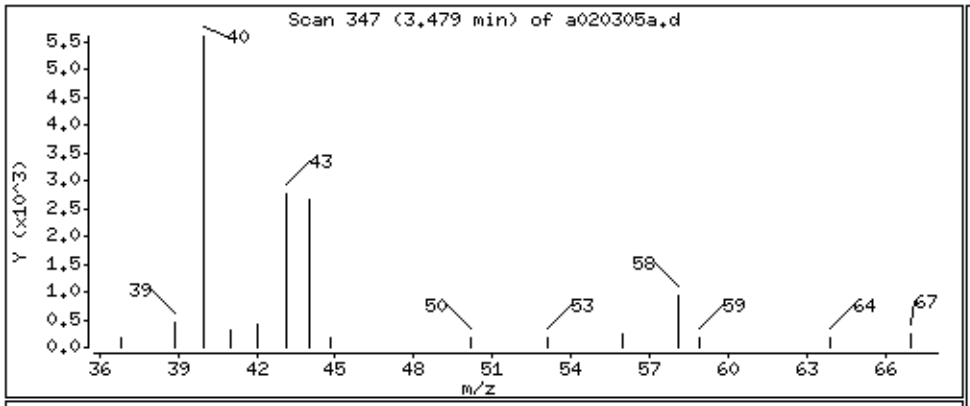
Operator: jg

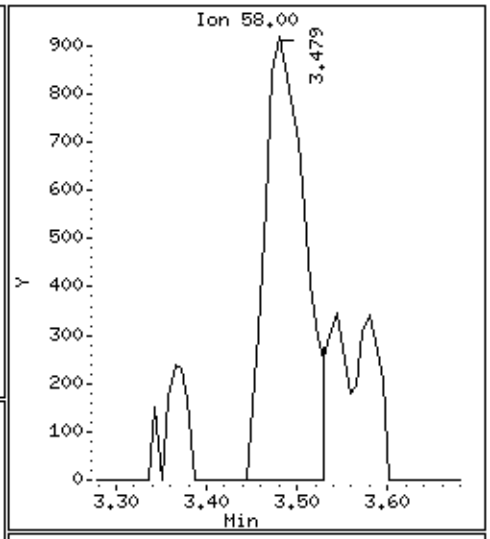
Column phase: RTX-624

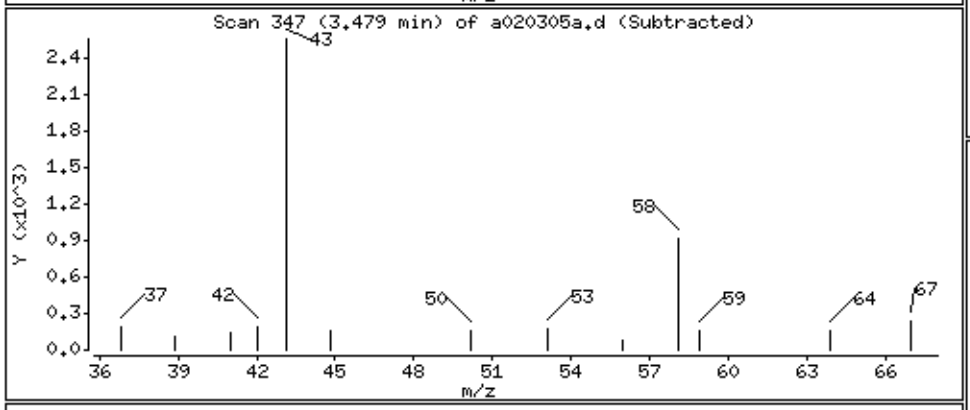
Column diameter: 0.25

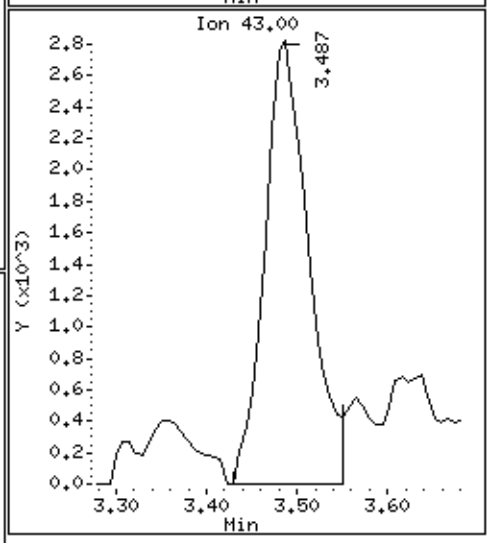
52 Acetone

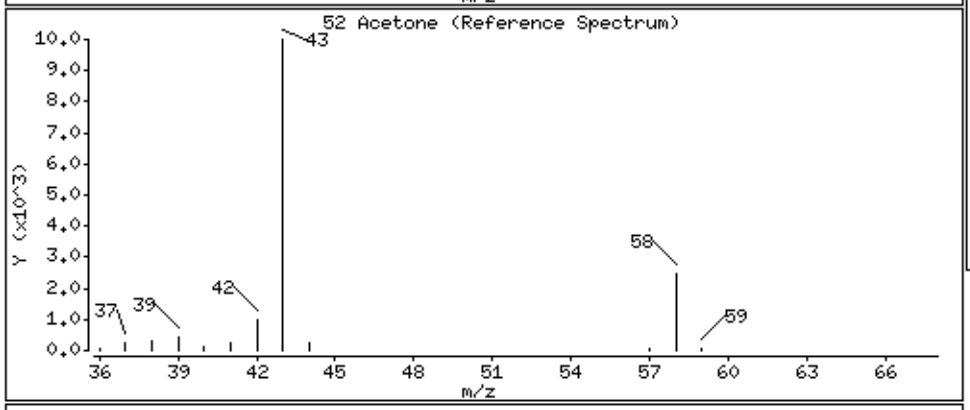
Concentration: 0.5809 PPBV

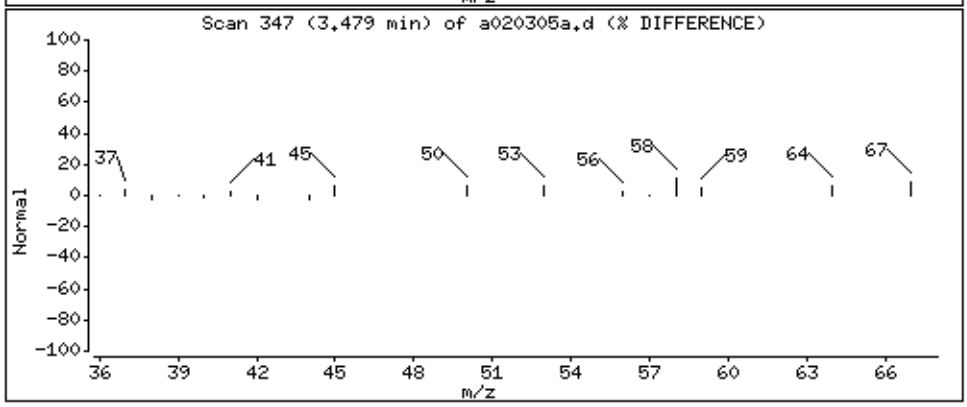












Data File: /chem/msda.i/03feb17.b/a020305a.d

Date : 03-FEB-2017 14:48

Client ID: Lab Blank

Instrument: msda.i

Sample Info: 200mL #34185

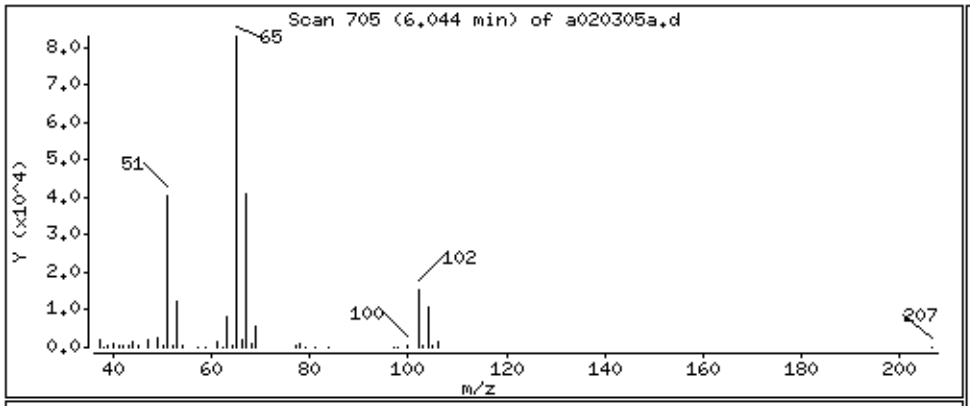
Operator: jg

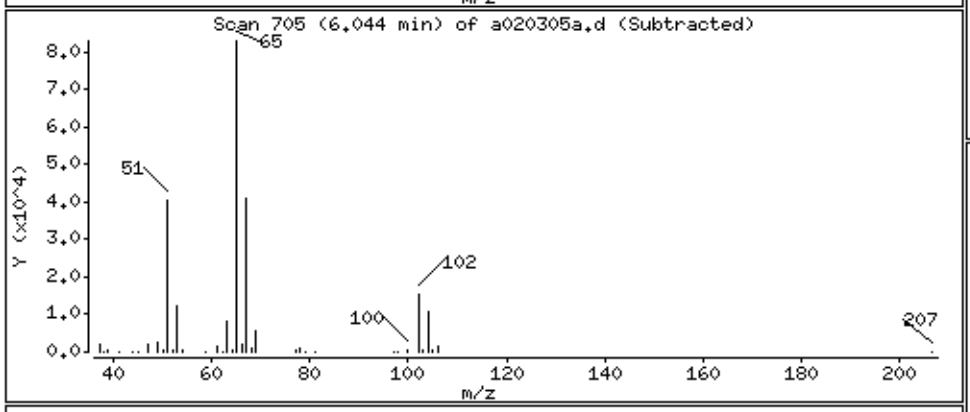
Column phase: RTX-624

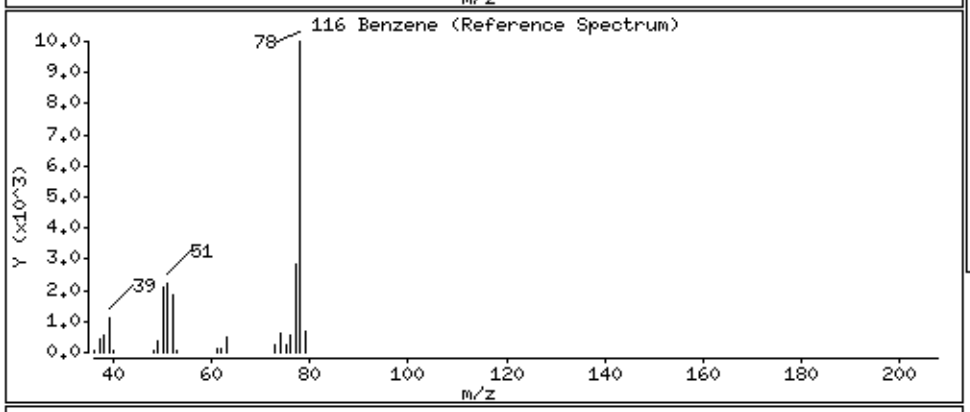
Column diameter: 0.25

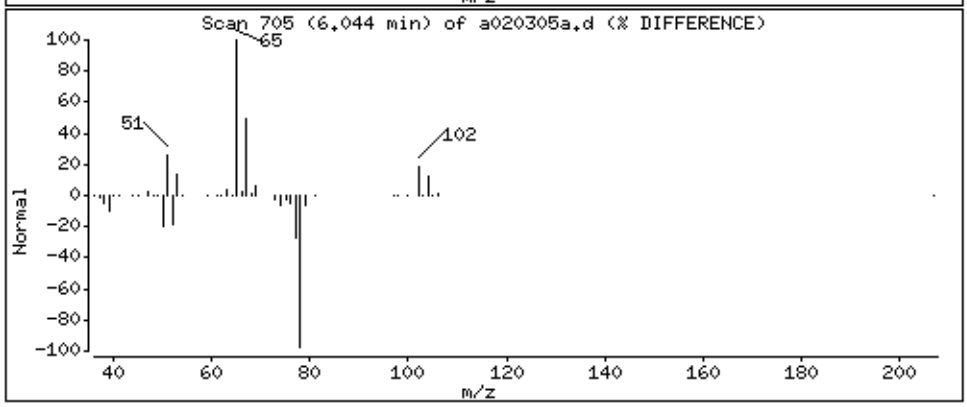
116 Benzene

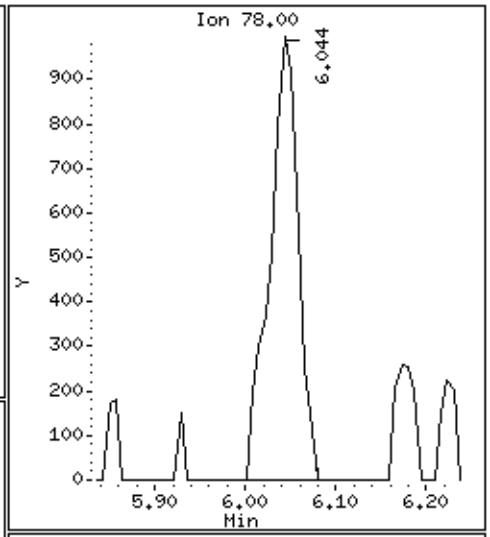
Concentration: 0.07161 PPBV

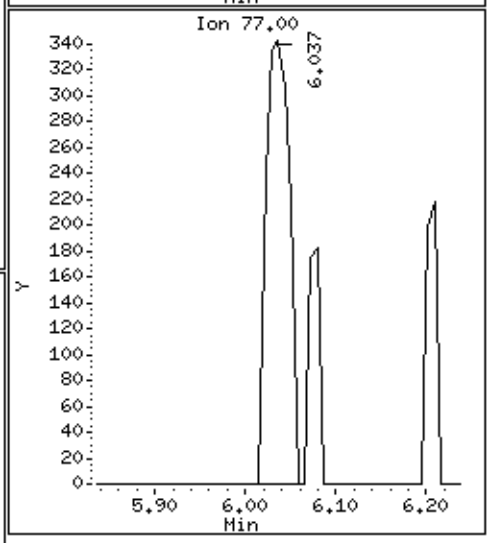












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Client Sample ID: Lab Blank

Lab ID#: 1701428B-20B

EPA METHOD TO-15 GC/MS

File Name:	**14020606a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/6/17 12:00 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	5.0	Not Detected	25	Not Detected
Freon 114	5.0	Not Detected	35	Not Detected
Chloromethane	20	Not Detected	41	Not Detected
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,3-Butadiene	5.0	Not Detected	11	Not Detected
Bromomethane	20	Not Detected	78	Not Detected
Chloroethane	20	Not Detected	53	Not Detected
Freon 11	5.0	Not Detected	28	Not Detected
Ethanol	20	Not Detected	38	Not Detected
Freon 113	5.0	Not Detected	38	Not Detected
1,1-Dichloroethene	5.0	Not Detected	20	Not Detected
Acetone	20	Not Detected	48	Not Detected
2-Propanol	20	Not Detected	49	Not Detected
Carbon Disulfide	20	Not Detected	62	Not Detected
3-Chloropropene	20	Not Detected	63	Not Detected
Methylene Chloride	20	Not Detected	69	Not Detected
Methyl tert-butyl ether	5.0	Not Detected	18	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Hexane	5.0	Not Detected	18	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
2-Butanone (Methyl Ethyl Ketone)	20	Not Detected	59	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrahydrofuran	5.0	Not Detected	15	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Cyclohexane	5.0	Not Detected	17	Not Detected
Carbon Tetrachloride	5.0	Not Detected	31	Not Detected
2,2,4-Trimethylpentane	5.0	Not Detected	23	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Heptane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
1,2-Dichloropropane	5.0	Not Detected	23	Not Detected
1,4-Dioxane	20	Not Detected	72	Not Detected
Bromodichloromethane	5.0	Not Detected	34	Not Detected
cis-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
4-Methyl-2-pentanone	5.0	Not Detected	20	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
trans-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
1,1,2-Trichloroethane	5.0	Not Detected	27	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected
2-Hexanone	20	Not Detected	82	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 1701428B-20B

EPA METHOD TO-15 GC/MS

File Name:	**14020606a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/6/17 12:00 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	5.0	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	5.0	Not Detected	38	Not Detected
Chlorobenzene	5.0	Not Detected	23	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected
Styrene	5.0	Not Detected	21	Not Detected
Bromoform	5.0	Not Detected	52	Not Detected
Cumene	5.0	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane	5.0	Not Detected	34	Not Detected
Propylbenzene	5.0	Not Detected	24	Not Detected
4-Ethyltoluene	5.0	Not Detected	24	Not Detected
1,3,5-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,2,4-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,3-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,4-Dichlorobenzene	5.0	Not Detected	30	Not Detected
alpha-Chlorotoluene	5.0	Not Detected	26	Not Detected
1,2-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,2,4-Trichlorobenzene	20	Not Detected	150	Not Detected
Hexachlorobutadiene	20	Not Detected	210	Not Detected
Naphthalene	20	Not Detected	100	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	100	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/06feb17.b/14020606a.d
Lab Smp Id: Lab blank Client Smp ID: Lab blank
Inj Date : 06-FEB-2017 12:00
Operator : gd Inst ID: msd14.i
Smp Info : 50mL #35248
Misc Info : Humid
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/06feb17.b/14651201b.m
Meth Date : 06-Feb-2017 10:03 gdelacru Quant Type: ISTD
Cal Date : 19-DEC-2016 11:43 Cal File: 14121908.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
* 98 Bromochloromethane					CAS #: 74-97-5		
5.312	5.312 (1.000)	130	91444	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	70288			46.96- 106.96	76.86
5.312	5.312 (1.000)	49	112596			97.69- 157.69	123.13
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.446	6.446 (1.000)	114	374692	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	54317			0.00- 45.92	14.50
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
10.336	10.335 (1.000)	117	342922	400.000		80.00- 120.00	100.00
10.336	10.335 (1.000)	82	161491			19.32- 79.32	47.09
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.984	5.984 (1.126)	65	105417	376.514	376.51	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	52205			24.72- 84.72	49.52
$ 146 Toluene-d8					CAS #: 2037-26-5		
8.503	8.503 (1.319)	98	360825	389.962	389.96	80.00- 120.00	100.00
8.503	8.489 (1.319)	70	34864			0.00- 40.20	9.66

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8 (continued)								
8.489	8.489	(1.317)	100	243884			38.62- 98.62	67.59
$ 177 4-Bromofluorobenzene						CAS #: 460-00-4		
11.343	11.343	(1.097)	174	213479	401.147	401.15	80.00- 120.00	100.00
11.343	11.343	(1.097)	95	246146			89.78- 149.78	115.30
11.343	11.343	(1.097)	176	208075			66.10- 126.10	97.47

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14020606a.d
Lab Smp Id: Lab blank
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msd14.i/06feb17.b/14651201b.m
Misc Info: Humid

Calibration Date: 06-FEB-2017
Calibration Time: 09:15
Client Smp ID: Lab blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	81368	48821	113915	91444	12.38
123 1,4-Difluorobenze	344671	206803	482539	374692	8.71
163 Chlorobenzene-d5	321726	193036	450416	342922	6.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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: 06-Feb-2017 12:36

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 06feb17
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: Lab blank
Client Smp ID: Lab blank
Level: LOW
Operator: gd
Data Type: MS DATA
SampleType: BLANK
SpikeList File: AT12ethanol.spk
Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msd14.i/06feb17.b/14651201b.m
Misc Info: Humid

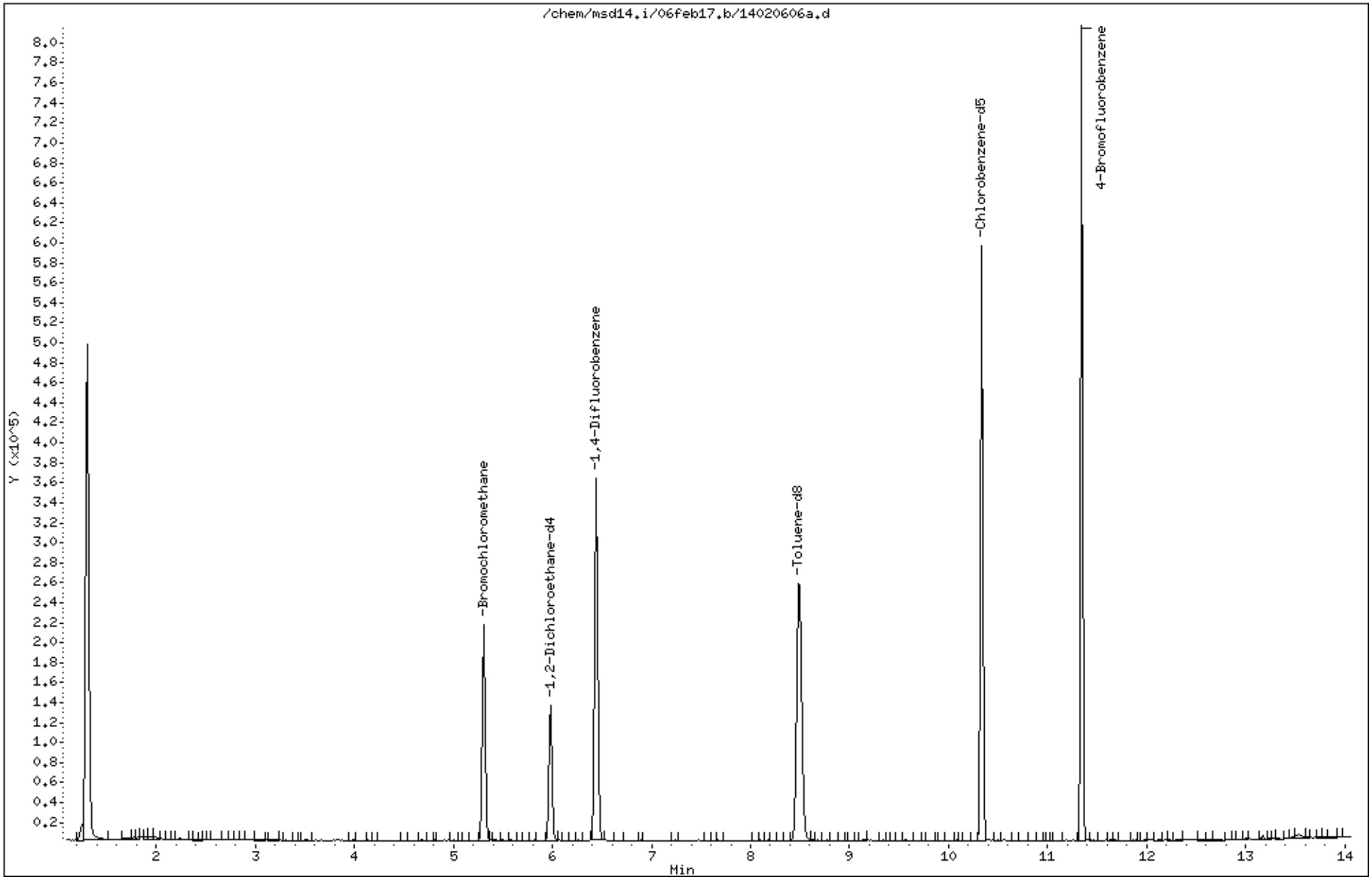
SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	400.00	376.51	94.13	70-130
$ 146 Toluene-d8	400.00	389.96	97.49	70-130
$ 177 4-Bromofluorobenze	400.00	401.15	100.29	70-130

Data File: /chem/msd14.i/06feb17.b/14020606a.d
Date : 06-FEB-2017 12:00
Client ID: Lab blank
Sample Info: 50mL #35248

Column phase: RTX-624

Instrument: msd14.i

Operator: gd
Column diameter: 0.18



LEVEL-IV VALIDATABLE

EPA METHOD TO-15 GC/MS

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1701428B

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	B8SS-2-012417	96		97		102				0
02	B8SS-2D-012417	95		99		100				0
03	B18SS-1-012617	98		100		106				0
04	B18SS-1Dup-012617	100		102		102				0
05	Lab Blank	101		103		103				0
06	Lab Blank	94		97		100				0
07	CCV	100		102		103				0
08	CCV	95		98		101				0
09	LCS	98		102		104				0
10	LCSD	98		100		104				0
11	LCS	94		98		103				0
12	LCSD	92		98		103				0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

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

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

EPA Method TO-15 GC/MS

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	AIR TOXICS, LTD	SDG No:	1701428B
Lab File ID:	a020202.d	Date Analyzed:	02/02/2017
Instrument ID:	msda.i	Time Analyzed:	10:10 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	849867		8.86		909926		6.41		213765		5.52	
	UPPER LIMIT	1189814		09.19		1273896		06.74		299271		05.85	
	LOWER LIMIT	509920		08.53		545956		06.08		128259		05.19	
	CLIENT SAMPLE NO												
01	B18SS-1-012617	807983		8.86		836276		6.42		196542		5.53	
02	CCV	849867		8.86		909926		6.41		213765		5.52	
03	LCS	666319		8.87		699096		6.42		166679		5.53	
04	LCSD	807799		8.86		869177		6.41		200581		5.52	
05													
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

LEVEL-IV VALIDATABLE

EPA Method TO-15 GC/MS

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	AIR TOXICS, LTD	SDG No:	1701428B
Lab File ID:	a020302.d	Date Analyzed:	02/03/2017
Instrument ID:	msda.i	Time Analyzed:	11:13 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	778694		8.86		821788		6.41		192825		5.52	
	UPPER LIMIT	1090172		09.19		1150503		06.74		269955		05.85	
	LOWER LIMIT	467216		08.53		493073		06.08		115695		05.19	
	CLIENT SAMPLE NO												
01	B18SS-1Dup-012617	985574		8.86		1067456		6.41		245682		5.52	
02	Lab Blank	895293		8.86		949174		6.41		216884		5.52	
03													
04													
05													
06													
07													
08													
09													
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11													
12													
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14													
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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

LEVEL-IV VALIDATABLE

EPA Method TO-15 GC/MS

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	AIR TOXICS, LTD	SDG No:	1701428B
Lab File ID:	14020602.d	Date Analyzed:	02/06/2017
Instrument ID:	msd14.i	Time Analyzed:	09:15 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	321726		10.34		344671		6.45		81368		5.31	
	UPPER LIMIT	450416		10.67		482539		06.78		113915		05.64	
	LOWER LIMIT	193036		10.01		206803		06.12		48821		04.98	
	CLIENT SAMPLE NO												
01	B8SS-2-012417	330352		10.34		362958		6.45		87894		5.31	
02	B8SS-2D-012417	336827		10.34		366286		6.45		88698		5.31	
03	Lab Blank	342922		10.34		374692		6.45		91444		5.31	
04	CCV	321726		10.34		344671		6.45		81368		5.31	
05	LCS	326355		10.34		357525		6.45		84875		5.31	
06	LCSD	325529		10.34		358100		6.45		85261		5.31	
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: a020204.d & a020203.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 2/2/17 & 2/2/17

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
71-55-6	1,1,1-Trichloroethane	91		92		1.1	
79-34-5	1,1,2,2-Tetrachloroethane	88		89		1.1	
79-00-5	1,1,2-Trichloroethane	86		85		1.2	
75-34-3	1,1-Dichloroethane	92		93		1.1	
75-35-4	1,1-Dichloroethene	95		95		0	
120-82-1	1,2,4-Trichlorobenzene	88		90		2.2	
95-63-6	1,2,4-Trimethylbenzene	87		89		2.3	
106-93-4	1,2-Dibromoethane (EDB)	87		87		0	
95-50-1	1,2-Dichlorobenzene	89		88		1.1	
107-06-2	1,2-Dichloroethane	102		100		2.0	
78-87-5	1,2-Dichloropropane	96		91		5.3	
108-67-8	1,3,5-Trimethylbenzene	87		86		1.2	
106-99-0	1,3-Butadiene	93		94		1.1	
541-73-1	1,3-Dichlorobenzene	90		90		0	
106-46-7	1,4-Dichlorobenzene	89		89		0	
123-91-1	1,4-Dioxane	100		96		4.1	
540-84-1	2,2,4-Trimethylpentane	95		98		3.1	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	88		95		7.6	
591-78-6	2-Hexanone	94		94		0	
67-63-0	2-Propanol	98		100		2.0	
107-05-1	3-Chloropropene	92		93		1.1	
622-96-8	4-Ethyltoluene	87		92		5.6	
108-10-1	4-Methyl-2-pentanone	98		98		0	
67-64-1	Acetone	96		94		2.1	
100-44-7	alpha-Chlorotoluene	91		93		2.2	
71-43-2	Benzene	91		89		2.2	
75-27-4	Bromodichloromethane	99		97		2.0	
75-25-2	Bromoform	93		93		0	
74-83-9	Bromomethane	93		94		1.1	
75-15-0	Carbon Disulfide	94		94		0	
56-23-5	Carbon Tetrachloride	92		94		2.2	
108-90-7	Chlorobenzene	87		89		2.3	
75-00-3	Chloroethane	94		96		2.1	
67-66-3	Chloroform	94		95		1.0	
74-87-3	Chloromethane	104		106		1.9	
156-59-2	cis-1,2-Dichloroethene	89		87		2.3	
10061-01-5	cis-1,3-Dichloropropene	106		104		1.9	
98-82-8	Cumene	87		87		0	
110-82-7	Cyclohexane	93		92		1.1	
124-48-1	Dibromochloromethane	90		90		0	
64-17-5	Ethanol	80		86		7.2	
100-41-4	Ethyl Benzene	89		89		0	
75-69-4	Freon 11	96		96		0	
76-13-1	Freon 113	91		93		2.2	
76-14-2	Freon 114	94		95		1.0	

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

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: a020204.d & a020203.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 2/2/17 & 2/2/17

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
75-71-8	Freon 12	98		99		1.0	
142-82-5	Heptane	96		93		3.2	
87-68-3	Hexachlorobutadiene	88		91		3.4	
110-54-3	Hexane	95		96		1.0	
108-38-3	m,p-Xylene	88		88		0	
1634-04-4	Methyl tert-butyl ether	90		91		1.1	
75-09-2	Methylene Chloride	96		100		4.1	
91-20-3	Naphthalene	91		94		3.2	
95-47-6	o-Xylene	89		89		0	
103-65-1	Propylbenzene	88		89		1.1	
100-42-5	Styrene	92		92		0	
127-18-4	Tetrachloroethene	87		87		0	
109-99-9	Tetrahydrofuran	97		101		4.0	
108-88-3	Toluene	95		94		1.0	
156-60-5	trans-1,2-Dichloroethene	99		103		4.0	
10061-02-6	trans-1,3-Dichloropropene	89		89		0	
79-01-6	Trichloroethene	95		92		3.2	
75-01-4	Vinyl Chloride	95		98		3.1	

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: 14020604.d & 14020603.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 2/6/17 & 2/6/17

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
71-55-6	1,1,1-Trichloroethane	116		113		2.6	
79-34-5	1,1,2,2-Tetrachloroethane	109		108		0.92	
79-00-5	1,1,2-Trichloroethane	107		103		3.8	
75-34-3	1,1-Dichloroethane	118		116		1.7	
75-35-4	1,1-Dichloroethene	122		118		3.3	
120-82-1	1,2,4-Trichlorobenzene	101		101		0	
95-63-6	1,2,4-Trimethylbenzene	108		107		0.93	
106-93-4	1,2-Dibromoethane (EDB)	110		110		0	
95-50-1	1,2-Dichlorobenzene	115		110		4.4	
107-06-2	1,2-Dichloroethane	102		102		0	
78-87-5	1,2-Dichloropropane	108		107		0.93	
108-67-8	1,3,5-Trimethylbenzene	130		128		1.6	
106-99-0	1,3-Butadiene	82		79		3.7	
541-73-1	1,3-Dichlorobenzene	111		106		4.6	
106-46-7	1,4-Dichlorobenzene	113		110		2.7	
123-91-1	1,4-Dioxane	107		104		2.8	
540-84-1	2,2,4-Trimethylpentane	117		114		2.6	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	113		112		0.89	
591-78-6	2-Hexanone	102		100		2.0	
67-63-0	2-Propanol	109		106		2.8	
107-05-1	3-Chloropropene	111		114		2.7	
622-96-8	4-Ethyltoluene	104		103		0.97	
108-10-1	4-Methyl-2-pentanone	97		93		4.2	
67-64-1	Acetone	113		116		2.6	
100-44-7	alpha-Chlorotoluene	103		101		2.0	
71-43-2	Benzene	118		115		2.6	
75-27-4	Bromodichloromethane	107		107		0	
75-25-2	Bromoform	114		112		1.8	
74-83-9	Bromomethane	86		96		11	Y
75-15-0	Carbon Disulfide	113		112		0.89	
56-23-5	Carbon Tetrachloride	122		118		3.3	
108-90-7	Chlorobenzene	112		108		3.6	
75-00-3	Chloroethane	120		114		5.1	
67-66-3	Chloroform	116		112		3.5	
74-87-3	Chloromethane	118		112		5.2	
156-59-2	cis-1,2-Dichloroethene	111		108		2.7	
10061-01-5	cis-1,3-Dichloropropene	108		104		3.8	
98-82-8	Cumene	108		106		1.9	
110-82-7	Cyclohexane	120		115		4.2	
124-48-1	Dibromochloromethane	113		111		1.8	
64-17-5	Ethanol	87		82		5.9	Y
100-41-4	Ethyl Benzene	109		107		1.8	
75-69-4	Freon 11	130		126		3.1	
76-13-1	Freon 113	131		128		2.3	
76-14-2	Freon 114	115		112		2.6	

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

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 14020604.d & 14020603.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 2/6/17 & 2/6/17

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
75-71-8	Freon 12	110		108		1.8	
142-82-5	Heptane	97		98		1.0	
87-68-3	Hexachlorobutadiene	99		94		5.2	Y
110-54-3	Hexane	123		119		3.3	
108-38-3	m,p-Xylene	110		111		0.90	
1634-04-4	Methyl tert-butyl ether	115		113		1.8	
75-09-2	Methylene Chloride	120		118		1.7	
91-20-3	Naphthalene	136		152		11	
95-47-6	o-Xylene	111		108		2.7	
103-65-1	Propylbenzene	110		107		2.8	
100-42-5	Styrene	110		108		1.8	
127-18-4	Tetrachloroethene	116		117		0.86	
109-99-9	Tetrahydrofuran	106		104		1.9	
108-88-3	Toluene	108		106		1.9	
156-60-5	trans-1,2-Dichloroethene	117		110		6.2	
10061-02-6	trans-1,3-Dichloropropene	104		103		0.97	
79-01-6	Trichloroethene	114		112		1.8	
75-01-4	Vinyl Chloride	100		98		2.0	

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 : 01-DEC-2016 12:05
End Cal Date : 19-DEC-2016 12:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd14.i/19dec16.b/14651201b.m
Cal Date : 20-Dec-2016 07:46 jscarbro
Curve Type : Average

Calibration File Names:
Level 2: /chem/msd14.i/01dec16.b/14120102.d
Level 3: /chem/msd14.i/19dec16.b/14121907.d
Level 4: /chem/msd14.i/01dec16.b/14120104.d
Level 5: /chem/msd14.i/19dec16.b/14121908.d
Level 6: /chem/msd14.i/19dec16.b/14121909.d
Level 7: /chem/msd14.i/01dec16.b/14120107.d
Level 8: /chem/msd14.i/01dec16.b/14120115.d
Level 9: /chem/msd14.i/01dec16.b/14120116.d
Level 10: /chem/msd14.i/01dec16.b/14120118.d

Compound	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	1000.000 Level 7	___ RRF	% RSD
	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
6 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
7 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-DEC-2016 12:05
End Cal Date : 19-DEC-2016 12:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd14.i/19dec16.b/14651201b.m
Cal Date : 20-Dec-2016 07:46 jscarbro
Curve Type : Average

Compound	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	1000.000 Level 7	___ RRF	% RSD
	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
8 Propane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
9 Propylene	+++++	1.11985	1.02997	1.15934	1.13578	1.09811		
	+++++	+++++	+++++				1.10861	4.449
10 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
11 Freon 12	3.48148	2.82662	2.87407	3.33243	3.27432	3.34412		
	+++++	+++++	+++++				3.18884	8.507
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
15 Freon 114	2.84078	2.35600	2.38418	2.94842	2.76820	2.81100		
	+++++	+++++	+++++				2.68476	9.352
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
17 Chloromethane	+++++	1.23357	1.14681	1.36239	1.20690	1.17526		
	+++++	+++++	+++++				1.22499	6.813

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-DEC-2016 12:05
End Cal Date : 19-DEC-2016 12:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd14.i/19dec16.b/14651201b.m
Cal Date : 20-Dec-2016 07:46 jscarbro
Curve Type : Average

Compound	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	1000.000 Level 7	___ RRF	% RSD
	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
19 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
20 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
21 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
22 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
23 Butane	+++++	0.38936	0.29140	0.29614	0.26282	0.26838		
	0.23919	0.30443	0.29051				0.29278	15.190
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
25 Vinyl Chloride	1.42755	1.15139	1.09547	1.25158	1.19779	1.21773		
	+++++	+++++	+++++				1.22358	9.298
26 1,3-Butadiene	1.92985	1.22023	1.02575	1.09982	1.03548	1.05371		
	+++++	+++++	+++++				1.22747	28.628
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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End Cal Date : 19-DEC-2016 12:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd14.i/19dec16.b/14651201b.m
Cal Date : 20-Dec-2016 07:46 jscarbro
Curve Type : Average

Compound	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	1000.000 Level 7	___ RRF	% RSD
	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
29 Bromomethane	+++++	0.64195	0.59124	0.82017	0.79917	0.92787		
	+++++	+++++	+++++				0.75608	18.192
30 Chloroethane	+++++	0.56948	0.45880	0.66096	0.64102	0.64457		
	+++++	+++++	+++++				0.59497	14.095
31 Isopentane	+++++	1.56774	1.42941	1.76319	1.67510	1.69503		
	0.69554	0.79314	0.72451				1.29296	36.427
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
34 Pentane	+++++	0.50250	+++++	0.72309	0.59398	+++++		
	+++++	+++++	+++++				0.60652	18.272
35 Freon 11	3.38841	3.04602	3.08485	3.54579	3.51945	3.54276		
	1.85308	2.11602	1.85550				2.88354	25.446
36 1-Pentene	+++++	0.90873	+++++	1.15341	1.08703	+++++		
	+++++	+++++	+++++				1.04973	12.054
37 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
40 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
41 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
42 Ethanol	+++++	0.53309	0.54207	0.69320	0.62216	0.58783		
	0.44557	1.05725	0.50644				0.62345	30.580 <-
43 1,2-Dichloro-1-fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
44 Ethyl Ether	+++++	0.42260	+++++	0.56862	0.52257	+++++		
	+++++	+++++	+++++				0.50459	14.794
45 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
46 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
47 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
48 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
49 Freon 113	2.68031	2.08991	2.22294	2.70094	2.60230	2.67898		
	1.46273	1.65237	1.56107				2.18350	23.658
50 1,1-Dichloroethene	2.21261	1.92586	1.88682	2.26257	2.21010	2.23909		
	1.18460	1.37051	1.29747				1.84329	24.013
51 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
52 Acetone	+++++	0.61148	0.62848	0.68513	0.71673	0.69299		
	0.52527	0.63392	0.52815				0.62777	11.454
53 Iodomethane	+++++	1.07963	+++++	2.39217	2.30862	+++++		
	+++++	+++++	+++++				1.92681	38.139 <-
54 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
55 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
56 Carbon Disulfide	+++++	2.97097	2.94059	3.54053	3.41442	3.49530		
	+++++	+++++	+++++				3.27236	8.945
57 2-Propanol	+++++	2.21515	2.17660	2.69938	2.64913	2.67344		
	2.12531	+++++	+++++				2.42317	11.418

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	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
58 3-Chloropropene	+++++	0.43287	0.42451	0.59832	0.53139	0.56367		
	+++++	+++++	+++++				0.51015	15.308
59 Cyclopentene	+++++	1.78578	+++++	2.24485	2.12938	+++++		
	+++++	+++++	+++++				2.05334	11.630
60 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
61 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
62 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
63 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
64 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
65 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
66 Methylene Chloride	+++++	1.61261	1.47370	1.74982	1.68016	1.68231		
	1.03728	1.20539	1.14870				1.44875	19.256
67 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
68 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
69 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
70 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
71 tert-Butyl alcohol	+++++	2.54158	2.56435	3.24397	3.08793	+++++		
	+++++	+++++	+++++				2.85946	12.580
72 Methyl tert-butyl ether	3.54948	2.89652	2.97253	3.69612	3.63852	3.74172		
	2.56220	3.00872	2.79052				3.20626	13.985
73 trans-1,2-Dichloroethene	1.65006	1.11758	1.11915	1.34818	1.30897	1.31891		
	+++++	+++++	+++++				1.31047	14.900
74 Acrylonitrile	+++++	1.10234	+++++	1.34142	1.23011	+++++		
	+++++	+++++	+++++				1.22462	9.769
75 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
76 1-Hexene	+++++	0.83622	+++++	1.03861	1.15330	+++++		
	+++++	+++++	+++++				1.00937	15.906
77 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
78 Hexane	2.96785	2.08809	2.09567	2.68568	2.44865	2.47584		
	1.33369	1.53893	1.42383				2.11758	27.514
79 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
80 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
81 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
82 1,1-Dichloroethane	2.53356	2.08491	2.12339	2.48439	2.44503	2.49679		
	1.60202	1.84692	1.75606				2.15256	16.576
83 Isopropyl ether	+++++	4.71064	4.65695	5.87966	5.48916	+++++		
	+++++	+++++	+++++				5.18410	11.568
84 1-Propanol	+++++	0.20329	+++++	0.25709	0.23408	+++++		
	+++++	+++++	+++++				0.23149	11.661
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
86 Vinyl Acetate	+++++	0.29535	0.29321	0.37488	0.36512	0.38651		
	+++++	+++++	+++++				0.34301	13.157
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
88 Ethyl-tert-butyl ether	+++++	3.80411	3.85222	5.03139	4.84508	+++++		
	+++++	+++++	+++++				4.38320	14.731
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
90 2,2-Dichloropropane	+++++	1.50857	+++++	2.11094	2.01654	+++++		
	+++++	+++++	+++++				1.87868	17.245
91 cis-1,2-Dichloroethene	2.18219	1.73103	1.72521	2.15761	2.06517	2.10159		
	1.29758	1.49142	1.40403				1.79509	19.195
92 2-Butanone	+++++	0.55947	0.57431	0.65423	0.66034	0.67333		
	+++++	+++++	+++++				0.62433	8.513
93 Methyl Acrylate	+++++	2.70630	+++++	3.31334	3.13214	+++++		
	+++++	+++++	+++++				3.05059	10.215
94 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
99 Tetrahydrofuran	1.93223	1.47874	1.47864	1.79558	1.76039	1.74461		
	++++++	++++++	++++++				1.69837	10.749
100 Chloroform	2.81871	2.25790	2.30519	2.87247	2.79188	2.78517		
	1.96736	2.24543	2.11002				2.46157	14.296
101 1-Bromopropane	++++++	++++++	++++++	++++++	++++++	++++++		
	++++++	++++++	++++++				++++++	++++++
102 Cyclohexane	2.16966	1.66538	1.52884	1.98988	1.80914	1.88251		
	1.11023	1.26245	1.18514				1.62258	23.170
103 1,1,1-Trichloroethane	3.25419	2.65681	2.59996	3.20012	3.01119	3.06444		
	2.06508	2.33122	2.19108				2.70823	16.494
104 Chloroacetonitrile	++++++	++++++	++++++	++++++	++++++	++++++		
	++++++	++++++	++++++				++++++	++++++
105 n-Butylchloride	++++++	++++++	++++++	++++++	++++++	++++++		
	++++++	++++++	++++++				++++++	++++++
106 Carbon Tetrachloride	3.13428	2.65530	2.75452	3.42555	3.21453	3.30119		
	2.21839	2.52606	2.33939				2.84102	15.540
107 1,1-Dichloropropene	++++++	0.68379	++++++	0.83854	0.79448	++++++		
	++++++	++++++	++++++				0.77227	10.324
108 Thiophene	++++++	++++++	++++++	++++++	++++++	++++++		
	++++++	++++++	++++++				++++++	++++++

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	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
109 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
110 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
113 2,2,4-Trimethylpentane	8.33025	6.70639	6.81806	8.91732	8.24327	8.11459		
	5.31261	6.38840	5.71226				7.17146	17.754
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
115 Isobutanol	+++++	0.24742	+++++	0.31167	0.29096	+++++		
	+++++	+++++	+++++				0.28335	11.575
116 Benzene	1.06565	0.84213	0.83848	1.07159	1.03936	1.00835		
	0.66351	0.82282	0.76269				0.90162	16.446
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
119 tert-Amyl methyl ether	+++++	3.10545	3.10588	4.10092	3.96503	+++++		
	+++++	+++++	+++++				3.56932	15.080
120 1,2-Dichloroethane	0.45808	0.39889	0.38252	0.45433	0.45506	0.44198		
	+++++	+++++	+++++				0.43181	7.579

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121 Heptane	0.44576	0.33867	0.31442	0.40261	0.36882	0.35813		
	#####	#####	#####				0.37140	12.632
122 2,3-Dichloro-1-propene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####				#####	#####
124 n-Butanol	#####	0.37767	#####	0.51807	0.51013	#####		
	#####	#####	#####				0.46862	16.829
125 Trichloroethene	0.49828	0.41884	0.42136	0.48799	0.48654	0.48519		
	0.34121	0.42232	0.38631				0.43867	12.392
126 Bromodichloroethene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####				#####	#####
127 Methylcyclohexane	#####	0.54124	0.55585	0.67828	0.64482	0.62542		
	0.41390	0.51719	0.47547				0.55652	16.080
128 Ethyl acrylate	#####	0.61270	#####	0.79019	0.72262	#####		
	#####	#####	#####				0.70850	12.644
129 2-Methylheptane	#####	#####	#####	#####	#####	#####		
	#####	#####	#####				#####	#####
130 3-Methylheptane	#####	#####	#####	#####	#####	#####		
	#####	#####	#####				#####	#####
131 2-Pentanone	#####	0.82960	#####	1.10928	1.00516	#####		
	#####	#####	#####				0.98135	14.404

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	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
132 1,2-Dichloropropane	0.39778	0.34015	0.32900	0.40569	0.39976	0.39281		
	#####	#####	#####				0.37753	8.930
133 1-Bromo-2-Chloroethane	#####	#####	#####	#####	#####	#####		
	#####	#####	#####				#####	#####
134 Methyl Methacrylate	#####	0.44209	#####	0.55240	0.50172	#####		
	#####	#####	#####				0.49874	11.070
135 Diethyl Ketone	#####	#####	#####	#####	#####	#####		
	#####	#####	#####				#####	#####
136 1,4-Dioxane	#####	0.19948	0.22916	0.27618	0.26925	0.25100		
	#####	#####	#####				0.24502	12.776
137 Dibromomethane	#####	0.38215	#####	0.47562	0.43323	#####		
	#####	#####	#####				0.43034	10.876
138 Bromodichloromethane	0.71642	0.62044	0.63566	0.73823	0.74111	0.72885		
	#####	#####	#####				0.69678	7.771
139 2-Nitropropane	#####	#####	#####	#####	#####	#####		
	#####	#####	#####				#####	#####
140 bis(chloromethyl) Ether	#####	#####	#####	#####	#####	#####		
	#####	#####	#####				#####	#####
141 1-Octene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####				#####	#####

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-DEC-2016 12:05
End Cal Date : 19-DEC-2016 12:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd14.i/19dec16.b/14651201b.m
Cal Date : 20-Dec-2016 07:46 jscarbro
Curve Type : Average

Compound	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	1000.000 Level 7	___ RRF	% RSD
	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
142 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
143 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
144 cis-1,3-Dichloropropene	0.59468	0.47909	0.48549	0.61125	0.58934	0.57801		
	+++++	+++++	+++++				0.55631	10.491
145 4-Methyl-2-pentanone	0.19804	0.14394	0.13824	0.15982	0.15964	0.15078		
	+++++	+++++	+++++				0.15841	13.386
147 Toluene	1.37976	1.17290	1.13581	1.45366	1.38639	1.31569		
	0.98103	1.27341	1.14123				1.24887	12.174
148 Octane	+++++	0.29095	+++++	0.33387	0.31194	+++++		
	+++++	+++++	+++++				0.31225	6.874
149 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
150 trans-1,3-Dichloropropene	0.53904	0.47881	0.49429	0.61131	0.59217	0.59321		
	+++++	+++++	+++++				0.55147	10.155
151 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
152 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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153 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
154 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
155 1,1,2-Trichloroethane	0.57754	0.42625	0.44073	0.49705	0.49717	0.48283		
	+++++	+++++	+++++				0.48693	10.965
156 Tetrachloroethene	0.68278	0.63482	0.65819	0.80671	0.77316	0.76676		
	0.57488	0.70976	0.63876				0.69398	11.006
157 1,3-Dichloropropane	+++++	1.86234	+++++	2.40682	2.28966	+++++		
	+++++	+++++	+++++				2.18628	13.108
158 2-Hexanone	+++++	0.47089	0.48177	0.60046	0.55533	0.52500		
	+++++	+++++	+++++				0.52669	10.134
159 Butyl Acetate	+++++	0.08229	+++++	0.09750	0.09507	+++++		
	+++++	+++++	+++++				0.09162	8.918
160 Dibromochloromethane	0.96196	0.81820	0.85306	1.02005	1.00095	0.99225		
	+++++	+++++	+++++				0.94108	8.982
161 1,2-Dibromoethane (EDB)	0.79322	0.63359	0.65573	0.81074	0.79513	0.77726		
	+++++	+++++	+++++				0.74428	10.508
162 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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164 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
165 Chlorobenzene	1.12088	1.04515	1.04802	1.24720	1.23554	1.20060		
	+++++	+++++	+++++				1.14956	7.932
166 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
167 Ethyl Benzene	0.59181	0.51288	0.54901	0.65954	0.62754	0.61469		
	+++++	+++++	+++++				0.59258	9.071
168 1,1,1,2-Tetrachloroethane	+++++	0.54549	+++++	0.69751	0.65967	+++++		
	+++++	+++++	+++++				0.63422	12.478
169 m,p-Xylene	0.78126	0.67919	0.67643	0.77340	0.77550	0.76095		
	0.60954	0.76448	0.68467				0.72282	8.511
170 Nonane	+++++	0.68512	+++++	0.88151	0.85568	+++++		
	+++++	+++++	+++++				0.80744	13.216
171 o-Xylene	0.75196	0.64185	0.65229	0.74000	0.72022	0.71455		
	0.59376	0.72330	0.64004				0.68644	8.037
172 Styrene	1.18239	1.06629	1.10250	1.28069	1.23412	1.20848		
	+++++	+++++	+++++				1.17908	6.871
173 2-Heptanone	+++++	0.56643	+++++	0.71168	0.70335	+++++		
	+++++	+++++	+++++				0.66048	12.348

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174 Bromoform	0.93864	0.80382	0.79371	0.98684	0.95877	0.94137		
	#####	#####	#####				0.90386	9.211
175 Cumene	2.17028	1.92783	2.00721	2.33070	2.27962	2.18987		
	#####	#####	#####				2.15092	7.238
176 Cyclohexanone	#####	0.44525	#####	0.52330	0.51448	#####		
	#####	#####	#####				0.49434	8.647
178 1-Decene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####				#####	#####
179 alpha-Pinene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####				#####	#####
180 Bromobenzene	#####	0.64158	#####	0.72333	0.71251	#####		
	#####	#####	#####				0.69247	6.413
181 1,1,2,2-Tetrachloroethane	0.98850	0.89760	0.93452	1.06694	1.03356	0.99574		
	#####	#####	#####				0.98614	6.313
182 Propylbenzene	2.41863	2.14839	2.23740	2.48506	2.48145	2.44222		
	#####	#####	#####				2.36886	5.968
183 1,4-Dichloro-2-Butene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####				#####	#####
184 trans-1,4-Dichloro-2-butene	#####	0.15223	#####	0.19741	0.20053	#####		
	#####	#####	#####				0.18339	14.740

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185 1,2,3-Trichloropropane	+++++	0.29339	+++++	0.32712	0.30854	+++++		
	+++++	+++++	+++++				0.30968	5.456
186 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
187 Decane	+++++	0.68240	+++++	0.80350	0.79479	+++++		
	+++++	+++++	+++++				0.76023	8.884
188 4-Ethyltoluene	2.22642	2.04192	2.06875	2.34472	2.39652	2.09384		
	+++++	+++++	+++++				2.19536	6.867
189 2-Chlorotoluene	+++++	0.46679	+++++	0.54315	0.55234	+++++		
	+++++	+++++	+++++				0.52076	9.018
190 1,3,5-Trimethylbenzene	1.74184	1.62297	1.67624	1.88840	1.88165	1.98227		
	1.58162	1.74297	1.06405				1.68689	15.895
191 4-Chlorotoluene	+++++	0.48529	+++++	0.55038	0.53392	+++++		
	+++++	+++++	+++++				0.52319	6.468
192 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
193 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
194 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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195 tert-Butylbenzene	+++++	1.49176	+++++	1.69137	1.67765	+++++		
	+++++	+++++	+++++				1.62026	6.882
196 1,2,4-Trimethylbenzene	1.77942	1.51077	1.54959	1.73937	1.77173	1.68559		
	1.55670	1.68425	+++++				1.65968	6.418
197 Pentachloroethane	+++++	0.46089	+++++	0.54176	0.52979	+++++		
	+++++	+++++	+++++				0.51081	8.545
198 Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
199 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
200 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
201 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
202 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
203 sec-Butylbenzene	+++++	2.09841	+++++	2.32947	2.32664	+++++		
	+++++	+++++	+++++				2.25151	5.889
204 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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205 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
206 bis(2-Chloroethyl) Ether	+++++	0.67728	+++++	0.81025	0.85942	+++++		
	+++++	+++++	+++++				0.78232	12.044
207 p-Cymene	+++++	1.77398	+++++	1.97770	1.97913	+++++		
	+++++	+++++	+++++				1.91027	6.179
208 1,3-Dichlorobenzene	1.38258	1.24656	1.21823	1.26858	1.31301	1.22128		
	+++++	+++++	+++++				1.27504	4.957
209 1,4-Dichlorobenzene	1.28302	1.20292	1.23303	1.28318	1.29443	1.22110		
	+++++	+++++	+++++				1.25295	3.082
210 1,2,3-Trimethylbenzene	+++++	0.69943	+++++	0.69394	0.73423	+++++		
	+++++	+++++	+++++				0.70920	3.081
211 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
212 alpha-Chlorotoluene	1.47600	1.41264	1.41434	1.50339	1.53666	1.49222		
	+++++	+++++	+++++				1.47254	3.387
213 Butylbenzene	+++++	0.43395	+++++	0.43570	0.44516	+++++		
	+++++	+++++	+++++				0.43827	1.376
214 1,2-Dichlorobenzene	1.16736	1.06964	1.15677	1.11054	1.17653	1.09705		
	+++++	+++++	+++++				1.12965	3.835

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215 Undecane	+++++	0.69550	+++++	0.61489	0.64442	+++++		
	+++++	+++++	+++++				0.65160	6.259
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	+++++	0.50706	+++++	0.41063	0.47012	+++++		
	+++++	+++++	+++++				0.46260	10.517
222 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
223 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
224 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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225 Dodecane	+++++	0.51209	+++++	0.31800	0.40963	+++++		
	+++++	+++++	+++++				0.41324	23.496
226 1,2,4-Trichlorobenzene	+++++	0.68242	0.74079	0.43801	0.57730	0.50395		
	+++++	+++++	+++++				0.58849	21.144
227 Hexachlorobutadiene	+++++	0.55318	0.64140	0.40268	0.49017	0.42931		
	+++++	+++++	+++++				0.50335	19.193
228 Naphthalene	+++++	+++++	+++++	0.84125	1.19363	0.81412		
	0.87293	0.98454	+++++				0.94129	16.493
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
230 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
231 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
234 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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235 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
236 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 237 1,2-Dichloroethene (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 238 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 239 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 240 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
241 Total Volatile Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
242 TPH reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
243 TPH reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
244 TPH reference to Gasoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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245 TPH reference MineralSpirits	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
246 TPH reference to Stoddard	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
247 TVOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
248 TVOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
249 TVOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
250 TVOC reference to Toluene-d8	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
251 NMOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
252 NMOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
253 NMOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
254 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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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	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
264 C8-C10 Aliphatic ref Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-DEC-2016 12:05
End Cal Date : 19-DEC-2016 12:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd14.i/19dec16.b/14651201b.m
Cal Date : 20-Dec-2016 07:46 jscarbro
Curve Type : Average

Compound	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	1000.000 Level 7	___ RRF	% RSD
	2500.000 Level 8	5000.000 Level 9	1.000e+04 Level 10					
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	1.21317	1.22712	1.19684	1.20936	1.19602	1.24040		
	1.25859	1.21793	1.26293				1.22471	2.016
$ 146 Toluene-d8	0.96853	1.00481	0.98420	0.99461	1.01177	0.97447		
	0.97326	0.99169	0.98668				0.98778	1.476
$ 177 4-Bromofluorobenzene	0.61471	0.63294	0.62726	0.63829	0.62264	0.61037		
	0.61174	0.61271	0.61608				0.62075	1.625

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-DEC-2016 12:05
End Cal Date : 19-DEC-2016 12:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd14.i/19dec16.b/14651201b.m
Cal Date : 20-Dec-2016 07:46 jscarbro
Curve Type : Average

```
 ____________________________________________
|Average %RSD Results.                       |
|============================================|
|Calculated Average %RSD = 12.2871799        |
|Maximun Average %RSD    =         30        |
|* Passed Average %RSD Test.                 |
|____________________________________________|
```

Calibration History

Method : /chem/msd14.i/19dec16.b/14651201b.m
Start Cal Date: 01-DEC-2016 12:05
End Cal Date : 19-DEC-2016 12:01

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 5.00000		
01-DEC-2016 12:05	Level2	/chem/msd14.i/01dec16.b/14120102.d

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 20.00000		
19-DEC-2016 11:18	ComboICALmVB	/chem/msd14.i/19dec16.b/14121907.d
01-DEC-2016 12:33	AT12curve	/chem/msd14.i/01dec16.b/14120103.d

Injection Date	Sublist	Calibration File
Cal Level: 4 , Cal Amount: 50.00000		
01-DEC-2016 13:12	AT12NaphLow	/chem/msd14.i/01dec16.b/14120104.d

Injection Date	Sublist	Calibration File
Cal Level: 5 , Cal Amount: 100.00000		
19-DEC-2016 11:43	ComboICALmVB	/chem/msd14.i/19dec16.b/14121908.d
01-DEC-2016 13:55	AT12NaphLow	/chem/msd14.i/01dec16.b/14120105.d

Injection Date	Sublist	Calibration File
Cal Level: 6 , Cal Amount: 200.00000		
19-DEC-2016 12:01	ComboICALmVB	/chem/msd14.i/19dec16.b/14121909.d
01-DEC-2016 14:23	AT12	/chem/msd14.i/01dec16.b/14120106.d

Injection Date	Sublist	Calibration File
Cal Level: 7 , Cal Amount: 1000.00000		
01-DEC-2016 15:16	AT12	/chem/msd14.i/01dec16.b/14120107.d

Injection Date	Sublist	Calibration File
Cal Level: 8 , Cal Amount: 2500.00000		
02-DEC-2016 10:15	NaphICAL	/chem/msd14.i/01dec16.b/14120115.d
02-DEC-2016 07:48	520HL	/chem/msd14.i/01dec16.b/14120113.d

```
+------------------+-----------------+----------------------------------------+
| Cal Level: 9 , Cal Amount: 5000.00000                                       |
+=============================================================================+
|02-DEC-2016 10:34 |NaphICAL         |/chem/msd14.i/01dec16.b/14120116.d      |
|02-DEC-2016 08:15 |520HL            |/chem/msd14.i/01dec16.b/14120114.d      |
+------------------+-----------------+----------------------------------------+

+------------------+-----------------+----------------------------------------+
| Cal Level: 10, Cal Amount: 10000.00000                                      |
+=============================================================================+
|02-DEC-2016 11:32 |520HL            |/chem/msd14.i/01dec16.b/14120118.d      |
+------------------+-----------------+----------------------------------------+


Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6
+------------------+-----------------+----------------------------------------+
| Ccal Level: 5 , Ccal Amount: 100.00                                         |
+=============================================================================+
|19-DEC-2016 11:43 |ComboICALmVB     |/chem/msd14.i/19dec16.b/14121908a.d     |
+------------------+-----------------+----------------------------------------+
| Ccal Level: 6 , Ccal Amount: 200.00                                         |
+=============================================================================+
|19-DEC-2016 08:17 |AT12             |/chem/msd14.i/19dec16.b/14121902.d      |
+------------------+-----------------+----------------------------------------+
| Ccal Level: 6 , Ccal Amount: 200.00                                         |
+=============================================================================+
|19-DEC-2016 12:01 |ComboICALmVB     |/chem/msd14.i/19dec16.b/14121909.d      |
+------------------+-----------------+----------------------------------------+
```

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-DEC-2016 12:05
End Cal Date : 02-DEC-2016 11:32
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd14.i/01dec16.b/14651201a.m
Cal Date : 02-Dec-2016 16:30 jscarbro
Curve Type : Average

Calibration File Names:
Level 2: /chem/msd14.i/01dec16.b/14120102.d
Level 3: /chem/msd14.i/01dec16.b/14120103.d
Level 4: /chem/msd14.i/01dec16.b/14120104.d
Level 5: /chem/msd14.i/01dec16.b/14120105.d
Level 6: /chem/msd14.i/01dec16.b/14120106.d
Level 7: /chem/msd14.i/01dec16.b/14120107.d
Level 8: /chem/msd14.i/01dec16.b/14120115.d
Level 9: /chem/msd14.i/01dec16.b/14120116.d
Level 10: /chem/msd14.i/01dec16.b/14120118.d

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

12/2/16 JL

BN 12/5/16

Compound	5.000 Level 2 / 2500.000 Level 8	20.000 Level 3 / 5000.000 Level 9	50.000 Level 4 / 1.000e+04 Level 10	100.000 Level 5	200.000 Level 6	1000.000 Level 7	RRF	% RSD
9 Propylene	+++++	1.11985	1.02997	1.15934	1.13578	1.09811		
	+++++	+++++	+++++				1.10861	4.449
11 Freon 12	3.48148	2.82662	2.87407	3.33243	3.27432	3.34412		
	+++++	+++++	+++++				3.18884	8.507
15 Freon 114	2.84078	2.35600	2.38418	2.94842	2.76820	2.81100		
	+++++	+++++	+++++				2.68476	9.352
17 Chloromethane	+++++	1.23357	1.14681	1.36239	1.20690	1.17526		
	+++++	+++++	+++++				1.22499	6.813
23 Butane	+++++	0.38936	0.29140	0.29614	0.26282	0.26838		
	0.23919	0.30443	0.29051				0.29278	15.190
25 Vinyl Chloride	1.42755	1.15139	1.09547	1.25158	1.19779	1.21773		
	+++++	+++++	+++++				1.22358	9.298
26 1,3-Butadiene	1.92985	1.22023	1.02575	1.09982	1.03548	1.05371		
	+++++	+++++	+++++				1.22747	28.628

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-DEC-2016 12:05
End Cal Date : 19-DEC-2016 12:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd14.i/19dec16.b/14651201b.m
Cal Date : 20-Dec-2016 07:46 jscarbro
Curve Type : Average

Calibration File Names:
Level 2: /chem/msd14.i/01dec16.b/14120102.d
Level 3: /chem/msd14.i/19dec16.b/14121907.d
Level 4: /chem/msd14.i/01dec16.b/14120104.d
Level 5: /chem/msd14.i/19dec16.b/14121908.d
Level 6: /chem/msd14.i/19dec16.b/14121909.d
Level 7: /chem/msd14.i/01dec16.b/14120107.d
Level 8: /chem/msd14.i/01dec16.b/14120115.d
Level 9: /chem/msd14.i/01dec16.b/14120116.d
Level 10: /chem/msd14.i/01dec16.b/14120118.d

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

JM 12/20/16

Compound	5.000 Level 2 / 2500.000 Level 8	20.000 Level 3 / 5000.000 Level 9	50.000 Level 4 / 1.000e+04 Level 10	100.000 Level 5	200.000 Level 6	1000.000 Level 7	RRF	% RSD
36 1-Pentene	+++++	0.90873	+++++	1.15341	1.08703	+++++		
	+++++	+++++	+++++				1.04973	12.054
34 Pentane	+++++	0.50250	+++++	0.72309	0.59398	+++++		
	+++++	+++++	+++++				0.60652	18.272
44 Ethyl Ether	+++++	0.42260	+++++	0.56862	0.52257	+++++		
	+++++	+++++	+++++				0.50459	14.794
53 Iodomethane	+++++	1.07963	+++++	2.39217	2.30862	+++++		
	+++++	+++++	+++++				1.92681	38.139 <-
59 Cyclopentene	+++++	1.78578	+++++	2.24485	2.12938	+++++		
	+++++	+++++	+++++				2.05334	11.630
63 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
64 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

14651201B.M
Initial Calibration Narrative

An initial calibration was performed on 12/01/16.

ICAL: **0** out

ICV: **0** out –File # 14120207,
DoD 4.2 – **0 out**; File# 14120207a
DoD 5.0 – **0 out**; File# 14120207c

The upper end of the curve is 10,000ppbv for the following compounds:

Butane	Hexane	Methylcyclohexane
Isopentane	1,1- Dichloroethane	Toluene
Freon 11	cis-1,2-Dichloroethene	Tetrachloroethene
Ethanol	Chloroform	m,p-Xylene
Freon 113	Cyclohexane	o-Xylene
1,1-Dichloroethene	1,1,1-Trichloroethane	1,3,5-trimethylbenzene
Acetone	Carbon Tetrachloride	
2,2,4-Trimethylpentane		
Methylene Chloride	Benzene	
MTBE	**TCE**	

1,2,4-Trimethylbenzene was calibrated to **5,000ppbv**

2-Propanol was calibrated to **2500ppbv.**

All other compounds calibrated to **1000ppbv** except the following:

Oxygenates were calibrated to **200ppbv**. *4 point calibration*

Naph calibrated to **500ppbv**.

A 3 point *Combo* standard was calibrated to **200ppbv**.
No acetonitrile nor cyclopentane due to coelution.
No vinyl bromide. No D-limonene. No alpha-pinene. No ethyl acetate.

BFB Tune File: A) 14120101 B) 14120201 C) 14121901

MDL: 5/25/16 and 5/26/16; Naphthalene MDL analyzed 5/10/16.

Vinyl Chloride @ 5ppbv addressed in **CAR # G5WH2A1165**.

Eurofins Air Toxics, Inc. **MSD-14** **Logbook #2809**

BFB Verification of 176/174 m/z Ratio: 295488/304896(100)=96.9%	
Method Name: ~~14120101A~~ 14651201A QM 12/2/16	

IS/S Std. #: 2819-108	Exp. Date: 2/3/17
BCM	124267
1,4-DFB	508921
CB-d5	476110

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

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 / 132 Method (Circle one): TO-14A/TO-15/TO-17

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	14120101	BFB tune check	2819-148	50ng	2.0ml	1.00	QM	12/1/16	1145	QM	
2	✓	02	ICAL Level #2	2819-141	5.0ppbv(500ppbv)	50mL	1.00	QM		1205	QM	Oxygenates exp 12/1/16 TO15N exp. 2/1/17
3	✓	03	#3	2819-132	20ppbv(200ppbv)	5mL	1.00	QM		1233	QM	5mL
4	✓	04	#4		50ppbv(200ppbv)	12.5mL	1.00	QM		1312	QM	25mL
5	✓	05	#5		100ppbv(200ppbv)	25mL	1.00	QM		1355	QM	
6	✓	06	#6		200ppbv(200ppbv)	50mL	1.00	QM		1423	QM	TO15N exp 2/1/17 CCV Oxygenates exp. 12/1/16
7	✓	07	#7	2819-134	1000ppbv(1000ppbv)	50mL	1.00	MD		1516	QM	Exp. 1/18/17
8	X	08	#8	2819-149	2500ppbv(10,000ppbv)	12.5mL	1.00	QM		1549	QM	exp. 3/1/17 Bad standard 25mL
9	X	09	#9		5000ppbv(10,000ppbv)	25mL	1.00	MD		1608	QM	
10	X	10	System Blank	35248	Humid	50mL	1.00	MD		1745	MD	> R.L.
11	✓	11								1815	MD	
12	X	12	ICAL Level #8	2819-150	2500ppbv(10,000ppbv)	12.5mL	1.00	MD		1842	MD	Exp 3/1/17 Bad Standard
13	✓	13	ICAL Level #8	2819-153	2500ppbv(10,000ppbv)	12.5mL	1.00	QM	12/2/16	0748	QM	exp. 3/1/17 25mL
14	✓	14	#9		5000ppbv(10,000ppbv)	25mL	1.00	QM		0815	QM	
15	✓	15	ICAL Level #8	2819-157	200ppbv(500ppbv)	25mL	1.00	QM		1015	QM	exp. 3/2/17; Naph only
16	✓	16	#9		500ppbv(500ppbv)	50mL	1.00	QM		1034	QM	
17	✓	17	System blank	35248	Humid	50mL	1.00	QM		1057	QM	Naph > RL

QM
Reviewed

12/2/16
Date

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
18	✓	1412018	ICAL Level #10	2819-153	10,000ppbv (ppmv)	50mL	1.00	JH	12/2/16	1132	JH	
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												JH 12/2/16

JH
Reviewed

12/2/16
Date

Eurofins Air Toxics, Inc. **MSD-14** **Logbook #2809**

BFB Verification of 176/174 m/z Ratio:	266901 / 274602 x 100 = 97.20
Method Name:	14651201A

IS/S Std. #: 2819-108	Exp. Date: 2/3/17
BCM	122373
1,4-DFB	514506
CB-d5	483941

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

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 / 132 Method (Circle one): TO-14A/TO-15/TO-17

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	141202 01	BFB tune check	2810-93	50ng	20ul	1.00	GH	12/2/16	1352	GH	
2	X	02	CCV (200ppbv)	2819-132	200ppbv	50mL	1.00	GH		1420	GH	incorrect std loaded Exp. 2/11/17 Exp-12/1/16
3	✓	03	System blank	35248	Humid	50mL	1.00	GH		1515	GH	
4	✓	04	CCV (200ppbv)	2819-132	200ppbv	50mL	1.00	GH		1538	GH	Exp. 2/11/17 Exp-12/1/16
5	X	05	ICV (200ppbv)	2819-49	200ppbv	50mL	1.00	GH		1605	GH \ -	Exp. 1/4/17 Nach T
6	✓	06	System blank	35248	humid	50mL	1.00	GH		1649	GH \ BJ	ZRL
7	✓	07	ICV (200ppbv)	2819-49 ~~352~~ GH 12/2/16	200ppbv	50mL	1.00	GH		1731	GH \ BJ	Exp: 1/4/17 Ø out
8												
9												
10												
11												
12												
13												
14												
15												
16												
17						GH	12/2/16					

Reviewed 12/2/16 Date

Eurofins Air Toxics, Inc.

MSD-14

Logbook #2838

BFB Verification of 176/174 m/z Ratio: 211584 / 221376 (100) = 95.58%	
Method Name: 146512018	

IS/S Std. #: 2819-08	Exp. Date: 2/3/17
BCM	106902
1,4-DFB	451282
CB-d5	416923

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

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 / 132 Method (Circle one): TO-14A/TO-15/TO-17

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	14121901	BFB tune check	2810-93	Song	2.0mL	1:00	QM	12/19/16	0756	QM/MS	
2	✓	02	CCV (200ppbv)	2819-1162	200ppbv	50mL	↓	QM	↓	0817	QM/MS	exp. 3/5/17 TO15 Only ΦQM
3	✓	03	LCS (200ppbv)	2819-116	↓	↓	↓	QM		0843	QM/MS	exp. 2/4/17; ΦQM
4	✓	04	LCSD ↓	↓	↓	↓	↓	QM		0908	QM/MS	
5	✓	05	TPHg calib (80ppmv)	2757-40	4000ppbv (80ppmv)	2.5mL	1.00	QM		1017	QM/MS	exp. 5/18/17; TPHg
6	✓	06	System blank	35248	Humid	50mL	1.00	QM		1055	QM/MS	
7	✓	07	ICAL level #3	2819-185	20ppbv (200ppbv)	5mL	1.00	QM		1118	QM/MS	BP 2/19/17 exp. ALL OTHERS 3/14/17 5mL
8	✓	08	↓ #15 QM 12/14/16	↓	100ppbv (200ppbv)	25mL	1.00	QM		1143	QM/MS	↓ ; CCV
9	✓	09	↓ #16	↓	200ppbv (200ppbv)	50mL	1.00	QM		1201	QM/MS	
10	✓	10	Lab blank	35248	Humid	50mL	1.00	QM	↓	1301	QM/MS	
11												
12												
13												
14												
15												
16												
17												QM 12/19/16

QM
Reviewed

12/19/16
Date

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

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

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

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

*Note: If Bromochloromethane (BCM) is required as a target compound, the internal standard mix is blended without BCM. Compounds and surrogates assigned to BCM are re-assigned to 1,4-Difluorobenzene for calibration and subsequent quantitation.

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/02dec16.b/14120207.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 02-DEC-2016 17:31
Operator : gh Inst ID: msd14.i
Smp Info : 50mL #2819-49
Misc Info : 200ppbv (200ppbv) Naph at 20ppbv
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/02dec16.b/14651201a.m
Meth Date : 05-Dec-2016 09:36 jscarbro Quant Type: ISTD
Cal Date : 01-DEC-2016 14:23 Cal File: 14120106.d
Als bottle: 1 QC Sample: ICV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.312	5.312 (1.000)	130	130978	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	103700			46.96- 106.96	79.17
5.312	5.312 (1.000)	49	170235			97.69- 157.69	129.97
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.446	6.446 (1.000)	114	564529	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	85418			0.00- 45.92	15.13
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
10.336	10.335 (1.000)	117	512839	400.000		80.00- 120.00	100.00
10.336	10.335 (1.000)	82	250463			19.32- 79.32	48.84
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.984	5.984 (1.126)	65	154742	385.867	385.87	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	85996			24.72- 84.72	55.57
$ 146 Toluene-d8					CAS #: 2037-26-5		
8.489	8.488 (1.317)	98	550139	394.626	394.63	80.00- 120.00	100.00
8.489	8.488 (1.317)	70	57360			0.00- 40.20	10.43

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8 (continued)							
8.489	8.488 (1.317)	100	381121			38.62- 98.62	69.28
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
11.343	11.343 (1.097)	174	320135	402.250	402.25	80.00- 120.00	100.00
11.343	11.343 (1.097)	95	385362			89.78- 149.78	120.37
11.343	11.343 (1.097)	176	306234			66.10- 126.10	95.66
9 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.268)	41	71778	197.731	197.73	80.00- 120.00	100.00
1.423	1.409 (0.268)	42	46405			33.78- 93.78	64.65
1.423	1.409 (0.268)	39	52431			36.58- 96.58	73.05
11 Freon 12					CAS #: 75-71-8		
1.451	1.450 (0.273)	85	224616	215.114	215.11	80.00- 120.00	100.00
1.451	1.450 (0.273)	87	71403			1.64- 61.64	31.79
15 Freon 114					CAS #: 76-14-2		
1.563	1.562 (0.294)	135	191034	217.303	217.30	80.00- 120.00	100.00
1.563	1.562 (0.294)	137	60505			1.10- 61.10	31.67
17 Chloromethane					CAS #: 74-87-3		
1.647	1.632 (0.310)	50	82448	205.547	205.55	80.00- 120.00	100.00
1.647	1.646 (0.310)	52	26642			2.75- 62.75	32.31
23 Butane					CAS #: 106-97-8		
1.717	1.716 (0.323)	58	19564	204.070	204.07	80.00- 120.00	100.00
1.717	1.716 (0.323)	43	136626			736.71- 796.71	698.35
25 Vinyl Chloride					CAS #: 75-01-4		
1.745	1.744 (0.328)	62	84232	210.235	210.23	80.00- 120.00	100.00
1.745	1.744 (0.328)	64	27766			1.78- 61.78	32.96
26 1,3-Butadiene					CAS #: 106-99-0		
1.773	1.772 (0.334)	54	67829	168.758	168.76	80.00- 120.00	100.00
1.773	1.772 (0.334)	39	66906			67.57- 127.57	98.64
29 Bromomethane					CAS #: 74-83-9		
2.122	2.122 (0.399)	94	51684	208.761	208.76	80.00- 120.00	100.00
2.122	2.122 (0.399)	96	48089			62.49- 122.49	93.04
30 Chloroethane					CAS #: 75-00-3		
2.220	2.220 (0.418)	64	41579	213.424	213.42	80.00- 120.00	100.00
2.220	2.220 (0.418)	66	12368			0.76- 60.76	29.75
31 Isopentane					CAS #: 78-78-4		
2.248	2.248 (0.423)	43	111418	263.168	263.17	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
31 Isopentane (continued)							
2.248	2.248 (0.423)	57	78011			37.62- 97.62	70.02
2.248	2.248 (0.423)	72	7719			0.00- 36.64	6.93
35 Freon 11					CAS #: 75-69-4		
2.458	2.458 (0.463)	101	236866	250.864	250.86	80.00- 120.00	100.00
2.458	2.458 (0.463)	103	153721			34.68- 94.68	64.90
42 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.521)	45	41808	204.794	204.79	80.00- 120.00	100.00
2.766	2.766 (0.521)	46	16748			11.88- 71.88	40.06
49 Freon 113					CAS #: 76-13-1		
3.018	3.018 (0.568)	151	172757	241.626	241.62	80.00- 120.00	100.00
3.018	3.018 (0.568)	153	108013			36.16- 96.16	62.52
3.004	3.018 (0.565)	101	197853			85.93- 145.93	114.53
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.046	3.046 (0.573)	61	143507	237.761	237.76	80.00- 120.00	100.00
3.046	3.046 (0.573)	96	88087			30.16- 90.16	61.38
3.046	3.046 (0.573)	98	56655			8.09- 68.09	39.48
52 Acetone					CAS #: 67-64-1		
3.186	3.185 (0.600)	58	45550	221.590	221.59	80.00- 120.00	100.00
3.186	3.185 (0.600)	43	150029			284.49- 344.49	329.37
56 Carbon Disulfide					CAS #: 75-15-0		
3.256	3.255 (0.613)	76	237507	221.655	221.65	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.340	3.325 (0.629)	45	185564	233.869	233.87	80.00- 120.00	100.00
3.326	3.325 (0.626)	43	33199			0.00- 46.84	17.89
3.340	3.325 (0.629)	59	6864			0.00- 34.10	3.70
58 3-Chloropropene					CAS #: 107-05-1		
3.480	3.479 (0.655)	76	37621	225.213	225.21	80.00- 120.00	100.00
3.480	3.479 (0.655)	41	121461			310.63- 370.63	322.85
66 Methylene Chloride					CAS #: 75-09-2		
3.647	3.647 (0.687)	49	110905	233.787	233.79	80.00- 120.00	100.00
3.647	3.647 (0.687)	84	76319			35.90- 95.90	68.81
3.647	3.647 (0.687)	51	34277			0.00- 59.48	30.91
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.857	3.857 (0.726)	73	246753	235.031	235.03	80.00- 120.00	100.00
3.857	3.857 (0.726)	57	63875			0.00- 56.69	25.89

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether (continued)							
3.857	3.857 (0.726)	41	59473			0.00- 54.89	24.10
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.885	3.885 (0.731)	96	93579	218.078	218.08	80.00- 120.00	100.00
3.885	3.885 (0.731)	61	134871			113.59- 173.59	144.13
3.885	3.885 (0.731)	98	59362			32.57- 92.57	63.44
78 Hexane					CAS #: 110-54-3		
4.095	4.095 (0.771)	57	162385	234.190	234.19	80.00- 120.00	100.00
4.095	4.095 (0.771)	43	105842			34.03- 94.03	65.18
4.095	4.095 (0.771)	86	25404			0.00- 45.63	15.64
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.389	4.389 (0.826)	63	160722	228.024	228.02	80.00- 120.00	100.00
4.389	4.389 (0.826)	65	49610			1.36- 61.36	30.87
86 Vinyl Acetate					CAS #: 108-05-4		
4.445	4.445 (0.837)	86	17006	151.410	151.41	80.00- 120.00	100.00
4.445	4.445 (0.837)	43	176476			1119.78-1179.78	1037.73
4.445	4.445 (0.837)	42	15086			63.36- 123.36	88.71
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.033	5.032 (0.947)	61	128827	219.170	219.17	80.00- 120.00	100.00
5.033	5.032 (0.947)	96	95118			46.92- 106.92	73.83
5.033	5.032 (0.947)	98	61757			18.93- 78.93	47.94
92 2-Butanone					CAS #: 78-93-3		
5.089	5.088 (0.958)	72	45093	220.574	220.57	80.00- 120.00	100.00
5.089	5.088 (0.958)	43	217051			439.29- 499.29	481.34
5.089	5.088 (0.958)	57	17075			8.51- 68.51	37.87
99 Tetrahydrofuran					CAS #: 109-99-9		
5.298	5.298 (0.997)	42	119616	215.090	215.09	80.00- 120.00	100.00
5.298	5.298 (0.997)	71	41521			3.78- 63.78	34.71
5.298	5.298 (0.997)	72	42494			4.55- 64.55	35.53
100 Chloroform					CAS #: 67-66-3		
5.382	5.382 (1.013)	83	183852	228.096	228.10	80.00- 120.00	100.00
5.382	5.382 (1.013)	85	122496			35.58- 95.58	66.63
102 Cyclohexane					CAS #: 110-82-7		
5.494	5.494 (1.034)	84	129466	243.675	243.68	80.00- 120.00	100.00
5.494	5.494 (1.034)	56	171493			109.96- 169.96	132.46
5.494	5.494 (1.034)	41	92086			47.10- 107.10	71.13

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane						CAS #: 71-55-6	
5.536	5.536 (1.042)	97	202171	227.979	227.98	80.00- 120.00	100.00
5.536	5.536 (1.042)	99	130140			34.47- 94.47	64.37
106 Carbon Tetrachloride						CAS #: 56-23-5	
5.662	5.662 (1.066)	119	217188	233.465	233.46	80.00- 120.00	100.00
5.662	5.662 (1.066)	117	224844			75.51- 135.51	103.53
113 2,2,4-Trimethylpentane						CAS #: 540-84-1	
5.914	5.914 (1.113)	57	538648	229.382	229.38	80.00- 120.00	100.00
5.928	5.928 (1.116)	56	173721			1.61- 61.61	32.25
5.914	5.914 (1.113)	41	137723			0.00- 55.08	25.57
116 Benzene						CAS #: 71-43-2	
5.942	5.942 (0.922)	78	281719	221.394	221.39	80.00- 120.00	100.00
5.942	5.942 (0.922)	77	66319			0.00- 53.47	23.54
120 1,2-Dichloroethane						CAS #: 107-06-2	
6.068	6.068 (0.941)	62	122286	200.660	200.66	80.00- 120.00	100.00
6.068	6.068 (0.941)	64	40526			1.44- 61.44	33.14
121 Heptane						CAS #: 142-82-5	
6.152	6.152 (0.954)	71	101278	193.215	193.22	80.00- 120.00	100.00
6.152	6.152 (0.954)	43	198706			167.16- 227.16	196.20
6.152	6.152 (0.954)	100	35831			4.59- 64.59	35.38
125 Trichloroethene						CAS #: 79-01-6	
6.698	6.697 (1.039)	95	133932	216.331	216.33	80.00- 120.00	100.00
6.698	6.697 (1.039)	130	147955			80.33- 140.33	110.47
6.698	6.697 (1.039)	97	86522			34.11- 94.11	64.60
127 Methylcyclohexane						CAS #: 108-87-2	
6.824	6.823 (1.059)	83	177157	225.554	225.55	80.00- 120.00	100.00
6.824	6.823 (1.059)	98	86864			18.36- 78.36	49.03
6.824	6.823 (1.059)	55	165167			64.11- 124.11	93.23
132 1,2-Dichloropropane						CAS #: 78-87-5	
7.047	7.047 (1.093)	63	110103	206.642	206.64	80.00- 120.00	100.00
7.047	7.047 (1.093)	62	75484			38.98- 98.98	68.56
7.047	7.047 (1.093)	41	60428			26.92- 86.92	54.88
136 1,4-Dioxane						CAS #: 123-91-1	
7.187	7.187 (1.115)	88	76393	220.919	220.92	80.00- 120.00	100.00
7.187	7.187 (1.115)	58	56089			45.23- 105.23	73.42
7.187	7.187 (1.115)	57	17742			0.00- 54.84	23.22

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane					CAS #: 75-27-4		
7.411	7.411 (1.150)	83	205322	208.790	208.79	80.00- 120.00	100.00
7.411	7.411 (1.150)	85	138075			35.40- 95.40	67.25
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
8.125	8.125 (1.260)	75	168764	214.950	214.95	80.00- 120.00	100.00
8.125	8.125 (1.260)	77	55305			4.01- 64.01	32.77
8.125	8.125 (1.260)	39	98181			28.76- 88.76	58.18
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
8.405	8.418 (1.304)	85	45664	204.252	204.25	80.00- 120.00	100.00
8.405	8.404 (1.304)	43	290516			608.29- 668.29	636.20
8.405	8.404 (1.304)	58	115478			218.56- 278.56	252.89
147 Toluene					CAS #: 108-88-3		
8.615	8.614 (1.336)	91	369280	209.513	209.51	80.00- 120.00	100.00
8.615	8.614 (1.336)	92	217699			28.41- 88.41	58.95
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
9.104	9.104 (0.881)	75	149743	211.788	211.79	80.00- 120.00	100.00
9.104	9.104 (0.881)	77	52321			3.39- 63.39	34.94
9.104	9.104 (0.881)	39	81505			23.99- 83.99	54.43
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
9.342	9.342 (0.904)	97	126761	203.049	203.05	80.00- 120.00	100.00
9.342	9.342 (0.904)	99	77400			30.16- 90.16	61.06
9.342	9.342 (0.904)	83	107337			52.74- 112.74	84.68
156 Tetrachloroethene					CAS #: 127-18-4		
9.356	9.356 (0.905)	166	196164	220.471	220.47	80.00- 120.00	100.00
9.356	9.356 (0.905)	129	145092			44.78- 104.78	73.96
9.356	9.356 (0.905)	131	145422			43.76- 103.76	74.13
158 2-Hexanone					CAS #: 591-78-6		
9.636	9.636 (0.932)	58	151888	224.930	224.93	80.00- 120.00	100.00
9.636	9.636 (0.932)	43	288700			158.05- 218.05	190.07
9.636	9.636 (0.932)	100	31296			0.00- 51.23	20.60
160 Dibromochloromethane					CAS #: 124-48-1		
9.762	9.762 (0.944)	129	257693	213.578	213.58	80.00- 120.00	100.00
9.762	9.762 (0.944)	127	201838			48.15- 108.15	78.32
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
9.888	9.888 (0.957)	107	202729	212.451	212.45	80.00- 120.00	100.00
9.888	9.888 (0.957)	109	197192			64.77- 124.77	97.27

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene					CAS #: 108-90-7		
10.364	10.363 (1.003)	112	310197	210.467	210.47	80.00- 120.00	100.00
10.364	10.363 (1.003)	114	99442			2.05- 62.05	32.06
10.364	10.363 (1.003)	77	173058			25.53- 85.53	55.79
167 Ethyl Benzene					CAS #: 100-41-4		
10.447	10.447 (1.011)	106	160478	211.226	211.22	80.00- 120.00	100.00
10.447	10.447 (1.011)	91	490835			275.38- 335.38	305.86
169 m,p-Xylene					CAS #: 108-38-3		
10.559	10.559 (1.022)	106	196263	211.780	211.78	80.00- 120.00	100.00
10.559	10.559 (1.022)	91	387512			163.96- 223.96	197.45
171 o-Xylene					CAS #: 95-47-6		
10.909	10.909 (1.056)	106	190065	215.963	215.96	80.00- 120.00	100.00
10.909	10.909 (1.056)	91	391262			178.07- 238.07	205.86
172 Styrene					CAS #: 100-42-5		
10.937	10.937 (1.058)	104	319053	211.056	211.06	80.00- 120.00	100.00
10.937	10.937 (1.058)	78	149096			17.50- 77.50	46.73
174 Bromoform					CAS #: 75-25-2		
11.105	11.105 (1.074)	173	254282	219.430	219.43	80.00- 120.00	100.00
11.105	11.105 (1.074)	171	130083			20.99- 80.99	51.16
175 Cumene					CAS #: 98-82-8		
11.189	11.203 (1.083)	105	579152	210.014	210.01	80.00- 120.00	100.00
11.203	11.203 (1.084)	120	157967			0.00- 57.87	27.28
11.189	11.189 (1.083)	51	58653			0.00- 40.21	10.13
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.483	11.483 (1.111)	83	264319	209.058	209.06	80.00- 120.00	100.00
11.483	11.483 (1.111)	85	174757			36.88- 96.88	66.12
182 Propylbenzene					CAS #: 103-65-1		
11.497	11.497 (1.112)	91	661188	217.703	217.70	80.00- 120.00	100.00
11.497	11.497 (1.112)	120	168326			0.00- 55.56	25.46
11.497	11.497 (1.112)	105	25958			0.00- 34.03	3.93
188 4-Ethyltoluene					CAS #: 622-96-8		
11.581	11.581 (1.120)	105	567336	201.564	201.56	80.00- 120.00	100.00
11.581	11.581 (1.120)	120	176264			0.00- 57.62	31.07
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.623	11.623 (1.125)	105	546095	252.499	252.50	80.00- 120.00	100.00
11.623	11.623 (1.125)	120	261608			23.73- 83.73	47.91

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.861	11.860 (1.148)	105	455883	214.244	214.24	80.00- 120.00	100.00
11.861	11.860 (1.148)	120	211519			17.13- 77.13	46.40
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.057	12.056 (1.167)	146	339634	207.762	207.76	80.00- 120.00	100.00
12.057	12.056 (1.167)	148	214050			33.49- 93.49	63.02
12.057	12.056 (1.167)	111	129361			7.53- 67.53	38.09
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.112	12.112 (1.172)	146	344870	214.685	214.68	80.00- 120.00	100.00
12.112	12.112 (1.172)	148	216757			33.27- 93.27	62.85
12.112	12.112 (1.172)	111	127483			7.29- 67.29	36.97
212 alpha-Chlorotoluene					CAS #: 100-44-7		
12.210	12.196 (1.181)	91	318550	168.729	168.73	80.00- 120.00	100.00
12.210	12.210 (1.181)	126	76430			0.00- 53.95	23.99
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.336	12.336 (1.194)	146	310616	214.466	214.47	80.00- 120.00	100.00
12.336	12.336 (1.194)	148	200182			32.65- 92.65	64.45
12.336	12.336 (1.194)	111	123409			9.40- 69.40	39.73
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
13.176	13.176 (1.275)	180	158320	209.832	209.83	80.00- 120.00	100.00
13.176	13.176 (1.275)	182	150503			63.10- 123.10	95.06
227 Hexachlorobutadiene					CAS #: 87-68-3		
13.232	13.232 (1.280)	225	140988	218.471	218.47	80.00- 120.00	100.00
13.232	13.232 (1.280)	223	90488			33.31- 93.31	64.18
228 Naphthalene					CAS #: 91-20-3		
13.316	13.316 (1.288)	128	33106	27.4323	27.432	80.00- 120.00	100.00
13.316	13.316 (1.288)	127	4305			0.00- 44.56	13.00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14120207.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd14.i/02dec16.b/14651201a.m
Misc Info: 200ppbv (200ppbv) Naph at 20ppbv

Calibration Date: 02-DEC-2016
Calibration Time: 15:38
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	122373	73424	171322	130978	7.03
123 1,4-Difluorobenze	514506	308704	720308	564529	9.72
163 Chlorobenzene-d5	483941	290365	677517	512839	5.97

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	0.00

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

Report Date: 05-Dec-2016 09:37

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 02dec16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: gh
Data Type: MS DATA
SampleType: ICV
SpikeList File: AT12ethanol.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msd14.i/02dec16.b/14651201a.m
Misc Info: 200ppbv (200ppbv) Naph at 20ppbv

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	200.00	197.73	98.87	60-140
11 Freon 12	200.00	215.11	107.56	70-130
15 Freon 114	200.00	217.30	108.65	70-130
17 Chloromethane	200.00	205.55	102.77	70-130
23 Butane	200.00	204.07	102.04	60-140
25 Vinyl Chloride	200.00	210.23	105.12	70-130
26 1,3-Butadiene	200.00	168.76	84.38	70-130
29 Bromomethane	200.00	208.76	104.38	70-130
30 Chloroethane	200.00	213.42	106.71	70-130
31 Isopentane	200.00	263.17	131.58	60-140
35 Freon 11	200.00	250.86	125.43	70-130
42 Ethanol	230.00	204.79	89.04	70-130
49 Freon 113	200.00	241.62	120.81	70-130
50 1,1-Dichloroethene	200.00	237.76	118.88	70-130
52 Acetone	200.00	221.59	110.80	70-130
56 Carbon Disulfide	200.00	221.65	110.83	70-130
57 2-Propanol	200.00	233.87	116.93	70-130
58 3-Chloropropene	200.00	225.21	112.61	70-130
66 Methylene Chloride	200.00	233.79	116.89	70-130
72 Methyl tert-butyl	200.00	235.03	117.52	70-130
73 trans-1,2-Dichloro	200.00	218.08	109.04	70-130
78 Hexane	200.00	234.19	117.09	70-130
82 1,1-Dichloroethane	200.00	228.02	114.01	70-130
86 Vinyl Acetate	200.00	151.41	75.70	60-140
91 cis-1,2-Dichloroet	200.00	219.17	109.59	70-130
92 2-Butanone	200.00	220.57	110.29	70-130
99 Tetrahydrofuran	200.00	215.09	107.54	70-130
100 Chloroform	200.00	228.10	114.05	70-130
103 1,1,1-Trichloroeth	200.00	227.98	113.99	70-130
106 Carbon Tetrachlori	200.00	233.46	116.73	70-130
102 Cyclohexane	200.00	243.68	121.84	70-130
113 2,2,4-Trimethylpen	200.00	229.38	114.69	70-130
116 Benzene	200.00	221.39	110.70	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	200.00	200.66	100.33	70-130
121 Heptane	200.00	193.22	96.61	70-130
125 Trichloroethene	200.00	216.33	108.17	70-130
127 Methylcyclohexane	200.00	225.55	112.78	60-140
132 1,2-Dichloropropan	200.00	206.64	103.32	70-130
136 1,4-Dioxane	200.00	220.92	110.46	70-130
138 Bromodichlorometha	200.00	208.79	104.40	70-130
144 cis-1,3-Dichloropr	200.00	214.95	107.47	70-130
145 4-Methyl-2-pentano	200.00	204.25	102.13	70-130
147 Toluene	200.00	209.51	104.76	70-130
150 trans-1,3-Dichloro	200.00	211.79	105.89	70-130
155 1,1,2-Trichloroeth	200.00	203.05	101.52	70-130
156 Tetrachloroethene	200.00	220.47	110.24	70-130
158 2-Hexanone	200.00	224.93	112.46	70-130
160 Dibromochlorometha	200.00	213.58	106.79	70-130
161 1,2-Dibromoethane	200.00	212.45	106.23	70-130
165 Chlorobenzene	200.00	210.47	105.23	70-130
167 Ethyl Benzene	200.00	211.22	105.61	70-130
169 m,p-Xylene	200.00	211.78	105.89	70-130
171 o-Xylene	200.00	215.96	107.98	70-130
172 Styrene	200.00	211.06	105.53	70-130
174 Bromoform	200.00	219.43	109.71	70-130
175 Cumene	200.00	210.01	105.01	70-130
181 1,1,2,2-Tetrachlor	200.00	209.06	104.53	70-130
182 Propylbenzene	200.00	217.70	108.85	70-130
188 4-Ethyltoluene	200.00	201.56	100.78	70-130
190 1,3,5-Trimethylben	200.00	252.50	126.25	70-130
196 1,2,4-Trimethylben	200.00	214.24	107.12	70-130
208 1,3-Dichlorobenzen	200.00	207.76	103.88	70-130
209 1,4-Dichlorobenzen	200.00	214.68	107.34	70-130
212 alpha-Chlorotoluen	200.00	168.73	84.36	70-130
214 1,2-Dichlorobenzen	200.00	214.47	107.23	70-130
226 1,2,4-Trichloroben	200.00	209.83	104.92	70-130
227 Hexachlorobutadien	200.00	218.47	109.24	70-130
228 Naphthalene	20.000	27.432	137.16	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	400.00	385.87	96.47	70-130
$ 146 Toluene-d8	400.00	394.63	98.66	70-130
$ 177 4-Bromofluorobenze	400.00	402.25	100.56	70-130

Data File: /chem/msd14.i/02dec16.b/14120207.d

Date : 02-DEC-2016 17:31

Client ID: ICV

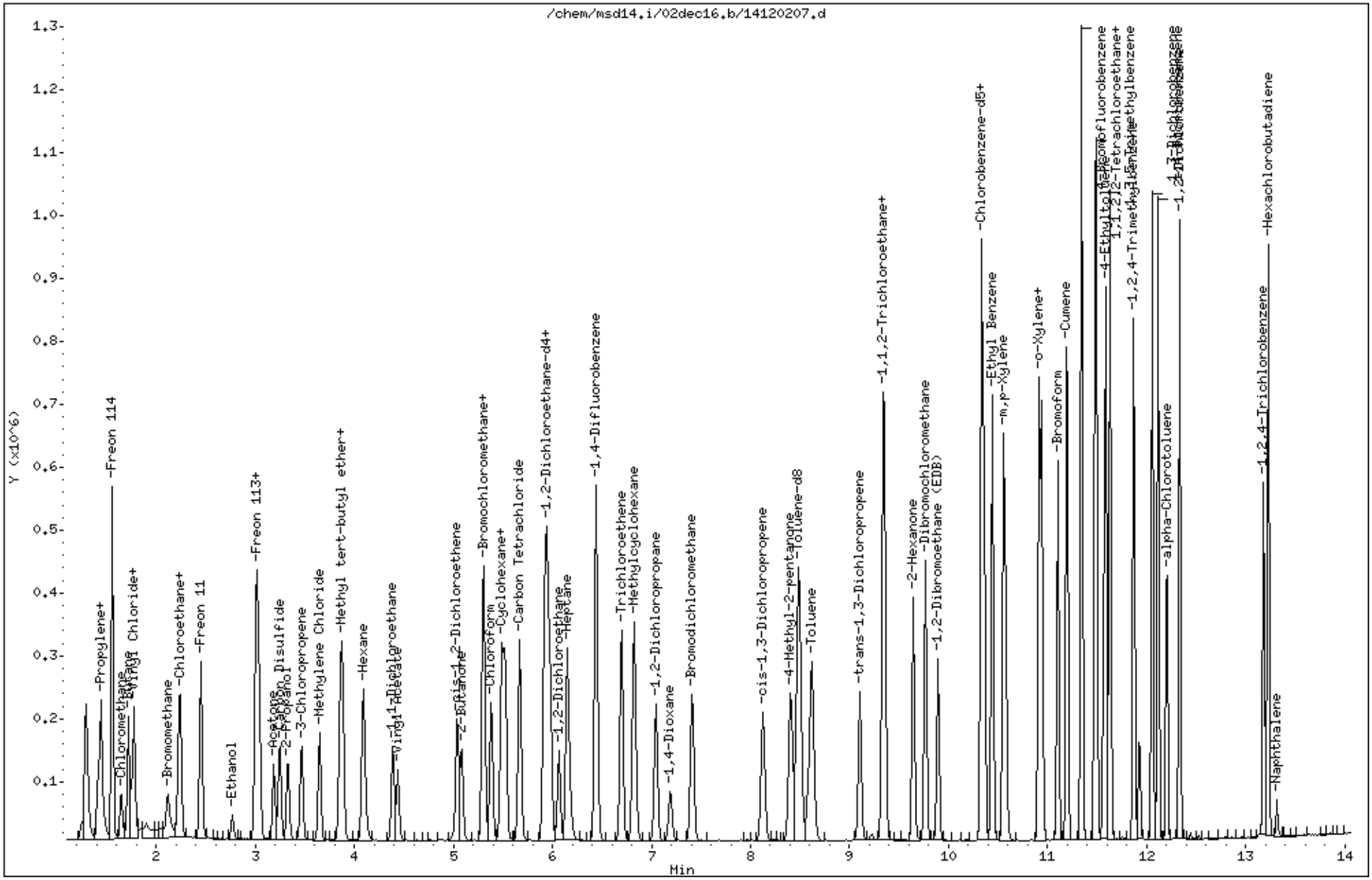
Sample Info: 50mL #2819-49

Column phase: RTX-624

Instrument: msd14.i

Operator: gh

Column diameter: 0.18



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/01dec16.b/14120102.d
Lab Smp Id: ICAL Level #2 Client Smp ID: ICAL Level #2
Inj Date : 01-DEC-2016 12:05
Operator : jg Inst ID: msd14.i
Smp Info : 50ml #2819-141
Misc Info : 5ppbv (5ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/01dec16.b/14651201a.m
Meth Date : 02-Dec-2016 16:28 jscarbro Quant Type: ISTD
Cal Date : 01-DEC-2016 12:05 Cal File: 14120102.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Level2.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.312	5.312 (1.000)	130	134104	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	103037			46.96- 106.96	76.83
5.312	5.312 (1.000)	49	173286			97.69- 157.69	129.22
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.446	6.446 (1.000)	114	565141	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	86610			0.00- 45.92	15.33
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
10.336	10.336 (1.000)	117	521518	400.000		80.00- 120.00	100.00
10.336	10.336 (1.000)	82	253662			19.32- 79.32	48.64
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.984	5.984 (1.126)	65	162691	400.000	396.45	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	84480			24.72- 84.72	51.93
$ 146 Toluene-d8						CAS #: 2037-26-5	
8.503	8.503 (1.319)	98	547357	400.000	391.72	80.00- 120.00	100.00
8.489	8.489 (1.317)	70	57868			0.00- 40.20	10.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8 (continued)							
8.503	8.503 (1.319)	100	374969			38.62- 98.62	68.51
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
11.357	11.357 (1.099)	174	320581	400.000	397.99	80.00- 120.00	100.00
11.343	11.343 (1.097)	95	380784			89.78- 149.78	118.78
11.357	11.357 (1.099)	176	311081			66.10- 126.10	97.04
11 Freon 12					CAS #: 75-71-8		
1.451	1.451 (0.273)	85	5836	5.00000	5.153	80.00- 120.00	100.00
1.451	1.451 (0.273)	87	1528			1.64- 61.64	26.18
15 Freon 114					CAS #: 76-14-2		
1.563	1.563 (0.294)	135	4762	5.00000	5.065	80.00- 120.00	100.00
1.563	1.563 (0.294)	137	1518			1.10- 61.10	31.88
25 Vinyl Chloride					CAS #: 75-01-4		
1.745	1.745 (0.328)	62	2393	5.00000	5.438	80.00- 120.00	100.00
1.745	1.745 (0.328)	64	1617			1.78- 61.78	67.57
26 1,3-Butadiene					CAS #: 106-99-0		
1.773	1.773 (0.334)	54	3235	5.00000	6.508	80.00- 120.00	100.00
1.773	1.773 (0.334)	39	4033			67.57- 127.57	124.67
35 Freon 11					CAS #: 75-69-4		
2.458	2.458 (0.463)	101	5680	5.00000	5.800	80.00- 120.00	100.00
2.458	2.458 (0.463)	103	3386			34.68- 94.68	59.61
49 Freon 113					CAS #: 76-13-1		
3.004	3.004 (0.565)	151	4493	5.00000	5.875	80.00- 120.00	100.00
3.018	3.018 (0.568)	153	2987			36.16- 96.16	66.48
3.018	3.018 (0.568)	101	4935			85.93- 145.93	109.84
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.046	3.046 (0.573)	61	3709	5.00000	5.802	80.00- 120.00	100.00
3.046	3.046 (0.573)	96	2906			30.16- 90.16	78.35
3.046	3.046 (0.573)	98	1927			8.09- 68.09	51.95
58 3-Chloropropene					CAS #: 107-05-1		
3.480	3.480 (0.655)	76	805	5.00000	4.518	80.00- 120.00	100.00(a)
3.466	3.466 (0.652)	41	4020			310.63- 370.63	499.38
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.857	3.857 (0.726)	73	5950	5.00000	5.336	80.00- 120.00	100.00
3.857	3.857 (0.726)	57	2544			0.00- 56.69	42.76
3.871	3.871 (0.729)	41	2034			0.00- 54.89	34.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.885	3.885 (0.731)	96	2766	5.00000	5.576	80.00- 120.00	100.00
3.885	3.885 (0.731)	61	3095			113.59- 173.59	111.89
3.885	3.885 (0.731)	98	1651			32.57- 92.57	59.69
78 Hexane					CAS #: 110-54-3		
4.095	4.095 (0.771)	57	4975	5.00000	6.508	80.00- 120.00	100.00
4.095	4.095 (0.771)	43	4317			34.03- 94.03	86.77
4.109	4.109 (0.773)	86	689			0.00- 45.63	13.85
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.389	4.389 (0.826)	63	4247	5.00000	5.643	80.00- 120.00	100.00
4.389	4.389 (0.826)	65	1520			1.36- 61.36	35.79
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.033	5.033 (0.947)	61	3658	5.00000	5.792	80.00- 120.00	100.00
5.047	5.047 (0.950)	96	3070			46.92- 106.92	83.93
5.047	5.047 (0.950)	98	2285			18.93- 78.93	62.47
99 Tetrahydrofuran					CAS #: 109-99-9		
5.312	5.312 (1.000)	42	3239	5.00000	5.233	80.00- 120.00	100.00
5.312	5.312 (1.000)	71	1778			3.78- 63.78	54.89
5.298	5.298 (0.997)	72	1141			4.55- 64.55	35.23
100 Chloroform					CAS #: 67-66-3		
5.396	5.396 (1.016)	83	4725	5.00000	5.476	80.00- 120.00	100.00
5.396	5.396 (1.016)	85	3249			35.58- 95.58	68.76
102 Cyclohexane					CAS #: 110-82-7		
5.494	5.494 (1.034)	84	3637	5.00000	6.302	80.00- 120.00	100.00
5.494	5.494 (1.034)	56	4512			109.96- 169.96	124.06
5.494	5.494 (1.034)	41	3185			47.10- 107.10	87.57
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.536	5.536 (1.042)	97	5455	5.00000	5.772	80.00- 120.00	100.00
5.536	5.536 (1.042)	99	3205			34.47- 94.47	58.75
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.662	5.662 (1.066)	119	5254	5.00000	5.411	80.00- 120.00	100.00
5.662	5.662 (1.066)	117	4946			75.51- 135.51	94.14
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.928	5.928 (1.116)	57	13964	5.00000	5.607	80.00- 120.00	100.00
5.928	5.928 (1.116)	56	5405			1.61- 61.61	38.71
5.914	5.914 (1.113)	41	3733			0.00- 55.08	26.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
116 Benzene					CAS #: 71-43-2		
5.942	5.942 (0.922)	78	7528	5.00000	5.574	80.00- 120.00	100.00
5.956	5.956 (0.924)	77	1906			0.00- 53.47	25.32
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.068	6.068 (0.941)	62	3236	5.00000	5.016	80.00- 120.00	100.00
6.068	6.068 (0.941)	64	1666			1.44- 61.44	51.48
121 Heptane					CAS #: 142-82-5		
6.166	6.166 (0.957)	71	3149	5.00000	5.472	80.00- 120.00	100.00
6.152	6.152 (0.954)	43	6583			167.16- 227.16	209.05
6.166	6.166 (0.957)	100	642			4.59- 64.59	20.39
125 Trichloroethene					CAS #: 79-01-6		
6.698	6.698 (1.039)	95	3520	5.00000	5.451	80.00- 120.00	100.00
6.698	6.698 (1.039)	130	3728			80.33- 140.33	105.91
6.698	6.698 (1.039)	97	2711			34.11- 94.11	77.02
132 1,2-Dichloropropane					CAS #: 78-87-5		
7.047	7.047 (1.093)	63	2810	5.00000	4.988	80.00- 120.00	100.00(a)
7.047	7.047 (1.093)	62	1815			38.98- 98.98	64.59
7.047	7.047 (1.093)	41	1989			26.92- 86.92	70.78
138 Bromodichloromethane					CAS #: 75-27-4		
7.425	7.425 (1.152)	83	5061	5.00000	4.915	80.00- 120.00	100.00(a)
7.411	7.411 (1.150)	85	3815			35.40- 95.40	75.38
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
8.125	8.125 (1.260)	75	4201	5.00000	5.022	80.00- 120.00	100.00
8.125	8.125 (1.260)	77	1757			4.01- 64.01	41.82
8.125	8.125 (1.260)	39	2903			28.76- 88.76	69.10
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
8.405	8.405 (1.304)	85	1399	5.00000	5.537	80.00- 120.00	100.00
8.405	8.405 (1.304)	43	6566			608.29- 668.29	469.34
8.419	8.419 (1.306)	58	2521			218.56- 278.56	180.20
147 Toluene					CAS #: 108-88-3		
8.615	8.615 (1.336)	91	9747	5.00000	5.297	80.00- 120.00	100.00
8.615	8.615 (1.336)	92	5717			28.41- 88.41	58.65
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
9.104	9.104 (0.881)	75	3514	5.00000	4.765	80.00- 120.00	100.00(a)
9.132	9.132 (0.884)	77	5683			3.39- 63.39	161.72
9.104	9.104 (0.881)	39	2901			23.99- 83.99	82.56

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

  155 1,1,2-Trichloroethane                          CAS #: 79-00-5
  9.342   9.342 (0.904)    97      3765 5.00000    5.374  80.00- 120.00   100.00
  9.342   9.342 (0.904)    99      2051                   30.16-  90.16    54.48
  9.342   9.342 (0.904)    83      2937                   52.74- 112.74    78.01
-------------------------------------------------------------------------------
  156 Tetrachloroethene                              CAS #: 127-18-4
  9.356   9.356 (0.905)   166      4451 5.00000    4.889  80.00- 120.00   100.00(a)
  9.356   9.356 (0.905)   129      3620                   44.78- 104.78    81.33
  9.356   9.356 (0.905)   131      3542                   43.76- 103.76    79.58
-------------------------------------------------------------------------------
  160 Dibromochloromethane                           CAS #: 124-48-1
  9.762   9.762 (0.944)   129      6271 5.00000    4.901  80.00- 120.00   100.00(a)
  9.762   9.762 (0.944)   127      4358                   48.15- 108.15    69.49
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                        CAS #: 106-93-4
  9.888   9.888 (0.957)   107      5171 5.00000    4.994  80.00- 120.00   100.00(a)
  9.888   9.888 (0.957)   109      4851                   64.77- 124.77    93.81
-------------------------------------------------------------------------------
  165 Chlorobenzene                                  CAS #: 108-90-7
 10.364  10.364 (1.003)   112      7307 5.00000    4.757  80.00- 120.00   100.00(a)
 10.364  10.364 (1.003)   114      2515                    2.05-  62.05    34.42
 10.336  10.336 (1.000)    77      8676                   25.53-  85.53   118.74
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                  CAS #: 100-41-4
 10.447  10.447 (1.011)   106      3858 5.00000    4.853  80.00- 120.00   100.00(a)
 10.447  10.447 (1.011)    91     12584                  275.38- 335.38   326.18
-------------------------------------------------------------------------------
  169 m,p-Xylene                                     CAS #: 108-38-3
 10.559  10.559 (1.022)   106      5093 5.00000    5.228  80.00- 120.00   100.00
 10.559  10.559 (1.022)    91      9422                  163.96- 223.96   185.00
-------------------------------------------------------------------------------
  171 o-Xylene                                       CAS #: 95-47-6
 10.909  10.909 (1.056)   106      4902 5.00000    5.340  80.00- 120.00   100.00
 10.909  10.909 (1.056)    91      9547                  178.07- 238.07   194.76
-------------------------------------------------------------------------------
  172 Styrene                                        CAS #: 100-42-5
 10.937  10.937 (1.058)   104      7708 5.00000    4.893  80.00- 120.00   100.00(a)
 10.937  10.937 (1.058)    78      3533                   17.50-  77.50    45.84
-------------------------------------------------------------------------------
  174 Bromoform                                      CAS #: 75-25-2
 11.105  11.105 (1.074)   173      6119 5.00000    4.947  80.00- 120.00   100.00(a)
 11.105  11.105 (1.074)   171      3162                   20.99-  80.99    51.68
-------------------------------------------------------------------------------
  175 Cumene                                         CAS #: 98-82-8
 11.203  11.203 (1.084)   105     14148 5.00000    4.877  80.00- 120.00   100.00(a)
 11.203  11.203 (1.084)   120      3976                    0.00-  57.87    28.10
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
175 Cumene (continued)							
11.203	11.203 (1.084)	51	1550			0.00- 40.21	10.96
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.483	11.483 (1.111)	83	6444	5.00000	4.888	80.00- 120.00	100.00(a)
11.483	11.483 (1.111)	85	3851			36.88- 96.88	59.76
182 Propylbenzene					CAS #: 103-65-1		
11.497	11.497 (1.112)	91	15767	5.00000	4.936	80.00- 120.00	100.00(a)
11.497	11.497 (1.112)	120	4140			0.00- 55.56	26.26
11.497	11.497 (1.112)	105	608			0.00- 34.03	3.86
188 4-Ethyltoluene					CAS #: 622-96-8		
11.581	11.581 (1.120)	105	14514	5.00000	4.816	80.00- 120.00	100.00(a)
11.581	11.581 (1.120)	120	4231			0.00- 57.62	29.15
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.623	11.623 (1.125)	105	11355	5.00000	5.574	80.00- 120.00	100.00
11.623	11.623 (1.125)	120	6518			23.73- 83.73	57.40
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.875	11.875 (1.149)	105	11600	5.00000	5.011	80.00- 120.00	100.00
11.875	11.875 (1.149)	120	5063			17.13- 77.13	43.65
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.057	12.057 (1.167)	146	9013	5.00000	5.129	80.00- 120.00	100.00
12.057	12.057 (1.167)	148	5134			33.49- 93.49	56.96
12.057	12.057 (1.167)	111	3080			7.53- 67.53	34.17
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.112	12.112 (1.172)	146	8364	5.00000	4.978	80.00- 120.00	100.00(a)
12.112	12.112 (1.172)	148	4934			33.27- 93.27	58.99
12.112	12.112 (1.172)	111	3182			7.29- 67.29	38.04
212 alpha-Chlorotoluene					CAS #: 100-44-7		
12.210	12.210 (1.181)	91	9622	5.00000	4.899	80.00- 120.00	100.00(a)
12.210	12.210 (1.181)	126	2338			0.00- 53.95	24.30
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.336	12.336 (1.194)	146	7610	5.00000	4.980	80.00- 120.00	100.00(a)
12.336	12.336 (1.194)	148	4420			32.65- 92.65	58.08
12.336	12.336 (1.194)	111	3288			9.40- 69.40	43.21

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: msd14.i
Lab File ID: 14120102.d
Lab Smp Id: ICAL Level #2
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msd14.i/01dec16.b/14651201a.m
Misc Info: 5ppbv (5ppbv)

Calibration Date: 01-DEC-2016
Calibration Time: 14:23
Client Smp ID: ICAL Level #2
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	124267	74560	173974	134104	7.92
123 1,4-Difluorobenze	508921	305353	712489	565141	11.05
163 Chlorobenzene-d5	476110	285666	666554	521518	9.54

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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/msd14.i/01dec16.b/14120102.d

Date : 01-DEC-2016 12:05

Client ID: ICAL Level #2

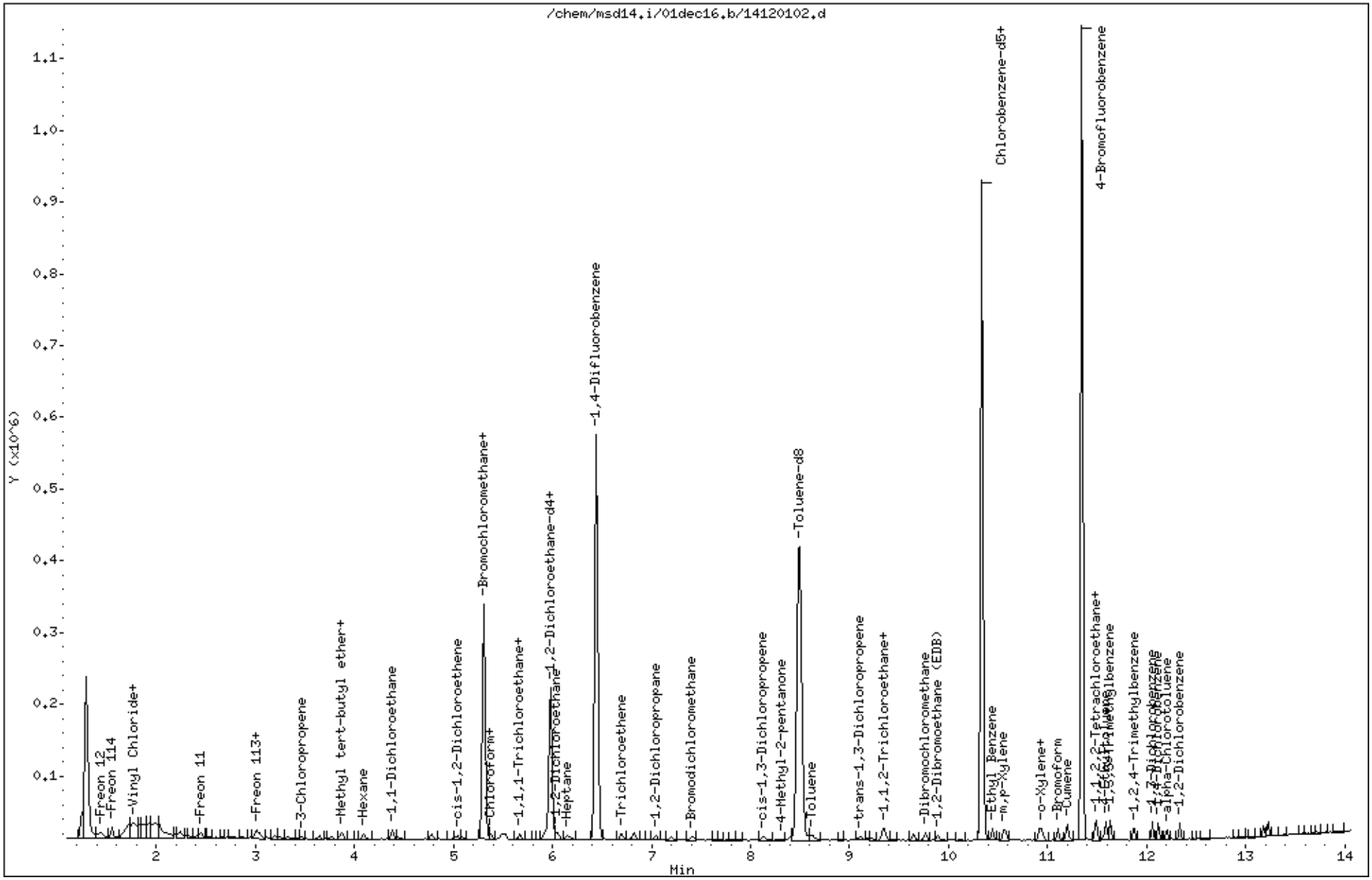
Sample Info: 50ml #2819-141

Column phase: RTX-624

Instrument: msd14.i

Operator: jg

Column diameter: 0.18



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/19dec16.b/14121907.d
Lab Smp Id: ICAL Level 3 Client Smp ID: ICAL Level 3
Inj Date : 19-DEC-2016 11:18
Operator : jg Inst ID: msd14.i
Smp Info : 5.0mL #2819-185
Misc Info : 5.0ppbv (200ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/19dec16.b/14651201b.m
Meth Date : 20-Dec-2016 07:39 jscarbro Quant Type: ISTD
Cal Date : 19-DEC-2016 11:18 Cal File: 14121907.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ComboICALmVB.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		
2.486	2.486 (0.468)	55	5163	20.0000	20.000	0.00- 0.00	100.00
2.472	2.472 (0.465)	42	9004			0.00- 0.00	174.39
34 Pentane					CAS #: 109-66-0		
2.528	2.528 (0.476)	43	2855	20.0000	20.000	0.00- 0.00	100.00
2.528	2.528 (0.476)	57	504			0.00- 0.00	17.65
2.528	2.528 (0.476)	72	166			0.00- 0.00	5.81
44 Ethyl Ether					CAS #: 60-29-7		
2.794	2.794 (0.526)	74	2401	20.0000	20.000	0.00- 0.00	100.00(T)
2.794	2.794 (0.526)	59	4301			0.00- 0.00	179.13
0.000	1.000 (0.000)	31	0			0.00- 0.00	0.00
53 Iodomethane					CAS #: 74-88-4		
3.227	3.227 (0.608)	142	6134	20.0000	20.000	0.00- 0.00	100.00
3.227	3.227 (0.608)	127	2620			0.00- 0.00	42.71
59 Cyclopentene					CAS #: 142-29-0		
3.479	3.479 (0.655)	67	10146	20.0000	20.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
59 Cyclopentene (continued)							
3.479	3.479 (0.655)	68	4335			0.00- 30.00	42.73
3.479	3.479 (0.655)	53	2315			0.00- 30.00	22.82
74 Acrylonitrile					CAS #: 107-13-1		
3.997	3.997 (0.752)	53	6263	20.0000	20.000	0.00- 0.00	100.00
3.997	3.997 (0.752)	52	5246			0.00- 0.00	83.76
76 1-Hexene					CAS #: 592-41-6		
4.025	4.025 (0.758)	55	4751	20.0000	20.000	0.00- 0.00	100.00
4.025	4.025 (0.758)	41	6367			0.00- 0.00	134.01
4.025	4.025 (0.758)	84	1961			0.00- 0.00	41.28
84 1-Propanol					CAS #: 71-23-8		
4.543	4.543 (0.855)	42	1155	20.0000	20.000	80.00- 120.00	100.00
4.529	4.529 (0.852)	59	1271			0.00- 30.00	110.04
4.529	4.529 (0.852)	41	1053			0.00- 30.00	91.17
90 2,2-Dichloropropane					CAS #: 594-20-7		
4.990	4.990 (0.939)	77	8571	20.0000	20.000	80.00- 120.00	100.00
4.990	4.990 (0.939)	79	2869			0.00- 30.00	33.47
5.004	5.004 (0.942)	97	1922			0.00- 30.00	22.42
93 Methyl Acrylate					CAS #: 96-33-3		
5.158	5.158 (0.971)	55	15376	20.0000	20.000	0.00- 0.00	100.00
5.158	5.158 (0.971)	85	1946			0.00- 0.00	12.66
5.158	5.158 (0.971)	58	1007			0.00- 0.00	6.55
* 98 Bromochloromethane					CAS #: 74-97-5		
5.312	5.312 (1.000)	130	113631	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	86904			46.96- 106.96	76.48
5.312	5.312 (1.000)	49	145406			97.69- 157.69	127.96
107 1,1-Dichloropropene					CAS #: 563-58-6		
5.718	5.718 (1.076)	110	3885	20.0000	20.000	80.00- 120.00	100.00
5.718	5.718 (1.076)	75	8239			0.00- 30.00	212.07
115 Isobutanol					CAS #: 78-83-1		
5.928	5.928 (0.920)	43	5911	20.0000	20.000	80.00- 120.00	100.00
5.928	5.928 (0.920)	41	4534			0.00- 30.00	76.70
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.446	6.446 (1.000)	114	477819	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	70198			0.00- 45.92	14.69
124 n-Butanol					CAS #: 71-36-3		
6.683	6.683 (1.037)	56	9023	20.0000	20.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
124 n-Butanol (continued)							
6.683	6.683 (1.037)	41	6768			0.00- 30.00	75.01
6.683	6.683 (1.037)	43	5221			0.00- 30.00	57.86
128 Ethyl acrylate					CAS #: 140-88-5		
6.879	6.879 (1.067)	55	14638	20.0000	20.000	0.00- 0.00	100.00
6.879	6.879 (1.067)	99	799			0.00- 0.00	5.46
6.879	6.879 (1.067)	45	1263			0.00- 0.00	8.63
131 2-Pentanone					CAS #: 107-87-9		
7.019	7.019 (1.089)	43	19820	20.0000	20.000	0.00- 0.00	100.00
7.019	7.019 (1.089)	58	1323			0.00- 0.00	6.68
7.019	7.019 (1.089)	86	3185			0.00- 0.00	16.07
134 Methyl Methacrylate					CAS #: 80-62-6		
7.187	7.187 (1.115)	41	10562	20.0000	20.000	0.00- 0.00	100.00
7.173	7.173 (1.113)	69	6672			0.00- 0.00	63.17
7.187	7.187 (1.115)	100	3319			0.00- 0.00	31.42
137 Dibromomethane					CAS #: 74-95-3		
7.215	7.215 (1.119)	174	9130	20.0000	20.000	0.00- 0.00	100.00
7.201	7.201 (1.117)	93	7475			0.00- 0.00	81.87
7.201	7.201 (1.117)	95	7012			0.00- 0.00	76.80
148 Octane					CAS #: 111-65-9		
8.712	8.712 (1.352)	57	6951	20.0000	20.000	0.00- 0.00	100.00
8.712	8.712 (1.352)	85	6809			0.00- 0.00	97.96
8.698	8.698 (1.349)	43	15795			0.00- 0.00	227.23
157 1,3-Dichloropropane					CAS #: 142-28-9		
9.552	9.552 (1.798)	76	10581	20.0000	20.000	80.00- 120.00	100.00
9.552	9.552 (1.798)	41	8243			0.00- 30.00	77.90
9.552	9.552 (1.798)	78	3927			0.00- 30.00	37.11
159 Butyl Acetate					CAS #: 123-86-4		
9.762	9.762 (1.514)	56	1966	20.0000	20.000	80.00- 120.00	100.00
9.762	9.762 (1.514)	73	761			0.00- 30.00	38.71
9.762	9.762 (1.514)	43	4593			0.00- 30.00	233.62
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
10.335	10.335 (1.000)	117	433556	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	209720			19.32- 79.32	48.37
170 Nonane					CAS #: 111-84-2		
10.531	10.531 (1.019)	43	14852	20.0000	20.000	0.00- 0.00	100.00
10.531	10.531 (1.019)	57	12830			0.00- 0.00	86.39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
170 Nonane (continued)							
10.531	10.531 (1.019)	85	4709			0.00- 0.00	31.71
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
10.461	10.461 (1.012)	131	11825	20.0000	20.000	80.00- 120.00	100.00
10.461	10.461 (1.012)	117	8056			0.00- 30.00	68.13
10.461	10.461 (1.012)	95	4000			0.00- 30.00	33.83
173 2-Heptanone					CAS #: 110-43-0		
11.063	11.063 (1.070)	58	12279	20.0000	20.000	80.00- 120.00	100.00
11.049	11.049 (1.069)	43	19143			0.00- 30.00	155.90
176 Cyclohexanone					CAS #: 108-94-1		
11.329	11.329 (1.096)	55	9652	20.0000	20.000	80.00- 120.00	100.00
11.329	11.329 (1.096)	98	3588			0.00- 30.00	37.17
11.315	11.315 (1.095)	42	5559			0.00- 30.00	57.59
180 Bromobenzene					CAS #: 108-86-1		
11.441	11.441 (1.107)	156	13908	20.0000	20.000	80.00- 120.00	100.00
11.441	11.441 (1.107)	77	18556			0.00- 30.00	133.42
11.441	11.441 (1.107)	158	13260			0.00- 30.00	95.34
184 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.525	11.525 (1.115)	89	3300	20.0000	20.000	0.00- 0.00	100.00
11.525	11.525 (1.115)	53	5567			0.00- 0.00	168.70
11.525	11.525 (1.115)	124	1372			0.00- 0.00	41.58
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.511	11.511 (1.114)	110	6360	20.0000	20.000	80.00- 120.00	100.00
11.511	11.511 (1.114)	61	4249			0.00- 30.00	66.81
11.511	11.511 (1.114)	112	4015			0.00- 30.00	63.13
187 Decane					CAS #: 124-18-5		
11.581	11.581 (1.120)	57	14793	20.0000	20.000	0.00- 0.00	100.00
11.581	11.581 (1.120)	71	4554			0.00- 0.00	30.78
11.581	11.581 (1.120)	142	646			0.00- 0.00	4.37
189 2-Chlorotoluene					CAS #: 95-49-8		
11.567	11.567 (1.119)	126	10119	20.0000	20.000	80.00- 120.00	100.00
11.567	11.567 (1.119)	91	26719			0.00- 30.00	264.05
11.567	11.567 (1.119)	65	2219			0.00- 30.00	21.93
191 4-Chlorotoluene					CAS #: 106-43-4		
11.651	11.651 (1.127)	126	10520	20.0000	20.000	80.00- 120.00	100.00
11.651	11.651 (1.127)	91	27411			0.00- 30.00	260.56
11.651	11.651 (1.127)	63	3532			0.00- 30.00	33.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
195 tert-Butylbenzene					CAS #: 98-06-6		
11.832	11.832 (1.145)	119	32338	20.0000	20.000	80.00- 120.00	100.00
11.832	11.832 (1.145)	134	8306			0.00- 30.00	25.68
11.818	11.818 (1.143)	91	20148			0.00- 30.00	62.30
197 Pentachloroethane					CAS #: 76-01-7		
11.860	11.860 (1.148)	167	9991	20.0000	20.000	80.00- 120.00	100.00
11.860	11.860 (1.148)	117	10295			0.00- 30.00	103.04
203 sec-Butylbenzene					CAS #: 135-98-8		
11.958	11.958 (1.157)	105	45489	20.0000	20.000	80.00- 120.00	100.00
11.958	11.958 (1.157)	134	9623			0.00- 30.00	21.15
11.958	11.958 (1.157)	91	6919			0.00- 30.00	15.21
206 bis(2-Chloroethyl) Ether					CAS #: 111-44-4		
12.042	12.042 (1.165)	93	14682	20.0000	20.000	0.00- 0.00	100.00
12.042	12.042 (1.165)	95	4283			0.00- 0.00	29.17
12.042	12.042 (1.165)	63	10753			0.00- 0.00	73.24
207 p-Cymene					CAS #: 99-87-6		
12.056	12.056 (1.167)	119	38456	20.0000	20.000	80.00- 120.00	100.00
12.056	12.056 (1.167)	134	10006			0.00- 30.00	26.02
12.056	12.056 (1.167)	91	8304			0.00- 30.00	21.59
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.126	12.126 (1.173)	120	15162	20.0000	20.000	80.00- 120.00	100.00
12.126	12.126 (1.173)	105	32804			0.00- 30.00	216.36
12.126	12.126 (1.173)	77	3743			0.00- 30.00	24.69
215 Undecane					CAS #: 1120-21-4		
12.294	12.294 (1.190)	57	15077	20.0000	20.000	0.00- 0.00	100.00
12.294	12.294 (1.190)	43	12548			0.00- 0.00	83.23
213 Butylbenzene					CAS #: 104-51-8		
12.294	12.294 (1.190)	134	9407	20.0000	20.000	80.00- 120.00	100.00
12.294	12.294 (1.190)	91	30021			0.00- 30.00	319.13
12.294	12.294 (1.190)	92	16084			0.00- 30.00	170.98
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
12.784	12.784 (1.237)	157	10992	20.0000	20.000	80.00- 120.00	100.00
12.770	12.770 (1.236)	75	7861			0.00- 30.00	71.52
12.784	12.784 (1.237)	155	8051			0.00- 30.00	73.24
225 Dodecane					CAS #: 112-40-3		
12.854	12.854 (1.244)	57	11101	20.0000	20.000	0.00- 0.00	100.00
12.854	12.854 (1.244)	43	8218			0.00- 0.00	74.03

QC Flag Legend

T - Target compound detected outside RT window.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14121907.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msd14.i/19dec16.b/14651201b.m
Misc Info: 5.0ppbv (200ppbv)

Calibration Date: 19-DEC-2016
Calibration Time: 08:17
Client Smp ID: ICAL Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	106902	64141	149663	113631	6.29
123 1,4-Difluorobenze	451282	270769	631795	477819	5.88
163 Chlorobenzene-d5	416923	250154	583692	433556	3.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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/msd14.i/19dec16.b/14121907.d

Date : 19-DEC-2016 11:18

Client ID: ICAL Level 3

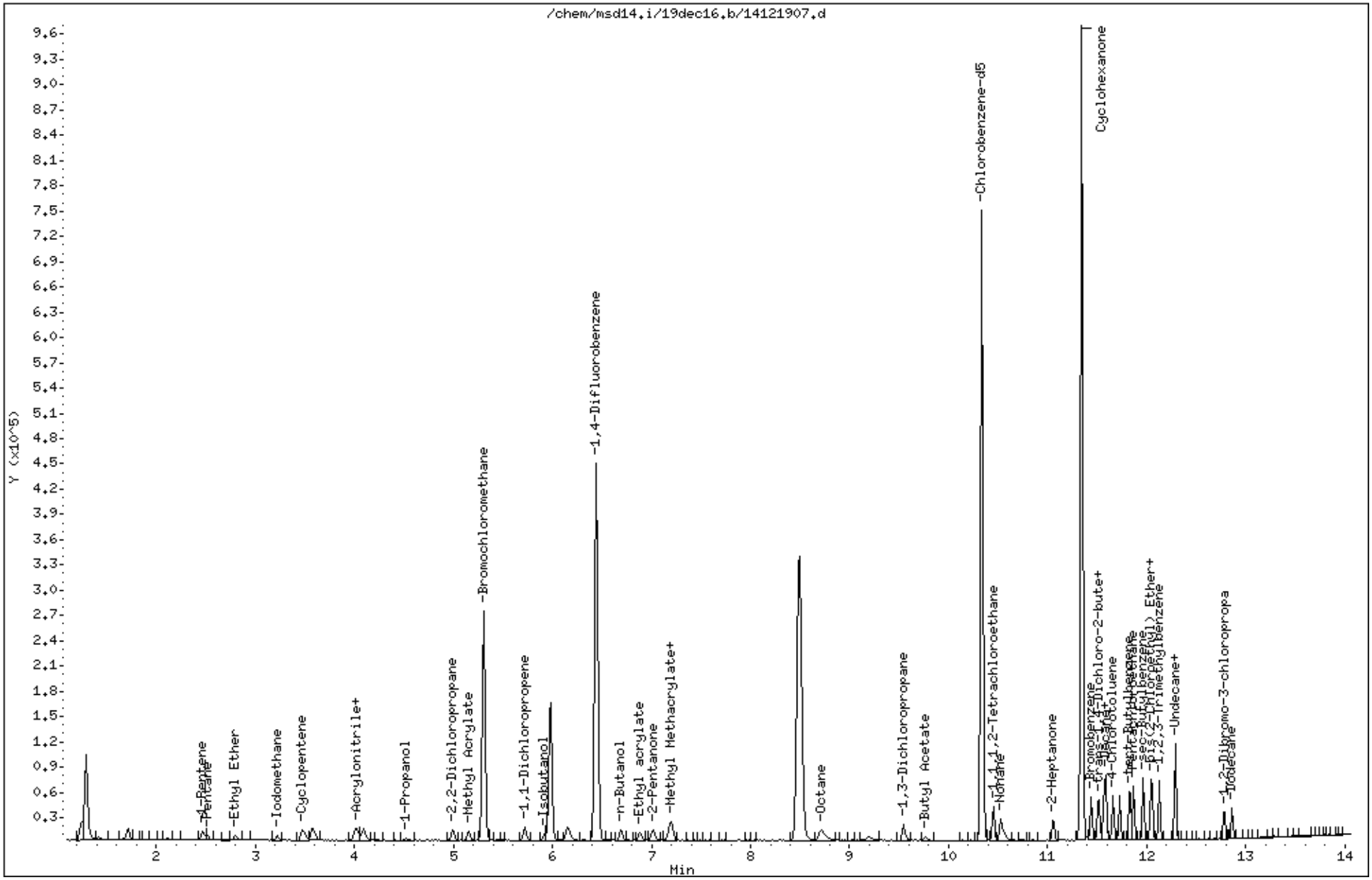
Sample Info: 5.0mL #2819-185

Column phase: RTX-624

Instrument: msd14.i

Operator: jg

Column diameter: 0.18



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/01dec16.b/14120103.d
Lab Smp Id: ICAL Level #3 Client Smp ID: ICAL Level #3
Inj Date : 01-DEC-2016 12:33
Operator : jg Inst ID: msd14.i
Smp Info : 5.0ml #2819-132
Misc Info : 20ppbv (200ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/01dec16.b/14651201a.m
Meth Date : 02-Dec-2016 16:28 jscarbro Quant Type: ISTD
Cal Date : 01-DEC-2016 12:33 Cal File: 14120103.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12curve.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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.312	5.312 (1.000)	130	131910	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	103030			46.96- 106.96	78.11
5.312	5.312 (1.000)	49	168942			97.69- 157.69	128.07
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.446	6.446 (1.000)	114	556349	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	86260			0.00- 45.92	15.50
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
10.335	10.335 (1.000)	117	520119	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	256133			19.32- 79.32	49.25
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.984	5.984 (1.126)	65	161869	400.000	400.75	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	82420			24.72- 84.72	50.92
$ 146 Toluene-d8						CAS #: 2037-26-5	
8.503	8.503 (1.319)	98	559027	400.000	404.78	80.00- 120.00	100.00
8.503	8.503 (1.319)	70	60247			0.00- 40.20	10.78

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

$ 146 Toluene-d8 (continued)
  8.503   8.503 (1.319)   100    377478                    38.62-  98.62    67.52
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 11.357  11.357 (1.099)   174    329206 400.000   407.30  80.00- 120.00   100.00
 11.343  11.343 (1.097)    95    387689                    89.78- 149.78   117.76
 11.357  11.357 (1.099)   176    319157                    66.10- 126.10    96.95
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.423   1.423 (0.268)    41      7386 20.0000   19.859  80.00- 120.00   100.00(a)
  1.423   1.423 (0.268)    42      4733                    33.78-  93.78    64.08
  1.423   1.423 (0.268)    39      4594                    36.58-  96.58    62.20
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.451   1.451 (0.273)    85     18643 20.0000   17.699  80.00- 120.00   100.00
  1.451   1.451 (0.273)    87      6265                     1.64-  61.64    33.61
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.563   1.563 (0.294)   135     15539 20.0000   17.748  80.00- 120.00   100.00
  1.563   1.563 (0.294)   137      5332                     1.10-  61.10    34.31
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.647   1.647 (0.310)    50      8136 20.0000   20.218  80.00- 120.00   100.00
  1.647   1.647 (0.310)    52      2822                     2.75-  62.75    34.69
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.716   1.716 (0.323)    58      2568 20.0000   24.782  80.00- 120.00   100.00
  1.716   1.716 (0.323)    43     15172                   736.71- 796.71   590.81
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.758   1.758 (0.331)    62      7594 20.0000   18.292  80.00- 120.00   100.00
  1.758   1.758 (0.331)    64      3452                     1.78-  61.78    45.46
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.772   1.772 (0.334)    54      8048 20.0000   17.492  80.00- 120.00   100.00
  1.772   1.772 (0.334)    39      6877                    67.57- 127.57    85.45
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.122   2.122 (0.399)    94      4234 20.0000   17.818  80.00- 120.00   100.00(a)
  2.122   2.122 (0.399)    96      4546                    62.49- 122.49   107.37
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.234   2.234 (0.421)    64      3756 20.0000   18.818  80.00- 120.00   100.00(a)
  2.234   2.234 (0.421)    66       974                     0.76-  60.76    25.93
-------------------------------------------------------------------------------
   31 Isopentane                                    CAS #: 78-78-4
  2.248   2.248 (0.423)    43     10340 20.0000   23.710  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
31 Isopentane (continued)							
2.248	2.248 (0.423)	57	6477			37.62- 97.62	62.64
2.262	2.262 (0.426)	72	444			0.00- 36.64	4.29
35 Freon 11					CAS #: 75-69-4		
2.458	2.458 (0.463)	101	20090	20.0000	20.634	80.00- 120.00	100.00
2.458	2.458 (0.463)	103	12462			34.68- 94.68	62.03
42 Ethanol					CAS #: 64-17-5		
2.752	2.752 (0.518)	45	3516	20.0000	19.249	80.00- 120.00	100.00(a)
2.752	2.752 (0.518)	46	1476			11.88- 71.88	41.98
49 Freon 113					CAS #: 76-13-1		
3.018	3.018 (0.568)	151	13784	20.0000	18.715	80.00- 120.00	100.00
3.018	3.018 (0.568)	153	9409			36.16- 96.16	68.26
3.018	3.018 (0.568)	101	16940			85.93- 145.93	122.90
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.046	3.046 (0.573)	61	12702	20.0000	20.150	80.00- 120.00	100.00
3.046	3.046 (0.573)	96	8146			30.16- 90.16	64.13
3.046	3.046 (0.573)	98	5421			8.09- 68.09	42.68
52 Acetone					CAS #: 67-64-1		
3.186	3.186 (0.600)	58	4033	20.0000	19.764	80.00- 120.00	100.00(a)
3.186	3.186 (0.600)	43	12939			284.49- 344.49	320.83
56 Carbon Disulfide					CAS #: 75-15-0		
3.256	3.256 (0.613)	76	19595	20.0000	18.611	80.00- 120.00	100.00(a)
57 2-Propanol					CAS #: 67-63-0		
3.326	3.326 (0.626)	45	14610	20.0000	18.216	80.00- 120.00	100.00(a)
3.326	3.326 (0.626)	43	3424			0.00- 46.84	23.44
3.326	3.326 (0.626)	59	655			0.00- 34.10	4.48
58 3-Chloropropene					CAS #: 107-05-1		
3.479	3.479 (0.655)	76	2855	20.0000	17.957	80.00- 120.00	100.00(a)
3.479	3.479 (0.655)	41	10012			310.63- 370.63	350.68
66 Methylene Chloride					CAS #: 75-09-2		
3.647	3.647 (0.687)	49	10636	20.0000	21.785	80.00- 120.00	100.00
3.647	3.647 (0.687)	84	7048			35.90- 95.90	66.27
3.633	3.633 (0.684)	51	2956			0.00- 59.48	27.79
71 tert-Butyl alcohol					CAS #: 75-65-0		
3.759	3.759 (0.708)	59	16763	20.0000	18.059	80.00- 120.00	100.00(a)
3.759	3.759 (0.708)	41	3951			0.00- 51.53	23.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol (continued)							
3.759	3.759 (0.708)	57	1638			0.00- 39.96	9.77
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.857	3.857 (0.726)	73	19104	20.0000	17.998	80.00- 120.00	100.00
3.857	3.857 (0.726)	57	6816			0.00- 56.69	35.68
3.857	3.857 (0.726)	41	4466			0.00- 54.89	23.38
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.885	3.885 (0.731)	96	7371	20.0000	16.449	80.00- 120.00	100.00
3.885	3.885 (0.731)	61	10520			113.59- 173.59	142.72
3.885	3.885 (0.731)	98	5049			32.57- 92.57	68.50
78 Hexane					CAS #: 110-54-3		
4.095	4.095 (0.771)	57	13772	20.0000	18.710	80.00- 120.00	100.00
4.095	4.095 (0.771)	43	9258			34.03- 94.03	67.22
4.095	4.095 (0.771)	86	2068			0.00- 45.63	15.02
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.389	4.389 (0.826)	63	13751	20.0000	18.912	80.00- 120.00	100.00
4.403	4.403 (0.829)	65	4577			1.36- 61.36	33.28
83 Isopropyl ether					CAS #: 108-20-3		
4.375	4.375 (0.824)	45	31069	20.0000	18.473	80.00- 120.00	100.00(a)
4.389	4.389 (0.826)	87	7325			0.00- 53.64	23.58
4.389	4.389 (0.826)	59	3321			0.00- 40.89	10.69
86 Vinyl Acetate					CAS #: 108-05-4		
4.445	4.445 (0.837)	86	1948	20.0000	17.887	80.00- 120.00	100.00(a)
4.445	4.445 (0.837)	43	21305			1119.78-1179.78	1093.69
4.445	4.445 (0.837)	42	2166			63.36- 123.36	111.19
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.781	4.781 (0.900)	59	25090	20.0000	17.593	80.00- 120.00	100.00(a)
4.767	4.767 (0.897)	87	9060			7.71- 67.71	36.11
4.781	4.781 (0.900)	41	4702			0.00- 47.13	18.74
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.033	5.033 (0.947)	61	11417	20.0000	18.758	80.00- 120.00	100.00
5.047	5.047 (0.950)	96	9037			46.92- 106.92	79.15
5.047	5.047 (0.950)	98	5551			18.93- 78.93	48.62
92 2-Butanone					CAS #: 78-93-3		
5.089	5.089 (0.958)	72	3690	20.0000	18.346	80.00- 120.00	100.00(a)
5.089	5.089 (0.958)	43	17741			439.29- 499.29	480.79
5.089	5.089 (0.958)	57	1166			8.51- 68.51	31.60

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Tetrahydrofuran					CAS #: 109-99-9		
5.298	5.298 (0.997)	42	9753	20.0000	17.157	80.00- 120.00	100.00
5.298	5.298 (0.997)	71	3524			3.78- 63.78	36.13
5.312	5.312 (1.000)	72	3574			4.55- 64.55	36.65
100 Chloroform					CAS #: 67-66-3		
5.382	5.382 (1.013)	83	14892	20.0000	18.102	80.00- 120.00	100.00
5.382	5.382 (1.013)	85	10984			35.58- 95.58	73.76
102 Cyclohexane					CAS #: 110-82-7		
5.494	5.494 (1.034)	84	10984	20.0000	19.508	80.00- 120.00	100.00
5.494	5.494 (1.034)	56	13948			109.96- 169.96	126.98
5.494	5.494 (1.034)	41	8132			47.10- 107.10	74.03
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.536	5.536 (1.042)	97	17523	20.0000	19.125	80.00- 120.00	100.00
5.536	5.536 (1.042)	99	10601			34.47- 94.47	60.50
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.662	5.662 (1.066)	119	17513	20.0000	18.726	80.00- 120.00	100.00
5.662	5.662 (1.066)	117	18244			75.51- 135.51	104.17
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.928	5.928 (1.116)	57	44232	20.0000	18.505	80.00- 120.00	100.00
5.928	5.928 (1.116)	56	14145			1.61- 61.61	31.98
5.928	5.928 (1.116)	41	10860			0.00- 55.08	24.55
116 Benzene					CAS #: 71-43-2		
5.942	5.942 (0.922)	78	23426	20.0000	18.160	80.00- 120.00	100.00
5.942	5.942 (0.922)	77	5784			0.00- 53.47	24.69
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.040	6.040 (1.137)	73	20482	20.0000	17.568	80.00- 120.00	100.00(a)
6.040	6.040 (1.137)	87	5259			0.00- 56.16	25.68
6.040	6.040 (1.137)	55	5973			0.00- 58.92	29.16
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.068	6.068 (0.941)	62	11096	20.0000	18.241	80.00- 120.00	100.00
6.068	6.068 (0.941)	64	3970			1.44- 61.44	35.78
121 Heptane					CAS #: 142-82-5		
6.166	6.166 (0.957)	71	9421	20.0000	17.620	80.00- 120.00	100.00
6.152	6.152 (0.954)	43	17644			167.16- 227.16	187.28
6.152	6.152 (0.954)	100	3088			4.59- 64.59	32.78
125 Trichloroethene					CAS #: 79-01-6		
6.698	6.698 (1.039)	95	11651	20.0000	18.719	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.698	6.698 (1.039)	130	11686			80.33- 140.33	100.30
6.698	6.698 (1.039)	97	7818			34.11- 94.11	67.10
127 Methylcyclohexane					CAS #: 108-87-2		
6.824	6.824 (1.059)	83	15056	20.0000	19.545	80.00- 120.00	100.00(a)
6.824	6.824 (1.059)	98	7810			18.36- 78.36	51.87
6.824	6.824 (1.059)	55	14961			64.11- 124.11	99.37
132 1,2-Dichloropropane					CAS #: 78-87-5		
7.047	7.047 (1.093)	63	9462	20.0000	17.939	80.00- 120.00	100.00
7.047	7.047 (1.093)	62	6153			38.98- 98.98	65.03
7.047	7.047 (1.093)	41	7514			26.92- 86.92	79.41
136 1,4-Dioxane					CAS #: 123-91-1		
7.187	7.187 (1.115)	88	5549	20.0000	17.023	80.00- 120.00	100.00(a)
7.201	7.201 (1.117)	58	4463			45.23- 105.23	80.43
7.187	7.187 (1.115)	57	1680			0.00- 54.84	30.28
138 Bromodichloromethane					CAS #: 75-27-4		
7.411	7.411 (1.150)	83	17259	20.0000	17.915	80.00- 120.00	100.00
7.425	7.425 (1.152)	85	11936			35.40- 95.40	69.16
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
8.125	8.125 (1.260)	75	13327	20.0000	17.284	80.00- 120.00	100.00
8.125	8.125 (1.260)	77	5036			4.01- 64.01	37.79
8.125	8.125 (1.260)	39	8299			28.76- 88.76	62.27
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
8.419	8.419 (1.306)	85	4004	20.0000	17.217	80.00- 120.00	100.00
8.405	8.405 (1.304)	43	26401			608.29- 668.29	659.37
8.419	8.419 (1.306)	58	9364			218.56- 278.56	233.87
147 Toluene					CAS #: 108-88-3		
8.614	8.614 (1.336)	91	32627	20.0000	18.470	80.00- 120.00	100.00
8.614	8.614 (1.336)	92	18649			28.41- 88.41	57.16
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
9.104	9.104 (0.881)	75	12452	20.0000	17.844	80.00- 120.00	100.00
9.104	9.104 (0.881)	77	7004			3.39- 63.39	56.25
9.104	9.104 (0.881)	39	7213			23.99- 83.99	57.93
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
9.342	9.342 (0.904)	97	11085	20.0000	17.039	80.00- 120.00	100.00
9.342	9.342 (0.904)	99	6347			30.16- 90.16	57.26
9.342	9.342 (0.904)	83	9056			52.74- 112.74	81.70

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
156 Tetrachloroethene					CAS #: 127-18-4		
9.356	9.356 (0.905)	166	16509	20.0000	18.606	80.00- 120.00	100.00
9.356	9.356 (0.905)	129	12156			44.78- 104.78	73.63
9.356	9.356 (0.905)	131	12707			43.76- 103.76	76.97
158 2-Hexanone					CAS #: 591-78-6		
9.636	9.636 (0.932)	58	12246	20.0000	18.354	80.00- 120.00	100.00(a)
9.636	9.636 (0.932)	43	22405			158.05- 218.05	182.96
9.636	9.636 (0.932)	100	2491			0.00- 51.23	20.34
160 Dibromochloromethane					CAS #: 124-48-1		
9.762	9.762 (0.944)	129	21278	20.0000	17.652	80.00- 120.00	100.00
9.762	9.762 (0.944)	127	16088			48.15- 108.15	75.61
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
9.888	9.888 (0.957)	107	16477	20.0000	17.109	80.00- 120.00	100.00
9.888	9.888 (0.957)	109	16075			64.77- 124.77	97.56
165 Chlorobenzene					CAS #: 108-90-7		
10.363	10.363 (1.003)	112	27180	20.0000	18.435	80.00- 120.00	100.00
10.363	10.363 (1.003)	114	8702			2.05- 62.05	32.02
10.363	10.363 (1.003)	77	18856			25.53- 85.53	69.37
167 Ethyl Benzene					CAS #: 100-41-4		
10.447	10.447 (1.011)	106	13338	20.0000	17.765	80.00- 120.00	100.00
10.447	10.447 (1.011)	91	43204			275.38- 335.38	323.92
169 m,p-Xylene					CAS #: 108-38-3		
10.559	10.559 (1.022)	106	17663	20.0000	18.604	80.00- 120.00	100.00
10.559	10.559 (1.022)	91	35097			163.96- 223.96	198.70
171 o-Xylene					CAS #: 95-47-6		
10.909	10.909 (1.056)	106	16692	20.0000	18.644	80.00- 120.00	100.00
10.909	10.909 (1.056)	91	34151			178.07- 238.07	204.60
172 Styrene					CAS #: 100-42-5		
10.937	10.937 (1.058)	104	27730	20.0000	18.370	80.00- 120.00	100.00
10.937	10.937 (1.058)	78	12633			17.50- 77.50	45.56
174 Bromoform					CAS #: 75-25-2		
11.105	11.105 (1.074)	173	20904	20.0000	17.854	80.00- 120.00	100.00
11.105	11.105 (1.074)	171	11067			20.99- 80.99	52.94
175 Cumene					CAS #: 98-82-8		
11.203	11.203 (1.084)	105	50135	20.0000	18.136	80.00- 120.00	100.00
11.203	11.203 (1.084)	120	14346			0.00- 57.87	28.61

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
175 Cumene (continued)							
11.189	11.189 (1.083)	51	5827			0.00- 40.21	11.62
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.483	11.483 (1.111)	83	23343	20.0000	18.446	80.00- 120.00	100.00
11.483	11.483 (1.111)	85	16159			36.88- 96.88	69.22
182 Propylbenzene					CAS #: 103-65-1		
11.497	11.497 (1.112)	91	55871	20.0000	18.288	80.00- 120.00	100.00
11.497	11.497 (1.112)	120	15057			0.00- 55.56	26.95
11.497	11.497 (1.112)	105	2346			0.00- 34.03	4.20
188 4-Ethyltoluene					CAS #: 622-96-8		
11.581	11.581 (1.120)	105	53102	20.0000	18.382	80.00- 120.00	100.00
11.581	11.581 (1.120)	120	17157			0.00- 57.62	32.31
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.623	11.623 (1.125)	105	42207	20.0000	20.575	80.00- 120.00	100.00
11.623	11.623 (1.125)	120	20706			23.73- 83.73	49.06
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.875	11.875 (1.149)	105	39289	20.0000	17.907	80.00- 120.00	100.00
11.875	11.875 (1.149)	120	19027			17.13- 77.13	48.43
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.056	12.056 (1.167)	146	32418	20.0000	18.973	80.00- 120.00	100.00
12.056	12.056 (1.167)	148	19482			33.49- 93.49	60.10
12.056	12.056 (1.167)	111	12214			7.53- 67.53	37.68
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.112	12.112 (1.172)	146	31283	20.0000	19.092	80.00- 120.00	100.00
12.112	12.112 (1.172)	148	19671			33.27- 93.27	62.88
12.112	12.112 (1.172)	111	11100			7.29- 67.29	35.48
212 alpha-Chlorotoluene					CAS #: 100-44-7		
12.210	12.210 (1.181)	91	36737	20.0000	19.153	80.00- 120.00	100.00
12.210	12.210 (1.181)	126	8770			0.00- 53.95	23.87
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.336	12.336 (1.194)	146	27817	20.0000	18.801	80.00- 120.00	100.00
12.336	12.336 (1.194)	148	17932			32.65- 92.65	64.46
12.336	12.336 (1.194)	111	11928			9.40- 69.40	42.88
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
13.176	13.176 (1.275)	180	17747	20.0000	21.669	80.00- 120.00	100.00
13.176	13.176 (1.275)	182	16902			63.10- 123.10	95.24

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
227 Hexachlorobutadiene						CAS #: 87-68-3		
13.232	13.232	(1.280)	225	14386	20.0000	21.208	80.00- 120.00	100.00
13.232	13.232	(1.280)	223	9370			33.31- 93.31	65.13

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: msd14.i
Lab File ID: 14120103.d
Lab Smp Id: ICAL Level #3
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msd14.i/01dec16.b/14651201a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 01-DEC-2016
Calibration Time: 14:23
Client Smp ID: ICAL Level #3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	124267	74560	173974	131910	6.15
123 1,4-Difluorobenze	508921	305353	712489	556349	9.32
163 Chlorobenzene-d5	476110	285666	666554	520119	9.24

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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/msd14.i/01dec16.b/14120103.d

Date : 01-DEC-2016 12:33

Client ID: ICAL Level #3

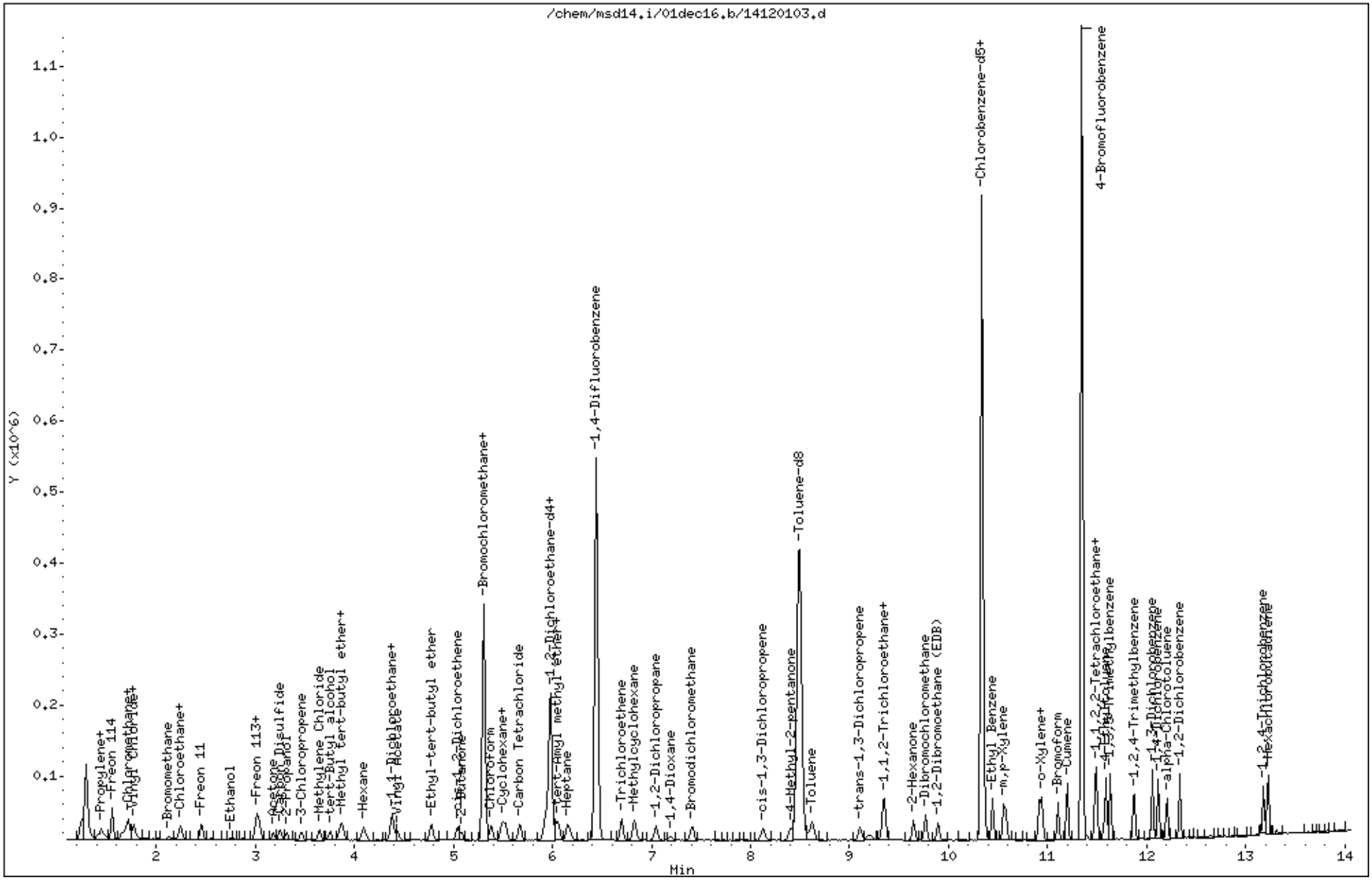
Sample Info: 5.0ml #2819-132

Column phase: RTX-624

Instrument: msd14.i

Operator: jg

Column diameter: 0.18



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/01dec16.b/14120104.d
Lab Smp Id: ICAL Level #4 Client Smp ID: ICAL Level #4
Inj Date : 01-DEC-2016 13:12
Operator : jg Inst ID: msd14.i
Smp Info : 12.5ml #2819-132
Misc Info : 50ppbv (200ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/01dec16.b/14651201a.m
Meth Date : 02-Dec-2016 16:28 jscarbro Quant Type: ISTD
Cal Date : 01-DEC-2016 13:12 Cal File: 14120104.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12NaphLow.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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.312	5.312 (1.000)	130	132765	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	99941			46.96- 106.96	75.28
5.312	5.312 (1.000)	49	167262			97.69- 157.69	125.98
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.446	6.446 (1.000)	114	545359	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	82441			0.00- 45.92	15.12
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
10.335	10.335 (1.000)	117	497634	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	243969			19.32- 79.32	49.03
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.984	5.984 (1.126)	65	158899	400.000	392.66	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	82382			24.72- 84.72	51.85
$ 146 Toluene-d8						CAS #: 2037-26-5	
8.502	8.502 (1.319)	98	536743	400.000	397.18	80.00- 120.00	100.00
8.502	8.502 (1.319)	70	55895			0.00- 40.20	10.41

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

$ 146 Toluene-d8 (continued)
  8.502   8.502 (1.319)   100    365218                    38.62-  98.62    68.04
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 11.357  11.357 (1.099)   174    312147 400.000   402.91  80.00- 120.00   100.00
 11.343  11.343 (1.097)    95    366453                   89.78- 149.78   117.40
 11.357  11.357 (1.099)   176    299618                   66.10- 126.10    95.99
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.423   1.423 (0.268)    41     17093 50.0000   47.022  80.00- 120.00   100.00
  1.423   1.423 (0.268)    42     10775                   33.78-  93.78    63.04
  1.423   1.423 (0.268)    39     11438                   36.58-  96.58    66.92
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.451   1.451 (0.273)    85     47697 50.0000   46.146  80.00- 120.00   100.00
  1.451   1.451 (0.273)    87     15278                    1.64-  61.64    32.03
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.563   1.563 (0.294)   135     39567 50.0000   46.075  80.00- 120.00   100.00
  1.563   1.563 (0.294)   137     12199                    1.10-  61.10    30.83
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.646   1.646 (0.310)    50     19032 50.0000   47.953  80.00- 120.00   100.00
  1.646   1.646 (0.310)    52      6702                    2.75-  62.75    35.21
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.716   1.716 (0.323)    58      4836 50.0000   47.226  80.00- 120.00   100.00
  1.716   1.716 (0.323)    43     34222                  736.71- 796.71   707.65
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.758   1.758 (0.331)    62     18180 50.0000   44.968  80.00- 120.00   100.00
  1.758   1.758 (0.331)    64      6201                    1.78-  61.78    34.11
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.772   1.772 (0.334)    54     17023 50.0000   39.366  80.00- 120.00   100.00
  1.772   1.772 (0.334)    39     16713                   67.57- 127.57    98.18
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.122   2.122 (0.399)    94      9812 50.0000   43.637  80.00- 120.00   100.00
  2.122   2.122 (0.399)    96      9213                   62.49- 122.49    93.90
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.234   2.234 (0.421)    64      7614 50.0000   41.226  80.00- 120.00   100.00
  2.234   2.234 (0.421)    66      2056                    0.76-  60.76    27.00
-------------------------------------------------------------------------------
   31 Isopentane                                    CAS #: 78-78-4
  2.248   2.248 (0.423)    43     23722 50.0000   52.973  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
31 Isopentane (continued)							
2.248	2.248 (0.423)	57	16249			37.62- 97.62	68.50
2.262	2.262 (0.426)	72	1689			0.00- 36.64	7.12
35 Freon 11					CAS #: 75-69-4		
2.458	2.458 (0.463)	101	51195	50.0000	51.779	80.00- 120.00	100.00
2.458	2.458 (0.463)	103	31549			34.68- 94.68	61.63
42 Ethanol					CAS #: 64-17-5		
2.752	2.752 (0.518)	45	8996	50.0000	49.195	80.00- 120.00	100.00
2.752	2.752 (0.518)	46	3820			11.88- 71.88	42.46
49 Freon 113					CAS #: 76-13-1		
3.018	3.018 (0.568)	151	36891	50.0000	49.812	80.00- 120.00	100.00
3.018	3.018 (0.568)	153	24158			36.16- 96.16	65.48
3.018	3.018 (0.568)	101	43745			85.93- 145.93	118.58
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.046	3.046 (0.573)	61	31313	50.0000	49.482	80.00- 120.00	100.00
3.046	3.046 (0.573)	96	19182			30.16- 90.16	61.26
3.046	3.046 (0.573)	98	12682			8.09- 68.09	40.50
52 Acetone					CAS #: 67-64-1		
3.186	3.186 (0.600)	58	10430	50.0000	50.585	80.00- 120.00	100.00
3.186	3.186 (0.600)	43	30049			284.49- 344.49	288.10
56 Carbon Disulfide					CAS #: 75-15-0		
3.256	3.256 (0.613)	76	48801	50.0000	47.297	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.325	3.325 (0.626)	45	36122	50.0000	46.370	80.00- 120.00	100.00
3.312	3.312 (0.623)	43	6785			0.00- 46.84	18.78
3.325	3.325 (0.626)	59	1695			0.00- 34.10	4.69
58 3-Chloropropene					CAS #: 107-05-1		
3.479	3.479 (0.655)	76	7045	50.0000	45.851	80.00- 120.00	100.00
3.479	3.479 (0.655)	41	23567			310.63- 370.63	334.52
66 Methylene Chloride					CAS #: 75-09-2		
3.647	3.647 (0.687)	49	24457	50.0000	49.828	80.00- 120.00	100.00
3.647	3.647 (0.687)	84	16197			35.90- 95.90	66.23
3.647	3.647 (0.687)	51	7840			0.00- 59.48	32.06
71 tert-Butyl alcohol					CAS #: 75-65-0		
3.759	3.759 (0.708)	59	42557	50.0000	46.944	80.00- 120.00	100.00
3.759	3.759 (0.708)	41	8204			0.00- 51.53	19.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol (continued)							
3.759	3.759 (0.708)	57	4363			0.00- 39.96	10.25
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.857	3.857 (0.726)	73	49331	50.0000	46.892	80.00- 120.00	100.00
3.857	3.857 (0.726)	57	13871			0.00- 56.69	28.12
3.857	3.857 (0.726)	41	13010			0.00- 54.89	26.37
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.885	3.885 (0.731)	96	18573	50.0000	43.079	80.00- 120.00	100.00
3.885	3.885 (0.731)	61	27418			113.59- 173.59	147.62
3.885	3.885 (0.731)	98	12270			32.57- 92.57	66.06
78 Hexane					CAS #: 110-54-3		
4.095	4.095 (0.771)	57	34779	50.0000	47.525	80.00- 120.00	100.00
4.095	4.095 (0.771)	43	22348			34.03- 94.03	64.26
4.095	4.095 (0.771)	86	5367			0.00- 45.63	15.43
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.389	4.389 (0.826)	63	35239	50.0000	48.510	80.00- 120.00	100.00
4.389	4.389 (0.826)	65	10844			1.36- 61.36	30.77
83 Isopropyl ether					CAS #: 108-20-3		
4.375	4.375 (0.824)	45	77285	50.0000	47.018	80.00- 120.00	100.00
4.375	4.375 (0.824)	87	17921			0.00- 53.64	23.19
4.375	4.375 (0.824)	59	7950			0.00- 40.89	10.29
86 Vinyl Acetate					CAS #: 108-05-4		
4.445	4.445 (0.837)	86	4866	50.0000	46.118	80.00- 120.00	100.00
4.445	4.445 (0.837)	43	56672			1119.78-1179.78	1164.65
4.445	4.445 (0.837)	42	4683			63.36- 123.36	96.24
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.767	4.767 (0.897)	59	63930	50.0000	46.221	80.00- 120.00	100.00
4.781	4.781 (0.900)	87	23151			7.71- 67.71	36.21
4.767	4.767 (0.897)	41	11169			0.00- 47.13	17.47
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.033	5.033 (0.947)	61	28631	50.0000	47.356	80.00- 120.00	100.00
5.046	5.046 (0.950)	96	23276			46.92- 106.92	81.30
5.046	5.046 (0.950)	98	14207			18.93- 78.93	49.62
92 2-Butanone					CAS #: 78-93-3		
5.088	5.088 (0.958)	72	9531	50.0000	48.016	80.00- 120.00	100.00
5.088	5.088 (0.958)	43	43793			439.29- 499.29	459.48
5.088	5.088 (0.958)	57	4203			8.51- 68.51	44.10

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Tetrahydrofuran					CAS #: 109-99-9		
5.298	5.298 (0.997)	42	24539	50.0000	44.470	80.00- 120.00	100.00
5.298	5.298 (0.997)	71	8765			3.78- 63.78	35.72
5.298	5.298 (0.997)	72	8760			4.55- 64.55	35.70
100 Chloroform					CAS #: 67-66-3		
5.382	5.382 (1.013)	83	38256	50.0000	46.916	80.00- 120.00	100.00
5.396	5.396 (1.016)	85	27419			35.58- 95.58	71.67
102 Cyclohexane					CAS #: 110-82-7		
5.494	5.494 (1.034)	84	25372	50.0000	45.729	80.00- 120.00	100.00
5.494	5.494 (1.034)	56	36933			109.96- 169.96	145.57
5.494	5.494 (1.034)	41	19603			47.10- 107.10	77.26
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.536	5.536 (1.042)	97	43148	50.0000	47.399	80.00- 120.00	100.00
5.536	5.536 (1.042)	99	27548			34.47- 94.47	63.85
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.662	5.662 (1.066)	119	45713	50.0000	48.846	80.00- 120.00	100.00
5.662	5.662 (1.066)	117	46787			75.51- 135.51	102.35
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.928	5.928 (1.116)	57	113150	50.0000	47.598	80.00- 120.00	100.00
5.928	5.928 (1.116)	56	35540			1.61- 61.61	31.41
5.928	5.928 (1.116)	41	29799			0.00- 55.08	26.34
116 Benzene					CAS #: 71-43-2		
5.942	5.942 (0.922)	78	57159	50.0000	46.087	80.00- 120.00	100.00
5.942	5.942 (0.922)	77	13448			0.00- 53.47	23.53
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.040	6.040 (1.137)	73	51544	50.0000	45.781	80.00- 120.00	100.00
6.040	6.040 (1.137)	87	13026			0.00- 56.16	25.27
6.040	6.040 (1.137)	55	14854			0.00- 58.92	28.82
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.068	6.068 (0.941)	62	26076	50.0000	45.147	80.00- 120.00	100.00
6.068	6.068 (0.941)	64	9001			1.44- 61.44	34.52
121 Heptane					CAS #: 142-82-5		
6.152	6.152 (0.954)	71	21434	50.0000	42.846	80.00- 120.00	100.00
6.152	6.152 (0.954)	43	43274			167.16- 227.16	201.89
6.166	6.166 (0.957)	100	7054			4.59- 64.59	32.91
125 Trichloroethene					CAS #: 79-01-6		
6.698	6.698 (1.039)	95	28724	50.0000	47.636	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.698	6.698 (1.039)	130	30693			80.33- 140.33	106.85
6.698	6.698 (1.039)	97	19247			34.11- 94.11	67.01
127 Methylcyclohexane					CAS #: 108-87-2		
6.823	6.823 (1.059)	83	37892	50.0000	50.135	80.00- 120.00	100.00
6.823	6.823 (1.059)	98	18242			18.36- 78.36	48.14
6.823	6.823 (1.059)	55	35167			64.11- 124.11	92.81
132 1,2-Dichloropropane					CAS #: 78-87-5		
7.047	7.047 (1.093)	63	22428	50.0000	44.863	80.00- 120.00	100.00
7.047	7.047 (1.093)	62	15395			38.98- 98.98	68.64
7.047	7.047 (1.093)	41	13414			26.92- 86.92	59.81
136 1,4-Dioxane					CAS #: 123-91-1		
7.187	7.187 (1.115)	88	15622	50.0000	49.254	80.00- 120.00	100.00
7.187	7.187 (1.115)	58	10638			45.23- 105.23	68.10
7.201	7.201 (1.117)	57	4329			0.00- 54.84	27.71
138 Bromodichloromethane					CAS #: 75-27-4		
7.411	7.411 (1.150)	83	43333	50.0000	46.850	80.00- 120.00	100.00
7.425	7.425 (1.152)	85	28259			35.40- 95.40	65.21
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
8.125	8.125 (1.260)	75	33096	50.0000	45.191	80.00- 120.00	100.00
8.125	8.125 (1.260)	77	10924			4.01- 64.01	33.01
8.125	8.125 (1.260)	39	20124			28.76- 88.76	60.80
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
8.419	8.419 (1.306)	85	9424	50.0000	43.210	80.00- 120.00	100.00
8.419	8.419 (1.306)	43	58895			608.29- 668.29	624.95
8.419	8.419 (1.306)	58	21110			218.56- 278.56	224.00
147 Toluene					CAS #: 108-88-3		
8.614	8.614 (1.336)	91	77428	50.0000	45.680	80.00- 120.00	100.00
8.614	8.614 (1.336)	92	46445			28.41- 88.41	59.98
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
9.104	9.104 (0.881)	75	30747	50.0000	46.979	80.00- 120.00	100.00
9.104	9.104 (0.881)	77	13995			3.39- 63.39	45.52
9.104	9.104 (0.881)	39	17102			23.99- 83.99	55.62
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
9.342	9.342 (0.904)	97	27415	50.0000	45.396	80.00- 120.00	100.00
9.342	9.342 (0.904)	99	15592			30.16- 90.16	56.87
9.342	9.342 (0.904)	83	22146			52.74- 112.74	80.78

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
156 Tetrachloroethene					CAS #: 127-18-4		
9.356	9.356 (0.905)	166	40942	50.0000	48.572	80.00- 120.00	100.00
9.356	9.356 (0.905)	129	31380			44.78- 104.78	76.65
9.356	9.356 (0.905)	131	32076			43.76- 103.76	78.34
158 2-Hexanone					CAS #: 591-78-6		
9.636	9.636 (0.932)	58	29968	50.0000	47.921	80.00- 120.00	100.00
9.636	9.636 (0.932)	43	55783			158.05- 218.05	186.14
9.636	9.636 (0.932)	100	5744			0.00- 51.23	19.17
160 Dibromochloromethane					CAS #: 124-48-1		
9.762	9.762 (0.944)	129	53064	50.0000	46.947	80.00- 120.00	100.00
9.762	9.762 (0.944)	127	40704			48.15- 108.15	76.71
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
9.888	9.888 (0.957)	107	40789	50.0000	45.574	80.00- 120.00	100.00
9.888	9.888 (0.957)	109	40128			64.77- 124.77	98.38
165 Chlorobenzene					CAS #: 108-90-7		
10.363	10.363 (1.003)	112	65191	50.0000	47.106	80.00- 120.00	100.00
10.363	10.363 (1.003)	114	21262			2.05- 62.05	32.61
10.363	10.363 (1.003)	77	40091			25.53- 85.53	61.50
167 Ethyl Benzene					CAS #: 100-41-4		
10.447	10.447 (1.011)	106	34151	50.0000	48.133	80.00- 120.00	100.00
10.447	10.447 (1.011)	91	103635			275.38- 335.38	303.46
169 m,p-Xylene					CAS #: 108-38-3		
10.559	10.559 (1.022)	106	42077	50.0000	47.013	80.00- 120.00	100.00
10.559	10.559 (1.022)	91	83004			163.96- 223.96	197.27
171 o-Xylene					CAS #: 95-47-6		
10.909	10.909 (1.056)	106	40575	50.0000	47.873	80.00- 120.00	100.00
10.909	10.909 (1.056)	91	82619			178.07- 238.07	203.62
172 Styrene					CAS #: 100-42-5		
10.937	10.937 (1.058)	104	68580	50.0000	48.088	80.00- 120.00	100.00
10.937	10.937 (1.058)	78	32158			17.50- 77.50	46.89
174 Bromoform					CAS #: 75-25-2		
11.105	11.105 (1.074)	173	49372	50.0000	45.420	80.00- 120.00	100.00
11.105	11.105 (1.074)	171	26471			20.99- 80.99	53.62
175 Cumene					CAS #: 98-82-8		
11.203	11.203 (1.084)	105	124857	50.0000	47.876	80.00- 120.00	100.00
11.203	11.203 (1.084)	120	36127			0.00- 57.87	28.93

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
175 Cumene (continued)							
11.203	11.203 (1.084)	51	13302			0.00- 40.21	10.65
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.483	11.483 (1.111)	83	58131	50.0000	48.494	80.00- 120.00	100.00
11.483	11.483 (1.111)	85	38286			36.88- 96.88	65.86
182 Propylbenzene					CAS #: 103-65-1		
11.497	11.497 (1.112)	91	139176	50.0000	48.189	80.00- 120.00	100.00
11.497	11.497 (1.112)	120	34830			0.00- 55.56	25.03
11.497	11.497 (1.112)	105	5982			0.00- 34.03	4.30
188 4-Ethyltoluene					CAS #: 622-96-8		
11.581	11.581 (1.120)	105	128685	50.0000	47.374	80.00- 120.00	100.00
11.581	11.581 (1.120)	120	41955			0.00- 57.62	32.60
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.623	11.623 (1.125)	105	104269	50.0000	52.469	80.00- 120.00	100.00
11.623	11.623 (1.125)	120	52549			23.73- 83.73	50.40
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.875	11.875 (1.149)	105	96391	50.0000	46.875	80.00- 120.00	100.00
11.875	11.875 (1.149)	120	45518			17.13- 77.13	47.22
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.056	12.056 (1.167)	146	75779	50.0000	47.215	80.00- 120.00	100.00
12.056	12.056 (1.167)	148	48576			33.49- 93.49	64.10
12.056	12.056 (1.167)	111	28490			7.53- 67.53	37.60
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.112	12.112 (1.172)	146	76700	50.0000	49.189	80.00- 120.00	100.00
12.112	12.112 (1.172)	148	48295			33.27- 93.27	62.97
12.112	12.112 (1.172)	111	28004			7.29- 67.29	36.51
212 alpha-Chlorotoluene					CAS #: 100-44-7		
12.210	12.210 (1.181)	91	87978	50.0000	48.439	80.00- 120.00	100.00
12.210	12.210 (1.181)	126	20640			0.00- 53.95	23.46
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.336	12.336 (1.194)	146	71956	50.0000	50.621	80.00- 120.00	100.00
12.336	12.336 (1.194)	148	46079			32.65- 92.65	64.04
12.336	12.336 (1.194)	111	29262			9.40- 69.40	40.67
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
13.190	13.190 (1.276)	180	46080	50.0000	55.545	80.00- 120.00	100.00
13.190	13.190 (1.276)	182	45101			63.10- 123.10	97.88

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
227 Hexachlorobutadiene						CAS #: 87-68-3		
13.232	13.232	(1.280)	225	39898	50.0000	57.106	80.00- 120.00	100.00
13.232	13.232	(1.280)	223	25253			33.31- 93.31	63.29
228 Naphthalene						CAS #: 91-20-3		
13.316	13.316	(1.288)	128	10010	5.00000	6.741	80.00- 120.00	100.00(a)
13.316	13.316	(1.288)	127	1673			0.00- 44.56	16.71

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: msd14.i
Lab File ID: 14120104.d
Lab Smp Id: ICAL Level #4
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msd14.i/01dec16.b/14651201a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 01-DEC-2016
Calibration Time: 14:23
Client Smp ID: ICAL Level #4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	124267	74560	173974	132765	6.84
123 1,4-Difluorobenze	508921	305353	712489	545359	7.16
163 Chlorobenzene-d5	476110	285666	666554	497634	4.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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/msd14.i/01dec16.b/14120104.d

Date : 01-DEC-2016 13:12

Client ID: ICAL Level #4

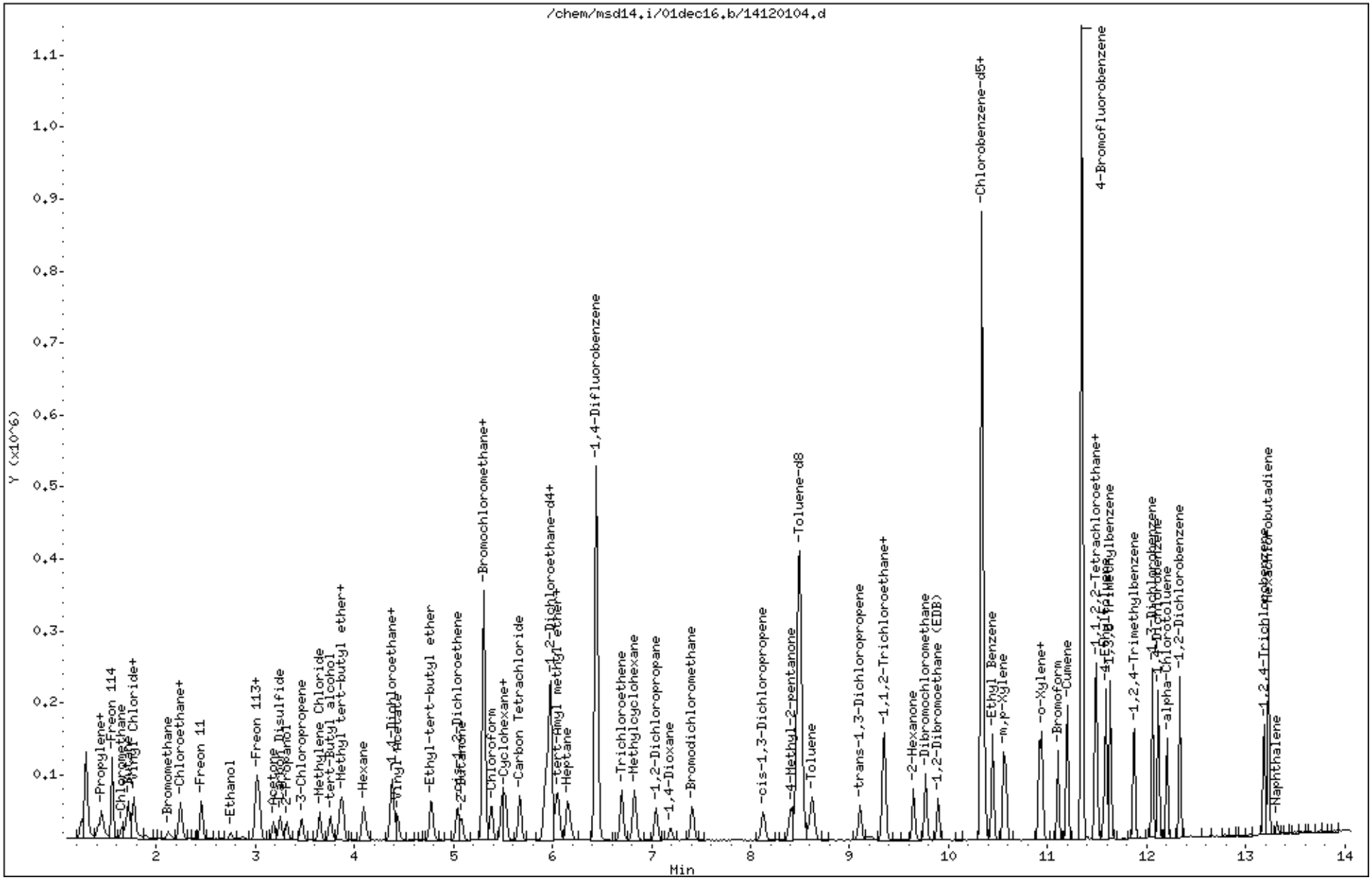
Sample Info: 12.5ml #2819-132

Column phase: RTX-624

Instrument: msd14.i

Operator: jg

Column diameter: 0.18



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/19dec16.b/14121908.d
Lab Smp Id: ICAL Level 5 Client Smp ID: ICAL Level 5
Inj Date : 19-DEC-2016 11:43
Operator : jg Inst ID: msd14.i
Smp Info : 25mL #2819-185
Misc Info : 100ppbv (200ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/19dec16.b/14651201b.m
Meth Date : 20-Dec-2016 07:46 jscarbro Quant Type: ISTD
Cal Date : 19-DEC-2016 11:43 Cal File: 14121908.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ComboICALmVB.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		
2.472	2.472 (0.465)	55	30301	100.000	109.88	0.00- 0.00	100.00
2.472	2.472 (0.465)	42	47904			0.00- 0.00	158.09
34 Pentane					CAS #: 109-66-0		
2.528	2.528 (0.476)	43	18996	100.000	119.22	0.00- 0.00	100.00
2.528	2.528 (0.476)	57	2869			0.00- 0.00	15.10
2.528	2.528 (0.476)	72	1770			0.00- 0.00	9.32
44 Ethyl Ether					CAS #: 60-29-7		
2.794	2.794 (0.526)	74	14938	100.000	112.69	0.00- 0.00	100.00(T)
2.794	2.794 (0.526)	59	24117			0.00- 0.00	161.45
0.000	1.000 (0.000)	31	0			0.00- 0.00	0.00
53 Iodomethane					CAS #: 74-88-4		
3.228	3.228 (0.608)	142	62844	100.000	124.15	0.00- 0.00	100.00
3.228	3.228 (0.608)	127	25854			0.00- 0.00	41.14
59 Cyclopentene					CAS #: 142-29-0		
3.479	3.479 (0.655)	67	58974	100.000	109.33	80.00- 120.00	100.00

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

   59 Cyclopentene (continued)
  3.479   3.479 (0.655)    68     21772                    0.00-  30.00    36.92
  3.479   3.479 (0.655)    53     14025                    0.00-  30.00    23.78
-------------------------------------------------------------------------------
   74 Acrylonitrile                                CAS #: 107-13-1
  3.997   3.997 (0.752)    53     35240 100.000   109.54   0.00-   0.00   100.00
  3.997   3.997 (0.752)    52     26203                    0.00-   0.00    74.36
-------------------------------------------------------------------------------
   76 1-Hexene                                     CAS #: 592-41-6
  4.025   4.025 (0.758)    55     27285 100.000   102.90   0.00-   0.00   100.00
  4.025   4.025 (0.758)    41     41526                    0.00-   0.00   152.19
  4.025   4.025 (0.758)    84     10776                    0.00-   0.00    39.49
-------------------------------------------------------------------------------
   84 1-Propanol                                   CAS #: 71-23-8
  4.529   4.529 (0.852)    42      6754 100.000   111.06  80.00- 120.00   100.00
  4.529   4.529 (0.852)    59      7279                    0.00-  30.00   107.77
  4.529   4.529 (0.852)    41      4518                    0.00-  30.00    66.89
-------------------------------------------------------------------------------
   90 2,2-Dichloropropane                          CAS #: 594-20-7
  4.990   4.990 (0.939)    77     55456 100.000   112.36  80.00- 120.00   100.00
  4.990   4.990 (0.939)    79     17806                    0.00-  30.00    32.11
  5.004   5.004 (0.942)    97     12562                    0.00-  30.00    22.65
-------------------------------------------------------------------------------
   93 Methyl Acrylate                              CAS #: 96-33-3
  5.158   5.158 (0.971)    55     87044 100.000   108.61   0.00-   0.00   100.00
  5.158   5.158 (0.971)    85     12731                    0.00-   0.00    14.63
  5.158   5.158 (0.971)    58      7565                    0.00-   0.00     8.69
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
  5.312   5.312 (1.000)   130    105083 400.000           80.00- 120.00   100.00
  5.312   5.312 (1.000)   128     80318                   46.96- 106.96    76.43
  5.312   5.312 (1.000)    49    133129                   97.69- 157.69   126.69
-------------------------------------------------------------------------------
  107 1,1-Dichloropropene                          CAS #: 563-58-6
  5.718   5.718 (1.076)   110     22029 100.000   108.58  80.00- 120.00   100.00
  5.718   5.718 (1.076)    75     50590                    0.00-  30.00   229.65
-------------------------------------------------------------------------------
  115 Isobutanol                                   CAS #: 78-83-1
  5.914   5.914 (0.918)    43     33737 100.000   110.00  80.00- 120.00   100.00
  5.928   5.928 (0.920)    41     24978                    0.00-  30.00    74.04
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                          CAS #: 540-36-3
  6.446   6.446 (1.000)   114    432980 400.000           80.00- 120.00   100.00
  6.446   6.446 (1.000)    88     65037                    0.00-  45.92    15.02
-------------------------------------------------------------------------------
  124 n-Butanol                                    CAS #: 71-36-3
  6.683   6.683 (1.037)    56     56078 100.000   110.55  80.00- 120.00   100.00
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
124 n-Butanol (continued)							
6.683	6.683 (1.037)	41	41086			0.00- 30.00	73.27
6.683	6.683 (1.037)	43	32501			0.00- 30.00	57.96
128 Ethyl acrylate					CAS #: 140-88-5		
6.879	6.879 (1.067)	55	85534	100.000	111.53	0.00- 0.00	100.00
6.879	6.879 (1.067)	99	6183			0.00- 0.00	7.23
6.879	6.879 (1.067)	45	7987			0.00- 0.00	9.34
131 2-Pentanone					CAS #: 107-87-9		
7.005	7.005 (1.087)	43	120074	100.000	113.04	0.00- 0.00	100.00
7.019	7.019 (1.089)	58	9403			0.00- 0.00	7.83
7.019	7.019 (1.089)	86	19040			0.00- 0.00	15.86
134 Methyl Methacrylate					CAS #: 80-62-6		
7.187	7.187 (1.115)	41	59794	100.000	110.76	0.00- 0.00	100.00
7.187	7.187 (1.115)	69	41327			0.00- 0.00	69.12
7.187	7.187 (1.115)	100	19097			0.00- 0.00	31.94
137 Dibromomethane					CAS #: 74-95-3		
7.215	7.215 (1.119)	174	51484	100.000	110.52	0.00- 0.00	100.00
7.201	7.201 (1.117)	93	44031			0.00- 0.00	85.52
7.201	7.201 (1.117)	95	35776			0.00- 0.00	69.49
148 Octane					CAS #: 111-65-9		
8.698	8.698 (1.349)	57	36140	100.000	106.92	0.00- 0.00	100.00
8.712	8.712 (1.352)	85	37759			0.00- 0.00	104.48
8.712	8.712 (1.352)	43	88907			0.00- 0.00	246.01
157 1,3-Dichloropropane					CAS #: 142-28-9		
9.552	9.552 (1.798)	76	63229	100.000	110.09	80.00- 120.00	100.00
9.552	9.552 (1.798)	41	46995			0.00- 30.00	74.33
9.552	9.552 (1.798)	78	20682			0.00- 30.00	32.71
159 Butyl Acetate					CAS #: 123-86-4		
9.762	9.762 (1.514)	56	10554	100.000	106.42	80.00- 120.00	100.00
9.762	9.762 (1.514)	73	3967			0.00- 30.00	37.59
9.762	9.762 (1.514)	43	27556			0.00- 30.00	261.10
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
10.335	10.335 (1.000)	117	398637	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	194516			19.32- 79.32	48.80
170 Nonane					CAS #: 111-84-2		
10.531	10.531 (1.019)	43	87851	100.000	109.17	0.00- 0.00	100.00
10.531	10.531 (1.019)	57	77556			0.00- 0.00	88.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
170 Nonane (continued)							
10.531	10.531 (1.019)	85	26978			0.00- 0.00	30.71
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
10.461	10.461 (1.012)	131	69513	100.000	109.98	80.00- 120.00	100.00
10.461	10.461 (1.012)	117	47045			0.00- 30.00	67.68
10.461	10.461 (1.012)	95	23108			0.00- 30.00	33.24
173 2-Heptanone					CAS #: 110-43-0		
11.049	11.049 (1.069)	58	70925	100.000	107.75	80.00- 120.00	100.00
11.049	11.049 (1.069)	43	112629			0.00- 30.00	158.80
176 Cyclohexanone					CAS #: 108-94-1		
11.315	11.315 (1.095)	55	52152	100.000	105.86	80.00- 120.00	100.00
11.329	11.329 (1.096)	98	20418			0.00- 30.00	39.15
11.315	11.315 (1.095)	42	33185			0.00- 30.00	63.63
180 Bromobenzene					CAS #: 108-86-1		
11.441	11.441 (1.107)	156	72087	100.000	104.46	80.00- 120.00	100.00
11.441	11.441 (1.107)	77	97130			0.00- 30.00	134.74
11.441	11.441 (1.107)	158	70645			0.00- 30.00	98.00
184 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.525	11.525 (1.115)	89	19674	100.000	107.64	0.00- 0.00	100.00
11.525	11.525 (1.115)	53	31007			0.00- 0.00	157.60
11.525	11.525 (1.115)	124	8380			0.00- 0.00	42.59
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.511	11.511 (1.114)	110	32601	100.000	105.63	80.00- 120.00	100.00
11.511	11.511 (1.114)	61	22753			0.00- 30.00	69.79
11.511	11.511 (1.114)	112	20638			0.00- 30.00	63.30
187 Decane					CAS #: 124-18-5		
11.581	11.581 (1.120)	57	80076	100.000	105.69	0.00- 0.00	100.00
11.581	11.581 (1.120)	71	27214			0.00- 0.00	33.99
11.581	11.581 (1.120)	142	4879			0.00- 0.00	6.09
189 2-Chlorotoluene					CAS #: 95-49-8		
11.567	11.567 (1.119)	126	54130	100.000	104.30	80.00- 120.00	100.00
11.567	11.567 (1.119)	91	142109			0.00- 30.00	262.53
11.567	11.567 (1.119)	65	12546			0.00- 30.00	23.18
191 4-Chlorotoluene					CAS #: 106-43-4		
11.651	11.651 (1.127)	126	54850	100.000	105.20	80.00- 120.00	100.00
11.651	11.651 (1.127)	91	147837			0.00- 30.00	269.53
11.651	11.651 (1.127)	63	18027			0.00- 30.00	32.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
195 tert-Butylbenzene					CAS #: 98-06-6		
11.818	11.818 (1.143)	119	168561	100.000	104.39	80.00- 120.00	100.00
11.832	11.832 (1.145)	134	43217			0.00- 30.00	25.64
11.818	11.818 (1.143)	91	101009			0.00- 30.00	59.92
197 Pentachloroethane					CAS #: 76-01-7		
11.860	11.860 (1.148)	167	53991	100.000	106.06	80.00- 120.00	100.00
11.860	11.860 (1.148)	117	53491			0.00- 30.00	99.07
203 sec-Butylbenzene					CAS #: 135-98-8		
11.958	11.958 (1.157)	105	232153	100.000	103.46	80.00- 120.00	100.00
11.958	11.958 (1.157)	134	50046			0.00- 30.00	21.56
11.958	11.958 (1.157)	91	33060			0.00- 30.00	14.24
206 bis(2-Chloroethyl) Ether					CAS #: 111-44-4		
12.042	12.042 (1.165)	93	80749	100.000	103.57	0.00- 0.00	100.00
12.042	12.042 (1.165)	95	23508			0.00- 0.00	29.11
12.028	12.028 (1.164)	63	57449			0.00- 0.00	71.15
207 p-Cymene					CAS #: 99-87-6		
12.056	12.056 (1.167)	119	197096	100.000	103.53	80.00- 120.00	100.00
12.056	12.056 (1.167)	134	52651			0.00- 30.00	26.71
12.042	12.042 (1.165)	91	41322			0.00- 30.00	20.97
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.126	12.126 (1.173)	120	69158	100.000	97.849	80.00- 120.00	100.00
12.126	12.126 (1.173)	105	160116			0.00- 30.00	231.52
12.126	12.126 (1.173)	77	16677			0.00- 30.00	24.11
215 Undecane					CAS #: 1120-21-4		
12.294	12.294 (1.190)	57	61279	100.000	94.365	0.00- 0.00	100.00
12.294	12.294 (1.190)	43	53657			0.00- 0.00	87.56
213 Butylbenzene					CAS #: 104-51-8		
12.294	12.294 (1.190)	134	43422	100.000	99.414	80.00- 120.00	100.00
12.294	12.294 (1.190)	91	140976			0.00- 30.00	324.66
12.294	12.294 (1.190)	92	74633			0.00- 30.00	171.88
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
12.784	12.784 (1.237)	157	40923	100.000	88.765	80.00- 120.00	100.00
12.770	12.770 (1.236)	75	28622			0.00- 30.00	69.94
12.784	12.784 (1.237)	155	32174			0.00- 30.00	78.62
225 Dodecane					CAS #: 112-40-3		
12.854	12.854 (1.244)	57	31692	100.000	76.954	0.00- 0.00	100.00
12.854	12.854 (1.244)	43	26706			0.00- 0.00	84.27

QC Flag Legend

T - Target compound detected outside RT window.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14121908.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msd14.i/19dec16.b/14651201b.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 19-DEC-2016
Calibration Time: 08:17
Client Smp ID: ICAL Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	106902	64141	149663	105083	-1.70
123 1,4-Difluorobenze	451282	270769	631795	432980	-4.06
163 Chlorobenzene-d5	416923	250154	583692	398637	-4.39

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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/msd14.i/19dec16.b/14121908.d

Date : 19-DEC-2016 11:43

Client ID: ICAL Level 5

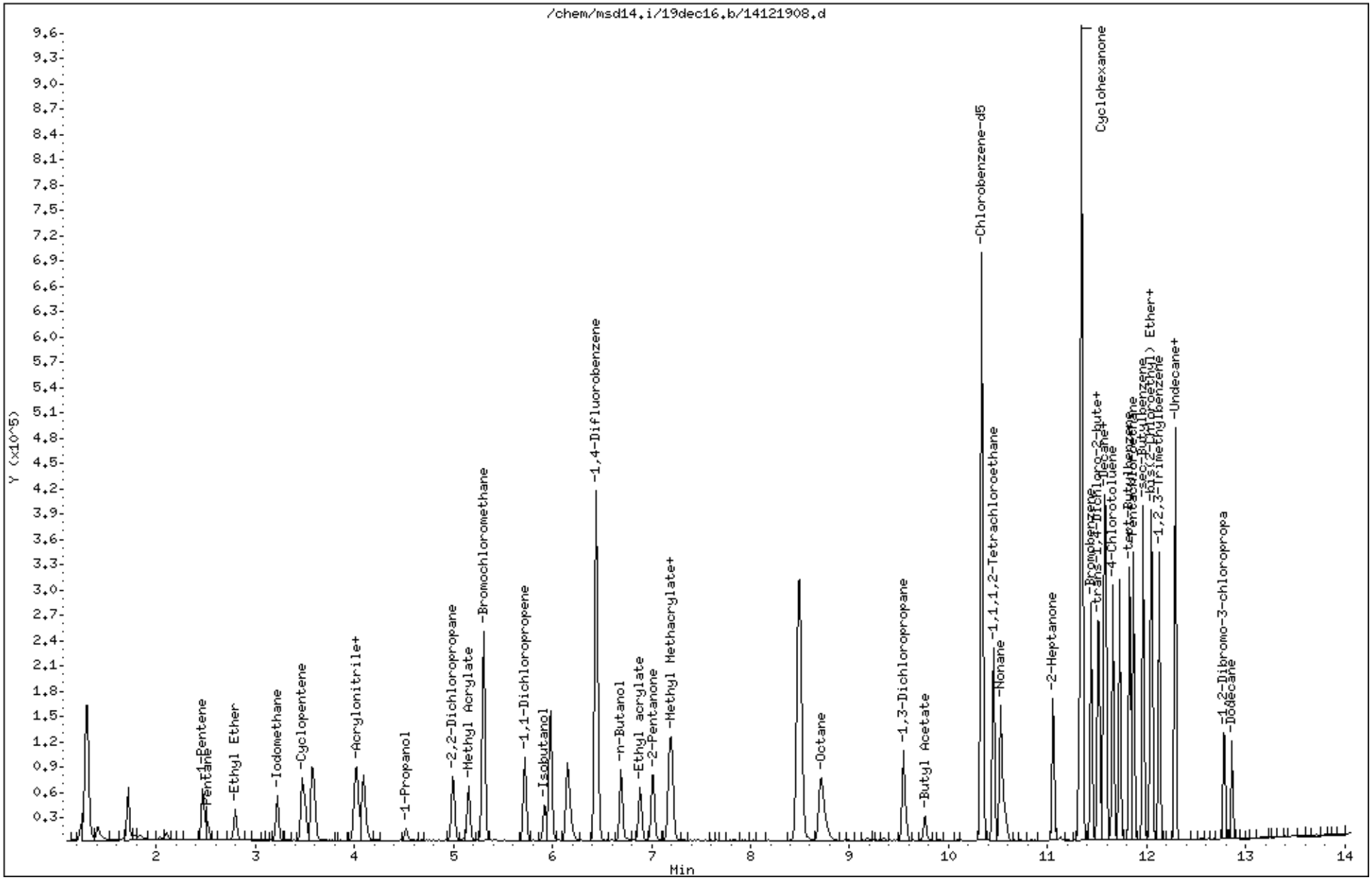
Sample Info: 25mL #2819-185

Column phase: RTX-624

Instrument: msd14.i

Operator: jg

Column diameter: 0.18



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/01dec16.b/14120105.d
Lab Smp Id: ICAL Level #5 Client Smp ID: ICAL Level #5
Inj Date : 01-DEC-2016 13:55
Operator : jg Inst ID: msd14.i
Smp Info : 25ml #2819-132
Misc Info : 100ppbv (200ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/01dec16.b/14651201a.m
Meth Date : 02-Dec-2016 16:28 jscarbro Quant Type: ISTD
Cal Date : 01-DEC-2016 13:55 Cal File: 14120105.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12NaphLow.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
* 98 Bromochloromethane					CAS #: 74-97-5		
5.312	5.312 (1.000)	130	122984	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	94956			46.96- 106.96	77.21
5.312	5.312 (1.000)	49	156800			97.69- 157.69	127.50
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.446	6.446 (1.000)	114	515858	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	79137			0.00- 45.92	15.34
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
10.335	10.335 (1.000)	117	481952	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	235946			19.32- 79.32	48.96
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.984	5.984 (1.126)	65	148732	400.000	397.30	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	76624			24.72- 84.72	51.52
$ 146 Toluene-d8					CAS #: 2037-26-5		
8.502	8.502 (1.319)	98	513075	400.000	401.14	80.00- 120.00	100.00
8.502	8.502 (1.319)	70	54467			0.00- 40.20	10.62

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

$ 146 Toluene-d8 (continued)
  8.502   8.502 (1.319)   100    349659                    38.62-  98.62    68.15
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 11.357  11.357 (1.099)   174    307625 400.000   408.30  80.00- 120.00   100.00
 11.343  11.343 (1.097)    95    355243                   89.78- 149.78   115.48
 11.357  11.357 (1.099)   176    292673                   66.10- 126.10    95.14
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.423   1.423 (0.268)    41     35645 100.000   104.33  80.00- 120.00   100.00
  1.423   1.423 (0.268)    42     22604                   33.78-  93.78    63.41
  1.409   1.409 (0.265)    39     26006                   36.58-  96.58    72.96
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.437   1.437 (0.270)    85    102459 100.000   105.53  80.00- 120.00   100.00
  1.437   1.437 (0.270)    87     33485                    1.64-  61.64    32.68
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.562   1.562 (0.294)   135     90652 100.000   110.86  80.00- 120.00   100.00
  1.562   1.562 (0.294)   137     27094                    1.10-  61.10    29.89
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.632   1.632 (0.307)    50     41888 100.000   110.10  80.00- 120.00   100.00
  1.632   1.632 (0.307)    52     13775                    2.75-  62.75    32.89
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.716   1.716 (0.323)    58      9105 100.000   96.762  80.00- 120.00   100.00
  1.716   1.716 (0.323)    43     64437                  736.71- 796.71   707.71
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.744   1.744 (0.328)    62     38481 100.000   102.19  80.00- 120.00   100.00
  1.744   1.744 (0.328)    64     12616                    1.78-  61.78    32.79
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.772   1.772 (0.334)    54     33815 100.000   87.133  80.00- 120.00   100.00
  1.772   1.772 (0.334)    39     33997                   67.57- 127.57   100.54
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.122   2.122 (0.399)    94     25217 100.000   115.01  80.00- 120.00   100.00
  2.122   2.122 (0.399)    96     23131                   62.49- 122.49    91.73
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.220   2.220 (0.418)    64     20322 100.000   113.46  80.00- 120.00   100.00
  2.220   2.220 (0.418)    66      6132                    0.76-  60.76    30.17
-------------------------------------------------------------------------------
   31 Isopentane                                    CAS #: 78-78-4
  2.248   2.248 (0.423)    43     54211 100.000   123.13  80.00- 120.00   100.00
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
31 Isopentane (continued)							
2.248	2.248 (0.423)	57	35913			37.62- 97.62	66.25
2.248	2.248 (0.423)	72	3977			0.00- 36.64	7.34
35 Freon 11					CAS #: 75-69-4		
2.458	2.458 (0.463)	101	109019	100.000	115.37	80.00- 120.00	100.00
2.458	2.458 (0.463)	103	72151			34.68- 94.68	66.18
42 Ethanol					CAS #: 64-17-5		
2.752	2.752 (0.518)	45	21313	100.000	119.64	80.00- 120.00	100.00
2.752	2.752 (0.518)	46	8207			11.88- 71.88	38.51
49 Freon 113					CAS #: 76-13-1		
3.018	3.018 (0.568)	151	83043	100.000	116.94	80.00- 120.00	100.00
3.018	3.018 (0.568)	153	53117			36.16- 96.16	63.96
3.018	3.018 (0.568)	101	95538			85.93- 145.93	115.05
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.046	3.046 (0.573)	61	69565	100.000	115.09	80.00- 120.00	100.00
3.046	3.046 (0.573)	96	43515			30.16- 90.16	62.55
3.046	3.046 (0.573)	98	27424			8.09- 68.09	39.42
52 Acetone					CAS #: 67-64-1		
3.185	3.185 (0.600)	58	21065	100.000	108.06	80.00- 120.00	100.00
3.185	3.185 (0.600)	43	70082			284.49- 344.49	332.69
56 Carbon Disulfide					CAS #: 75-15-0		
3.255	3.255 (0.613)	76	108857	100.000	110.07	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.325	3.325 (0.626)	45	82995	100.000	110.85	80.00- 120.00	100.00
3.325	3.325 (0.626)	43	15562			0.00- 46.84	18.75
3.325	3.325 (0.626)	59	3144			0.00- 34.10	3.79
58 3-Chloropropene					CAS #: 107-05-1		
3.479	3.479 (0.655)	76	18396	100.000	120.44	80.00- 120.00	100.00
3.479	3.479 (0.655)	41	56151			310.63- 370.63	305.23
66 Methylene Chloride					CAS #: 75-09-2		
3.647	3.647 (0.687)	49	53800	100.000	114.14	80.00- 120.00	100.00
3.647	3.647 (0.687)	84	37449			35.90- 95.90	69.61
3.647	3.647 (0.687)	51	16636			0.00- 59.48	30.92
71 tert-Butyl alcohol					CAS #: 75-65-0		
3.759	3.759 (0.708)	59	99739	100.000	113.45	80.00- 120.00	100.00
3.759	3.759 (0.708)	41	20177			0.00- 51.53	20.23

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol (continued)							
3.759	3.759 (0.708)	57	9362			0.00- 39.96	9.39
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.857	3.857 (0.726)	73	113641	100.000	113.47	80.00- 120.00	100.00
3.857	3.857 (0.726)	57	30449			0.00- 56.69	26.79
3.857	3.857 (0.726)	41	29010			0.00- 54.89	25.53
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.885	3.885 (0.731)	96	41451	100.000	103.01	80.00- 120.00	100.00
3.885	3.885 (0.731)	61	59449			113.59- 173.59	143.42
3.885	3.885 (0.731)	98	25675			32.57- 92.57	61.94
78 Hexane					CAS #: 110-54-3		
4.095	4.095 (0.771)	57	82574	100.000	117.54	80.00- 120.00	100.00
4.095	4.095 (0.771)	43	51060			34.03- 94.03	61.84
4.095	4.095 (0.771)	86	13126			0.00- 45.63	15.90
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.389	4.389 (0.826)	63	76385	100.000	111.01	80.00- 120.00	100.00
4.389	4.389 (0.826)	65	24306			1.36- 61.36	31.82
83 Isopropyl ether					CAS #: 108-20-3		
4.375	4.375 (0.824)	45	180776	100.000	113.42	80.00- 120.00	100.00
4.389	4.389 (0.826)	87	45249			0.00- 53.64	25.03
4.375	4.375 (0.824)	59	19754			0.00- 40.89	10.93
86 Vinyl Acetate					CAS #: 108-05-4		
4.445	4.445 (0.837)	86	11526	100.000	112.87	80.00- 120.00	100.00
4.445	4.445 (0.837)	43	132688			1119.78-1179.78	1151.21
4.445	4.445 (0.837)	42	10946			63.36- 123.36	94.97
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.767	4.767 (0.897)	59	154695	100.000	114.79	80.00- 120.00	100.00
4.767	4.767 (0.897)	87	55877			7.71- 67.71	36.12
4.767	4.767 (0.897)	41	26503			0.00- 47.13	17.13
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.032	5.032 (0.947)	61	66338	100.000	114.92	80.00- 120.00	100.00
5.032	5.032 (0.947)	96	51756			46.92- 106.92	78.02
5.046	5.046 (0.950)	98	32178			18.93- 78.93	48.51
92 2-Butanone					CAS #: 78-93-3		
5.088	5.088 (0.958)	72	20115	100.000	106.88	80.00- 120.00	100.00
5.088	5.088 (0.958)	43	98929			439.29- 499.29	491.82
5.088	5.088 (0.958)	57	7605			8.51- 68.51	37.81

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Tetrahydrofuran					CAS #: 109-99-9		
5.298	5.298 (0.997)	42	55207	100.000	106.30	80.00- 120.00	100.00
5.298	5.298 (0.997)	71	20245			3.78- 63.78	36.67
5.298	5.298 (0.997)	72	19462			4.55- 64.55	35.25
100 Chloroform					CAS #: 67-66-3		
5.382	5.382 (1.013)	83	88317	100.000	113.71	80.00- 120.00	100.00
5.382	5.382 (1.013)	85	57297			35.58- 95.58	64.88
102 Cyclohexane					CAS #: 110-82-7		
5.494	5.494 (1.034)	84	61181	100.000	115.38	80.00- 120.00	100.00
5.494	5.494 (1.034)	56	82754			109.96- 169.96	135.26
5.494	5.494 (1.034)	41	43621			47.10- 107.10	71.30
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.536	5.536 (1.042)	97	98391	100.000	113.52	80.00- 120.00	100.00
5.536	5.536 (1.042)	99	61111			34.47- 94.47	62.11
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.662	5.662 (1.066)	119	105322	100.000	117.29	80.00- 120.00	100.00
5.662	5.662 (1.066)	117	108702			75.51- 135.51	103.21
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.928	5.928 (1.116)	57	274172	100.000	119.62	80.00- 120.00	100.00
5.928	5.928 (1.116)	56	84678			1.61- 61.61	30.88
5.928	5.928 (1.116)	41	68572			0.00- 55.08	25.01
116 Benzene					CAS #: 71-43-2		
5.942	5.942 (0.922)	78	138197	100.000	114.41	80.00- 120.00	100.00
5.942	5.942 (0.922)	77	32873			0.00- 53.47	23.79
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.040	6.040 (1.137)	73	126087	100.000	114.89	80.00- 120.00	100.00
6.040	6.040 (1.137)	87	32979			0.00- 56.16	26.16
6.040	6.040 (1.137)	55	37517			0.00- 58.92	29.75
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.068	6.068 (0.941)	62	58592	100.000	105.71	80.00- 120.00	100.00
6.068	6.068 (0.941)	64	19773			1.44- 61.44	33.75
121 Heptane					CAS #: 142-82-5		
6.152	6.152 (0.954)	71	51923	100.000	107.63	80.00- 120.00	100.00
6.152	6.152 (0.954)	43	99611			167.16- 227.16	191.84
6.152	6.152 (0.954)	100	17265			4.59- 64.59	33.25
125 Trichloroethene					CAS #: 79-01-6		
6.697	6.697 (1.039)	95	62933	100.000	108.47	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.697	6.697 (1.039)	130	72186			80.33- 140.33	114.70
6.697	6.697 (1.039)	97	40965			34.11- 94.11	65.09
127 Methylcyclohexane					CAS #: 108-87-2		
6.823	6.823 (1.059)	83	87474	100.000	117.12	80.00- 120.00	100.00
6.823	6.823 (1.059)	98	42278			18.36- 78.36	48.33
6.823	6.823 (1.059)	55	81428			64.11- 124.11	93.09
132 1,2-Dichloropropane					CAS #: 78-87-5		
7.047	7.047 (1.093)	63	52320	100.000	108.34	80.00- 120.00	100.00
7.047	7.047 (1.093)	62	37033			38.98- 98.98	70.78
7.047	7.047 (1.093)	41	30038			26.92- 86.92	57.41
136 1,4-Dioxane					CAS #: 123-91-1		
7.201	7.201 (1.117)	88	35618	100.000	113.41	80.00- 120.00	100.00
7.187	7.187 (1.115)	58	26665			45.23- 105.23	74.86
7.187	7.187 (1.115)	57	9148			0.00- 54.84	25.68
138 Bromodichloromethane					CAS #: 75-27-4		
7.411	7.411 (1.150)	83	95205	100.000	106.93	80.00- 120.00	100.00
7.411	7.411 (1.150)	85	63247			35.40- 95.40	66.43
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
8.125	8.125 (1.260)	75	78829	100.000	110.74	80.00- 120.00	100.00
8.125	8.125 (1.260)	77	25835			4.01- 64.01	32.77
8.125	8.125 (1.260)	39	45547			28.76- 88.76	57.78
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
8.418	8.418 (1.306)	85	20611	100.000	99.927	80.00- 120.00	100.00
8.418	8.418 (1.306)	43	135893			608.29- 668.29	659.32
8.404	8.404 (1.304)	58	50383			218.56- 278.56	244.45
147 Toluene					CAS #: 108-88-3		
8.614	8.614 (1.336)	91	187470	100.000	113.72	80.00- 120.00	100.00
8.614	8.614 (1.336)	92	110005			28.41- 88.41	58.68
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
9.104	9.104 (0.881)	75	73656	100.000	112.55	80.00- 120.00	100.00
9.104	9.104 (0.881)	77	26017			3.39- 63.39	35.32
9.104	9.104 (0.881)	39	40530			23.99- 83.99	55.03
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
9.342	9.342 (0.904)	97	59888	100.000	101.91	80.00- 120.00	100.00
9.342	9.342 (0.904)	99	36886			30.16- 90.16	61.59
9.342	9.342 (0.904)	83	49878			52.74- 112.74	83.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
156 Tetrachloroethene					CAS #: 127-18-4		
9.356	9.356 (0.905)	166	97199	100.000	115.40	80.00- 120.00	100.00
9.356	9.356 (0.905)	129	72780			44.78- 104.78	74.88
9.356	9.356 (0.905)	131	71902			43.76- 103.76	73.97
158 2-Hexanone					CAS #: 591-78-6		
9.636	9.636 (0.932)	58	72348	100.000	113.91	80.00- 120.00	100.00
9.636	9.636 (0.932)	43	132548			158.05- 218.05	183.21
9.636	9.636 (0.932)	100	14735			0.00- 51.23	20.37
160 Dibromochloromethane					CAS #: 124-48-1		
9.762	9.762 (0.944)	129	122904	100.000	109.58	80.00- 120.00	100.00
9.762	9.762 (0.944)	127	93287			48.15- 108.15	75.90
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
9.888	9.888 (0.957)	107	97685	100.000	109.90	80.00- 120.00	100.00
9.888	9.888 (0.957)	109	95888			64.77- 124.77	98.16
165 Chlorobenzene					CAS #: 108-90-7		
10.363	10.363 (1.003)	112	150273	100.000	109.46	80.00- 120.00	100.00
10.363	10.363 (1.003)	114	49978			2.05- 62.05	33.26
10.363	10.363 (1.003)	77	90093			25.53- 85.53	59.95
167 Ethyl Benzene					CAS #: 100-41-4		
10.447	10.447 (1.011)	106	79467	100.000	112.14	80.00- 120.00	100.00
10.447	10.447 (1.011)	91	239115			275.38- 335.38	300.90
169 m,p-Xylene					CAS #: 108-38-3		
10.559	10.559 (1.022)	106	93185	100.000	106.18	80.00- 120.00	100.00
10.559	10.559 (1.022)	91	183842			163.96- 223.96	197.29
171 o-Xylene					CAS #: 95-47-6		
10.909	10.909 (1.056)	106	89161	100.000	107.08	80.00- 120.00	100.00
10.909	10.909 (1.056)	91	182518			178.07- 238.07	204.71
172 Styrene					CAS #: 100-42-5		
10.937	10.937 (1.058)	104	154308	100.000	109.16	80.00- 120.00	100.00
10.937	10.937 (1.058)	78	71914			17.50- 77.50	46.60
174 Bromoform					CAS #: 75-25-2		
11.105	11.105 (1.074)	173	118902	100.000	110.09	80.00- 120.00	100.00
11.105	11.105 (1.074)	171	61045			20.99- 80.99	51.34
175 Cumene					CAS #: 98-82-8		
11.203	11.203 (1.084)	105	280821	100.000	108.75	80.00- 120.00	100.00
11.203	11.203 (1.084)	120	75209			0.00- 57.87	26.78

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
175 Cumene (continued)							
11.203	11.203 (1.084)	51	27747			0.00- 40.21	9.88
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.483	11.483 (1.111)	83	128554	100.000	108.40	80.00- 120.00	100.00
11.483	11.483 (1.111)	85	83798			36.88- 96.88	65.19
182 Propylbenzene					CAS #: 103-65-1		
11.497	11.497 (1.112)	91	299420	100.000	105.56	80.00- 120.00	100.00
11.497	11.497 (1.112)	120	77100			0.00- 55.56	25.75
11.497	11.497 (1.112)	105	11997			0.00- 34.03	4.01
188 4-Ethyltoluene					CAS #: 622-96-8		
11.581	11.581 (1.120)	105	282511	100.000	105.82	80.00- 120.00	100.00
11.581	11.581 (1.120)	120	89944			0.00- 57.62	31.84
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.623	11.623 (1.125)	105	227530	100.000	114.74	80.00- 120.00	100.00
11.623	11.623 (1.125)	120	112385			23.73- 83.73	49.39
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.874	11.874 (1.149)	105	209573	100.000	104.14	80.00- 120.00	100.00
11.874	11.874 (1.149)	120	97706			17.13- 77.13	46.62
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.056	12.056 (1.167)	146	152849	100.000	98.662	80.00- 120.00	100.00
12.056	12.056 (1.167)	148	98187			33.49- 93.49	64.24
12.056	12.056 (1.167)	111	59105			7.53- 67.53	38.67
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.112	12.112 (1.172)	146	154608	100.000	101.89	80.00- 120.00	100.00
12.112	12.112 (1.172)	148	97802			33.27- 93.27	63.26
12.112	12.112 (1.172)	111	56578			7.29- 67.29	36.59
212 alpha-Chlorotoluene					CAS #: 100-44-7		
12.210	12.210 (1.181)	91	181141	100.000	102.37	80.00- 120.00	100.00
12.210	12.210 (1.181)	126	43320			0.00- 53.95	23.92
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.336	12.336 (1.194)	146	133807	100.000	97.744	80.00- 120.00	100.00
12.336	12.336 (1.194)	148	85791			32.65- 92.65	64.12
12.336	12.336 (1.194)	111	53668			9.40- 69.40	40.11
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
13.190	13.190 (1.276)	180	52775	100.000	71.849	80.00- 120.00	100.00
13.190	13.190 (1.276)	182	51255			63.10- 123.10	97.12

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
227 Hexachlorobutadiene						CAS #: 87-68-3		
13.232	13.232	(1.280)	225	48518	100.000	77.162	80.00- 120.00	100.00
13.232	13.232	(1.280)	223	30696			33.31- 93.31	63.27
228 Naphthalene						CAS #: 91-20-3		
13.316	13.316	(1.288)	128	10136	10.0000	8.268	80.00- 120.00	100.00(a)
13.316	13.316	(1.288)	127	1423			0.00- 44.56	14.04

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14120105.d
Lab Smp Id: ICAL Level #5
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msd14.i/01dec16.b/14651201a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 01-DEC-2016
Calibration Time: 14:23
Client Smp ID: ICAL Level #5
Level: LOW
Sample Type: AIR

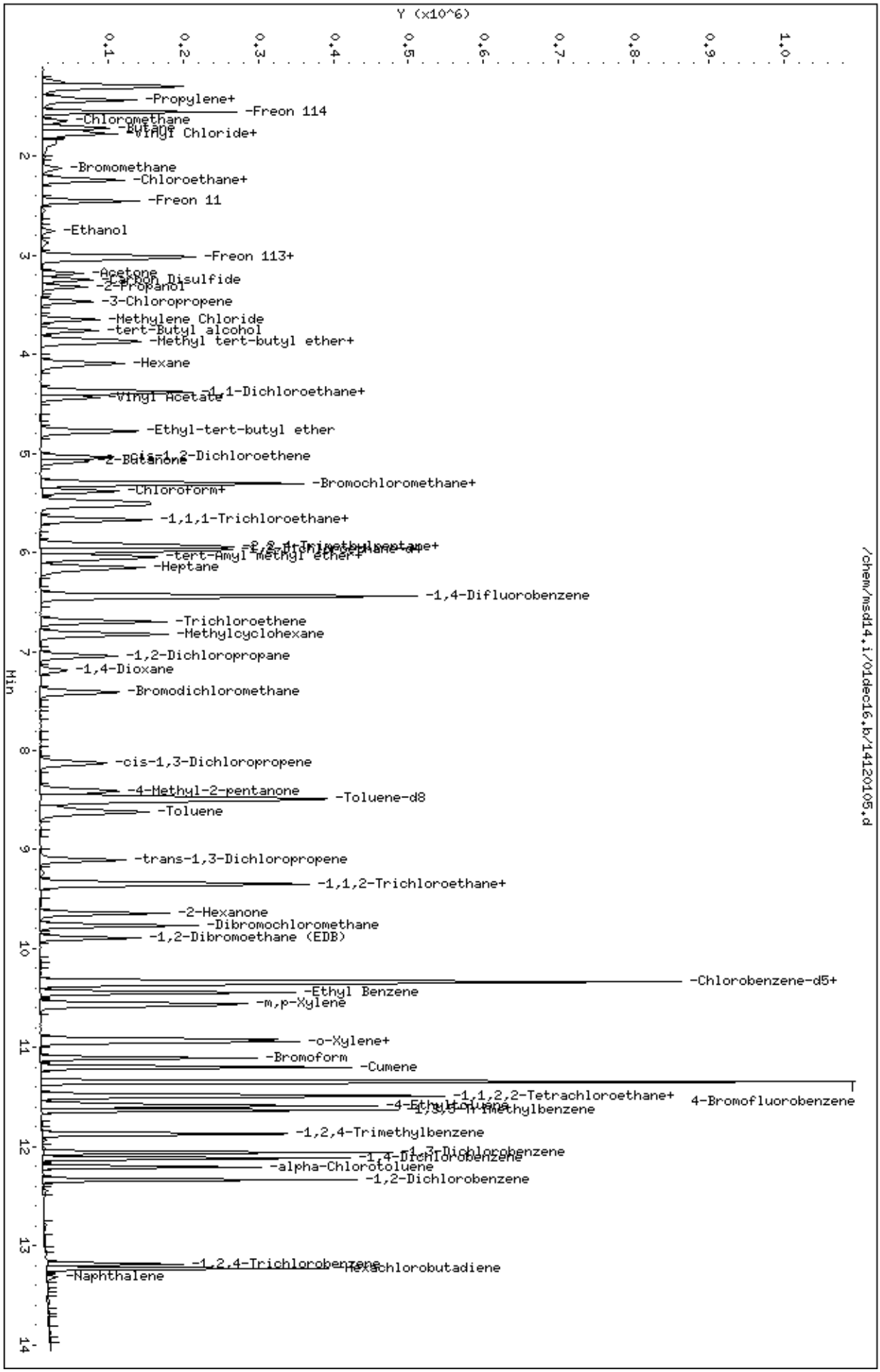
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	124267	74560	173974	122984	-1.03
123 1,4-Difluorobenze	508921	305353	712489	515858	1.36
163 Chlorobenzene-d5	476110	285666	666554	481952	1.23

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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/msd14.i/01dec16.b/14120105.d
Date : 01-DEC-2016 13:55
Client ID: ICAL Level #5
Sample Info: 25ml #2819-132
Column phase: RTX-624

Instrument: msd14.i
Operator: jg
Column diameter: 0.18



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/19dec16.b/14121909.d
Lab Smp Id: ICAL Level 6 Client Smp ID: ICAL Level 6
Inj Date : 19-DEC-2016 12:01
Operator : jg Inst ID: msd14.i
Smp Info : 50mL #2819-185
Misc Info : 200ppbv (200ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/19dec16.b/14651201b.m
Meth Date : 20-Dec-2016 07:44 jscarbro Quant Type: ISTD
Cal Date : 19-DEC-2016 12:01 Cal File: 14121909.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ComboICALmVB.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		
2.472	2.472 (0.465)	55	57384	200.000	207.11	0.00- 0.00	100.00(A)
2.472	2.472 (0.465)	42	90838			0.00- 0.00	158.30
34 Pentane					CAS #: 109-66-0		
2.528	2.528 (0.476)	43	31356	200.000	195.86	0.00- 0.00	100.00
2.528	2.528 (0.476)	57	5070			0.00- 0.00	16.17
2.528	2.528 (0.476)	72	2967			0.00- 0.00	9.46
44 Ethyl Ether					CAS #: 60-29-7		
2.794	2.794 (0.526)	74	27586	200.000	207.12	0.00- 0.00	100.00(TA)
2.794	2.794 (0.526)	59	45691			0.00- 0.00	165.63
0.000	1.000 (0.000)	31	0			0.00- 0.00	0.00
53 Iodomethane					CAS #: 74-88-4		
3.228	3.228 (0.608)	142	121871	200.000	239.63	0.00- 0.00	100.00(A)
3.228	3.228 (0.608)	127	49456			0.00- 0.00	40.58
59 Cyclopentene					CAS #: 142-29-0		
3.479	3.479 (0.655)	67	112409	200.000	207.41	80.00- 120.00	100.00(A)

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

   59 Cyclopentene (continued)
  3.479   3.479 (0.655)    68     42832                    0.00-  30.00    38.10
  3.479   3.479 (0.655)    53     25779                    0.00-  30.00    22.93
-------------------------------------------------------------------------------
   74 Acrylonitrile                                CAS #: 107-13-1
  3.997   3.997 (0.752)    53     64937 200.000   200.90   0.00-   0.00   100.00(A)
  3.997   3.997 (0.752)    52     49390                    0.00-   0.00    76.06
-------------------------------------------------------------------------------
   76 1-Hexene                                     CAS #: 592-41-6
  4.025   4.025 (0.758)    55     60882 200.000   228.52   0.00-   0.00   100.00(A)
  4.025   4.025 (0.758)    41     72220                    0.00-   0.00   118.62
  4.025   4.025 (0.758)    84     19018                    0.00-   0.00    31.24
-------------------------------------------------------------------------------
   84 1-Propanol                                   CAS #: 71-23-8
  4.529   4.529 (0.852)    42     12357 200.000   202.24  80.00- 120.00   100.00(A)
  4.529   4.529 (0.852)    59     14876                    0.00-  30.00   120.39
  4.529   4.529 (0.852)    41      8904                    0.00-  30.00    72.06
-------------------------------------------------------------------------------
   90 2,2-Dichloropropane                          CAS #: 594-20-7
  4.990   4.990 (0.939)    77    106452 200.000   214.68  80.00- 120.00   100.00(A)
  4.990   4.990 (0.939)    79     34185                    0.00-  30.00    32.11
  4.990   4.990 (0.939)    97     24098                    0.00-  30.00    22.64
-------------------------------------------------------------------------------
   93 Methyl Acrylate                              CAS #: 96-33-3
  5.158   5.158 (0.971)    55    165344 200.000   205.35   0.00-   0.00   100.00(A)
  5.158   5.158 (0.971)    85     23525                    0.00-   0.00    14.23
  5.158   5.158 (0.971)    58     14329                    0.00-   0.00     8.67
-------------------------------------------------------------------------------
*  98 Bromochloromethane                           CAS #: 74-97-5
  5.312   5.312 (1.000)   130    105579 400.000           80.00- 120.00   100.00
  5.312   5.312 (1.000)   128     80654                   46.96- 106.96    76.39
  5.312   5.312 (1.000)    49    134767                   97.69- 157.69   127.65
-------------------------------------------------------------------------------
  107 1,1-Dichloropropene                          CAS #: 563-58-6
  5.718   5.718 (1.076)   110     41940 200.000   205.75  80.00- 120.00   100.00(A)
  5.718   5.718 (1.076)    75     94754                    0.00-  30.00   225.93
-------------------------------------------------------------------------------
  115 Isobutanol                                   CAS #: 78-83-1
  5.928   5.928 (0.920)    43     64670 200.000   205.37  80.00- 120.00   100.00(A)
  5.928   5.928 (0.920)    41     46188                    0.00-  30.00    71.42
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                          CAS #: 540-36-3
  6.446   6.446 (1.000)   114    444531 400.000           80.00- 120.00   100.00
  6.446   6.446 (1.000)    88     63877                    0.00-  45.92    14.37
-------------------------------------------------------------------------------
  124 n-Butanol                                    CAS #: 71-36-3
  6.684   6.684 (1.037)    56    113384 200.000   217.71  80.00- 120.00   100.00(A)
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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE ( PPBV)  ( PPBV)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  124 n-Butanol (continued)
  6.684   6.684 (1.037)    41     78667                     0.00-  30.00    69.38
  6.684   6.684 (1.037)    43     62881                     0.00-  30.00    55.46
-------------------------------------------------------------------------------
  128 Ethyl acrylate                                CAS #: 140-88-5
  6.879   6.879 (1.067)    55    160613 200.000   203.98   0.00-   0.00   100.00(A)
  6.879   6.879 (1.067)    99     10523                     0.00-   0.00     6.55
  6.879   6.879 (1.067)    45     15357                     0.00-   0.00     9.56
-------------------------------------------------------------------------------
  131 2-Pentanone                                   CAS #: 107-87-9
  7.005   7.005 (1.087)    43    223412 200.000   204.85   0.00-   0.00   100.00(A)
  7.005   7.005 (1.087)    58     18268                     0.00-   0.00     8.18
  7.019   7.019 (1.089)    86     37703                     0.00-   0.00    16.88
-------------------------------------------------------------------------------
  134 Methyl Methacrylate                           CAS #: 80-62-6
  7.173   7.173 (1.113)    41    111515 200.000   201.20   0.00-   0.00   100.00(A)
  7.187   7.187 (1.115)    69     79232                     0.00-   0.00    71.05
  7.187   7.187 (1.115)   100     34748                     0.00-   0.00    31.16
-------------------------------------------------------------------------------
  137 Dibromomethane                                CAS #: 74-95-3
  7.215   7.215 (1.119)   174     96293 200.000   201.35   0.00-   0.00   100.00(A)
  7.201   7.201 (1.117)    93     84970                     0.00-   0.00    88.24
  7.201   7.201 (1.117)    95     70416                     0.00-   0.00    73.13
-------------------------------------------------------------------------------
  148 Octane                                        CAS #: 111-65-9
  8.712   8.712 (1.352)    57     69333 200.000   199.80   0.00-   0.00   100.00
  8.698   8.698 (1.349)    85     72494                     0.00-   0.00   104.56
  8.698   8.698 (1.349)    43    165384                     0.00-   0.00   238.54
-------------------------------------------------------------------------------
  157 1,3-Dichloropropane                           CAS #: 142-28-9
  9.552   9.552 (1.798)    76    120870 200.000   209.46  80.00- 120.00   100.00(A)
  9.552   9.552 (1.798)    41     86460                     0.00-  30.00    71.53
  9.552   9.552 (1.798)    78     40478                     0.00-  30.00    33.49
-------------------------------------------------------------------------------
  159 Butyl Acetate                                 CAS #: 123-86-4
  9.762   9.762 (1.514)    56     21131 200.000   207.53  80.00- 120.00   100.00(A)
  9.762   9.762 (1.514)    73      7978                     0.00-  30.00    37.75
  9.762   9.762 (1.514)    43     51803                     0.00-  30.00   245.15
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                              CAS #: 3114-55-4
 10.335  10.335 (1.000)   117    401779 400.000            80.00- 120.00   100.00
 10.335  10.335 (1.000)    82    192665                    19.32-  79.32    47.95
-------------------------------------------------------------------------------
  170 Nonane                                        CAS #: 111-84-2
 10.531  10.531 (1.019)    43    171898 200.000   211.95   0.00-   0.00   100.00(A)
 10.531  10.531 (1.019)    57    150498                     0.00-   0.00    87.55
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
170 Nonane (continued)							
10.531	10.531 (1.019)	85	53968			0.00- 0.00	31.40
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
10.461	10.461 (1.012)	131	132521	200.000	208.02	80.00- 120.00	100.00(A)
10.461	10.461 (1.012)	117	87802			0.00- 30.00	66.26
10.461	10.461 (1.012)	95	43794			0.00- 30.00	33.05
173 2-Heptanone					CAS #: 110-43-0		
11.049	11.049 (1.069)	58	141295	200.000	212.98	80.00- 120.00	100.00(A)
11.049	11.049 (1.069)	43	227796			0.00- 30.00	161.22
176 Cyclohexanone					CAS #: 108-94-1		
11.315	11.315 (1.095)	55	103354	200.000	208.15	80.00- 120.00	100.00(A)
11.329	11.329 (1.096)	98	39992			0.00- 30.00	38.69
11.315	11.315 (1.095)	42	66502			0.00- 30.00	64.34
180 Bromobenzene					CAS #: 108-86-1		
11.441	11.441 (1.107)	156	143136	200.000	205.79	80.00- 120.00	100.00(A)
11.441	11.441 (1.107)	77	194472			0.00- 30.00	135.87
11.441	11.441 (1.107)	158	136152			0.00- 30.00	95.12
184 trans-1,4-Dichloro-2-butene					CAS #: 110-57-6		
11.525	11.525 (1.115)	89	40285	200.000	218.69	0.00- 0.00	100.00(A)
11.525	11.525 (1.115)	53	58791			0.00- 0.00	145.94
11.525	11.525 (1.115)	124	15893			0.00- 0.00	39.45
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.511	11.511 (1.114)	110	61982	200.000	199.26	80.00- 120.00	100.00
11.511	11.511 (1.114)	61	43411			0.00- 30.00	70.04
11.511	11.511 (1.114)	112	40317			0.00- 30.00	65.05
187 Decane					CAS #: 124-18-5		
11.581	11.581 (1.120)	57	159664	200.000	209.09	0.00- 0.00	100.00(A)
11.581	11.581 (1.120)	71	53364			0.00- 0.00	33.42
11.581	11.581 (1.120)	142	9731			0.00- 0.00	6.09
189 2-Chlorotoluene					CAS #: 95-49-8		
11.567	11.567 (1.119)	126	110959	200.000	212.13	80.00- 120.00	100.00(A)
11.567	11.567 (1.119)	91	284537			0.00- 30.00	256.43
11.567	11.567 (1.119)	65	26935			0.00- 30.00	24.27
191 4-Chlorotoluene					CAS #: 106-43-4		
11.651	11.651 (1.127)	126	107258	200.000	204.10	80.00- 120.00	100.00(A)
11.651	11.651 (1.127)	91	283811			0.00- 30.00	264.61
11.651	11.651 (1.127)	63	35564			0.00- 30.00	33.16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
195 tert-Butylbenzene					CAS #: 98-06-6		
11.819	11.819 (1.143)	119	337022	200.000	207.08	80.00- 120.00	100.00(A)
11.819	11.819 (1.143)	134	84803			0.00- 30.00	25.16
11.819	11.819 (1.143)	91	200603			0.00- 30.00	59.52
197 Pentachloroethane					CAS #: 76-01-7		
11.860	11.860 (1.148)	167	106430	200.000	207.43	80.00- 120.00	100.00(A)
11.860	11.860 (1.148)	117	105669			0.00- 30.00	99.28
203 sec-Butylbenzene					CAS #: 135-98-8		
11.958	11.958 (1.157)	105	467398	200.000	206.67	80.00- 120.00	100.00(A)
11.958	11.958 (1.157)	134	103303			0.00- 30.00	22.10
11.958	11.958 (1.157)	91	68636			0.00- 30.00	14.68
206 bis(2-Chloroethyl) Ether					CAS #: 111-44-4		
12.042	12.042 (1.165)	93	172648	200.000	219.71	0.00- 0.00	100.00(A)
12.042	12.042 (1.165)	95	52824			0.00- 0.00	30.60
12.028	12.028 (1.164)	63	124932			0.00- 0.00	72.36
207 p-Cymene					CAS #: 99-87-6		
12.056	12.056 (1.167)	119	397587	200.000	207.21	80.00- 120.00	100.00(A)
12.056	12.056 (1.167)	134	108516			0.00- 30.00	27.29
12.042	12.042 (1.165)	91	81964			0.00- 30.00	20.62
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
12.126	12.126 (1.173)	120	147500	200.000	207.06	80.00- 120.00	100.00(A)
12.126	12.126 (1.173)	105	332154			0.00- 30.00	225.19
12.126	12.126 (1.173)	77	36032			0.00- 30.00	24.43
215 Undecane					CAS #: 1120-21-4		
12.294	12.294 (1.190)	57	129457	200.000	197.80	0.00- 0.00	100.00
12.294	12.294 (1.190)	43	113858			0.00- 0.00	87.95
213 Butylbenzene					CAS #: 104-51-8		
12.294	12.294 (1.190)	134	89428	200.000	203.14	80.00- 120.00	100.00(A)
12.280	12.280 (1.188)	91	298179			0.00- 30.00	333.43
12.280	12.280 (1.188)	92	162115			0.00- 30.00	181.28
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
12.770	12.770 (1.236)	157	94442	200.000	203.25	80.00- 120.00	100.00(A)
12.770	12.770 (1.236)	75	65311			0.00- 30.00	69.15
12.770	12.770 (1.236)	155	74459			0.00- 30.00	78.84
225 Dodecane					CAS #: 112-40-3		
12.854	12.854 (1.244)	57	82290	200.000	198.25	0.00- 0.00	100.00
12.854	12.854 (1.244)	43	66343			0.00- 0.00	80.62

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount
    exceeded maximum amount.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14121909.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msd14.i/19dec16.b/14651201b.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 19-DEC-2016
Calibration Time: 12:01
Client Smp ID: ICAL Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	105579	63347	147811	105579	0.00
123 1,4-Difluorobenze	444531	266719	622343	444531	0.00
163 Chlorobenzene-d5	401779	241067	562491	401779	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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.

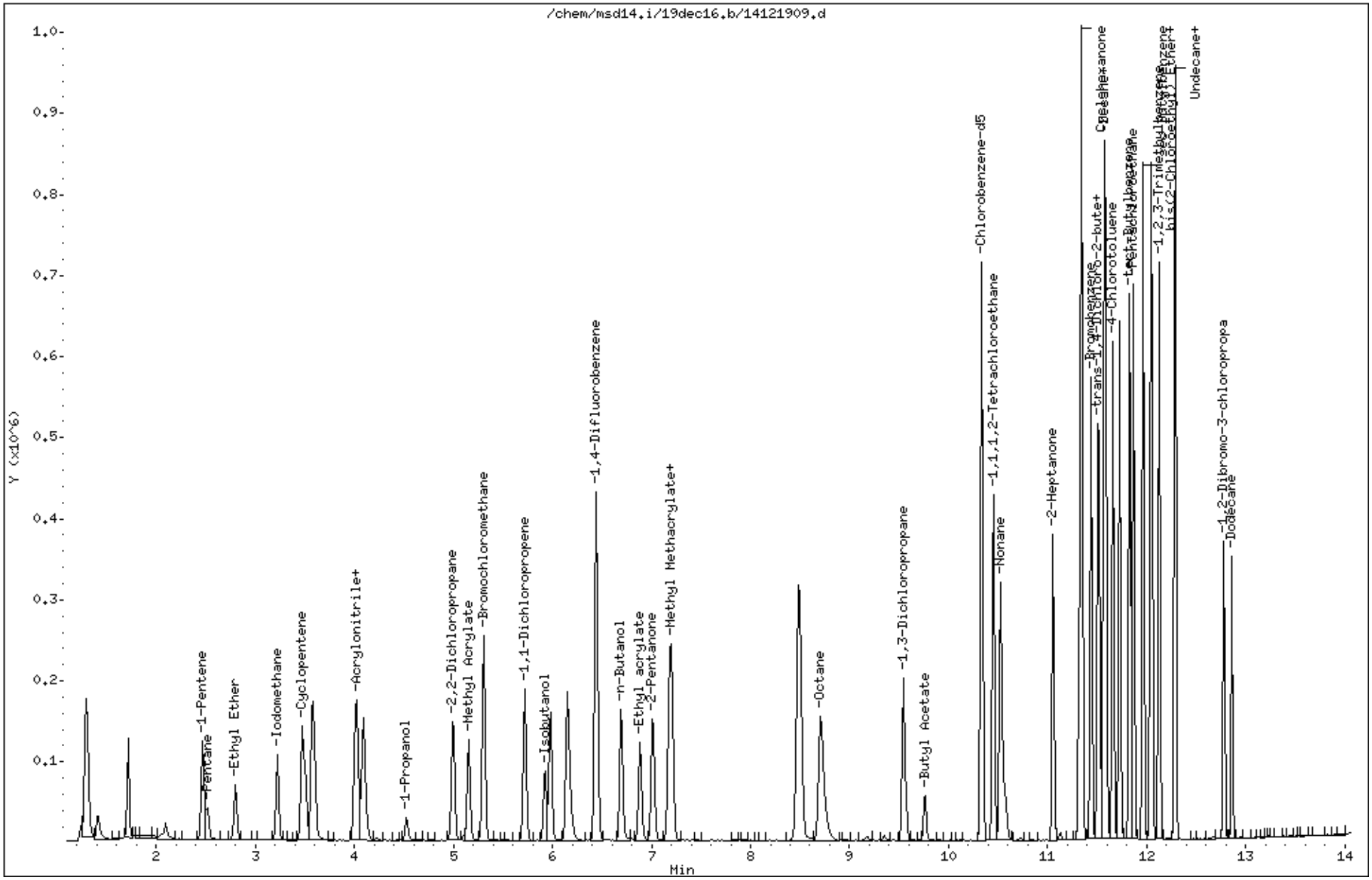
Data File: /chem/msd14.i/19dec16.b/14121909.d
Date : 19-DEC-2016 12:01
Client ID: ICAL Level 6
Sample Info: 50mL #2819-185

Instrument: msd14.i

Operator: jg

Column phase: RTX-624

Column diameter: 0.18



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/01dec16.b/14120106.d
Lab Smp Id: ICAL Level #6 Client Smp ID: ICAL Level #6
Inj Date : 01-DEC-2016 14:23
Operator : jg Inst ID: msd14.i
Smp Info : 50ml #2819-132
Misc Info : 200ppbv (200ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/01dec16.b/14651201a.m
Meth Date : 02-Dec-2016 16:30 jscarbro Quant Type: ISTD
Cal Date : 01-DEC-2016 14:23 Cal File: 14120106.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.312	5.312 (1.000)	130	124267	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	95637			46.96- 106.96	76.96
5.312	5.312 (1.000)	49	158678			97.69- 157.69	127.69
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.446	6.446 (1.000)	114	508921	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	81022			0.00- 45.92	15.92
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
10.335	10.335 (1.000)	117	476110	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	234840			19.32- 79.32	49.32
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.984	5.984 (1.126)	65	148626	400.000	390.63	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	81322			24.72- 84.72	54.72
$ 146 Toluene-d8						CAS #: 2037-26-5	
8.488	8.488 (1.317)	98	514909	400.000	409.71	80.00- 120.00	100.00
8.488	8.488 (1.317)	70	52522			0.00- 40.20	10.20

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

$ 146 Toluene-d8 (continued)
  8.488   8.488 (1.317)   100    353353                    38.62-  98.62    68.62
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 11.343  11.343 (1.097)   174    296447 400.000   401.22  80.00- 120.00   100.00
 11.343  11.343 (1.097)    95    355078                   89.78- 149.78   119.78
 11.343  11.343 (1.097)   176    284886                   66.10- 126.10    96.10
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.423   1.423 (0.268)    41     70570 200.000   204.90  80.00- 120.00   100.00
  1.423   1.423 (0.268)    42     45011                   33.78-  93.78    63.78
  1.423   1.423 (0.268)    39     46988                   36.58-  96.58    66.58
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.451   1.451 (0.273)    85    203445 200.000   205.36  80.00- 120.00   100.00
  1.451   1.451 (0.273)    87     64370                    1.64-  61.64    31.64
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.563   1.563 (0.294)   135    171998 200.000   206.22  80.00- 120.00   100.00
  1.563   1.563 (0.294)   137     53485                    1.10-  61.10    31.10
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.646   1.646 (0.310)    50     74989 200.000   197.05  80.00- 120.00   100.00
  1.646   1.646 (0.310)    52     24560                    2.75-  62.75    32.75
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.716   1.716 (0.323)    58     16330 200.000   179.54  80.00- 120.00   100.00
  1.716   1.716 (0.323)    43    125203                  736.71- 796.71   766.71
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.744   1.744 (0.328)    62     74423 200.000   195.78  80.00- 120.00   100.00
  1.744   1.744 (0.328)    64     23655                    1.78-  61.78    31.78
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.772   1.772 (0.334)    54     64338 200.000   168.72  80.00- 120.00   100.00
  1.772   1.772 (0.334)    39     62772                   67.57- 127.57    97.57
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.122   2.122 (0.399)    94     49655 200.000   211.40  80.00- 120.00   100.00
  2.122   2.122 (0.399)    96     45928                   62.49- 122.49    92.49
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.220   2.220 (0.418)    64     39829 200.000   215.48  80.00- 120.00   100.00
  2.220   2.220 (0.418)    66     12250                    0.76-  60.76    30.76
-------------------------------------------------------------------------------
   31 Isopentane                                    CAS #: 78-78-4
  2.248   2.248 (0.423)    43    104080 200.000   259.11  80.00- 120.00   100.00
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
31 Isopentane (continued)							
2.248	2.248 (0.423)	57	70382			37.62- 97.62	67.62
2.248	2.248 (0.423)	72	6907			0.00- 36.64	6.64
35 Freon 11					CAS #: 75-69-4		
2.458	2.458 (0.463)	101	218676	200.000	244.11	80.00- 120.00	100.00
2.458	2.458 (0.463)	103	141437			34.68- 94.68	64.68
42 Ethanol					CAS #: 64-17-5		
2.766	2.766 (0.521)	45	38657	200.000	199.58	80.00- 120.00	100.00
2.766	2.766 (0.521)	46	16190			11.88- 71.88	41.88
49 Freon 113					CAS #: 76-13-1		
3.018	3.018 (0.568)	151	161690	200.000	238.36	80.00- 120.00	100.00
3.018	3.018 (0.568)	153	106980			36.16- 96.16	66.16
3.004	3.004 (0.565)	101	187452			85.93- 145.93	115.93
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.046	3.046 (0.573)	61	137321	200.000	239.80	80.00- 120.00	100.00
3.046	3.046 (0.573)	96	82607			30.16- 90.16	60.16
3.046	3.046 (0.573)	98	52312			8.09- 68.09	38.09
52 Acetone					CAS #: 67-64-1		
3.186	3.186 (0.600)	58	44533	200.000	228.34	80.00- 120.00	100.00
3.186	3.186 (0.600)	43	140052			284.49- 344.49	314.49
56 Carbon Disulfide					CAS #: 75-15-0		
3.256	3.256 (0.613)	76	212150	200.000	208.68	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.325	3.325 (0.626)	45	164600	200.000	218.65	80.00- 120.00	100.00
3.325	3.325 (0.626)	43	27719			0.00- 46.84	16.84
3.325	3.325 (0.626)	59	6756			0.00- 34.10	4.10
58 3-Chloropropene					CAS #: 107-05-1		
3.479	3.479 (0.655)	76	33017	200.000	208.32	80.00- 120.00	100.00
3.479	3.479 (0.655)	41	112466			310.63- 370.63	340.63
66 Methylene Chloride					CAS #: 75-09-2		
3.647	3.647 (0.687)	49	104394	200.000	231.95	80.00- 120.00	100.00
3.647	3.647 (0.687)	84	68794			35.90- 95.90	65.90
3.647	3.647 (0.687)	51	30773			0.00- 59.48	29.48
71 tert-Butyl alcohol					CAS #: 75-65-0		
3.759	3.759 (0.708)	59	191864	200.000	215.98	80.00- 120.00	100.00(A)
3.759	3.759 (0.708)	41	41301			0.00- 51.53	21.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol (continued)							
3.759	3.759 (0.708)	57	19112			0.00- 39.96	9.96
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.857	3.857 (0.726)	73	226074	200.000	226.96	80.00- 120.00	100.00
3.857	3.857 (0.726)	57	60341			0.00- 56.69	26.69
3.857	3.857 (0.726)	41	56271			0.00- 54.89	24.89
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.885	3.885 (0.731)	96	81331	200.000	199.77	80.00- 120.00	100.00
3.885	3.885 (0.731)	61	116785			113.59- 173.59	143.59
3.885	3.885 (0.731)	98	50889			32.57- 92.57	62.57
78 Hexane					CAS #: 110-54-3		
4.095	4.095 (0.771)	57	152143	200.000	231.27	80.00- 120.00	100.00
4.095	4.095 (0.771)	43	97415			34.03- 94.03	64.03
4.095	4.095 (0.771)	86	23779			0.00- 45.63	15.63
83 Isopropyl ether					CAS #: 108-20-3		
4.375	4.375 (0.824)	45	341061	200.000	211.77	80.00- 120.00	100.00(A)
4.389	4.389 (0.826)	87	80628			0.00- 53.64	23.64
4.375	4.375 (0.824)	59	37137			0.00- 40.89	10.89
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.389	4.389 (0.826)	63	151918	200.000	227.17	80.00- 120.00	100.00
4.389	4.389 (0.826)	65	47644			1.36- 61.36	31.36
86 Vinyl Acetate					CAS #: 108-05-4		
4.445	4.445 (0.837)	86	22686	200.000	212.89	80.00- 120.00	100.00
4.445	4.445 (0.837)	43	260839			1119.78-1179.78	1149.78
4.445	4.445 (0.837)	42	21179			63.36- 123.36	93.36
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.781	4.781 (0.900)	59	301042	200.000	221.08	80.00- 120.00	100.00(A)
4.781	4.781 (0.900)	87	113533			7.71- 67.71	37.71
4.767	4.767 (0.897)	41	51574			0.00- 47.13	17.13
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.032	5.032 (0.947)	61	128316	200.000	230.09	80.00- 120.00	100.00
5.046	5.046 (0.950)	96	98697			46.92- 106.92	76.92
5.046	5.046 (0.950)	98	62790			18.93- 78.93	48.93
92 2-Butanone					CAS #: 78-93-3		
5.088	5.088 (0.958)	72	41029	200.000	211.53	80.00- 120.00	100.00
5.088	5.088 (0.958)	43	192545			439.29- 499.29	469.29
5.088	5.088 (0.958)	57	15799			8.51- 68.51	38.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Tetrahydrofuran					CAS #: 109-99-9		
5.298	5.298 (0.997)	42	109379	200.000	207.30	80.00- 120.00	100.00
5.298	5.298 (0.997)	71	36944			3.78- 63.78	33.78
5.298	5.298 (0.997)	72	37791			4.55- 64.55	34.55
100 Chloroform					CAS #: 67-66-3		
5.382	5.382 (1.013)	83	173469	200.000	226.84	80.00- 120.00	100.00
5.396	5.396 (1.016)	85	113753			35.58- 95.58	65.58
102 Cyclohexane					CAS #: 110-82-7		
5.494	5.494 (1.034)	84	112408	200.000	223.00	80.00- 120.00	100.00
5.494	5.494 (1.034)	56	157321			109.96- 169.96	139.96
5.494	5.494 (1.034)	41	86668			47.10- 107.10	77.10
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.536	5.536 (1.042)	97	187096	200.000	222.37	80.00- 120.00	100.00
5.536	5.536 (1.042)	99	120612			34.47- 94.47	64.47
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.662	5.662 (1.066)	119	199730	200.000	226.29	80.00- 120.00	100.00
5.662	5.662 (1.066)	117	210729			75.51- 135.51	105.51
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.928	5.928 (1.116)	57	512183	200.000	229.89	80.00- 120.00	100.00
5.928	5.928 (1.116)	56	161890			1.61- 61.61	31.61
5.928	5.928 (1.116)	41	128474			0.00- 55.08	25.08
116 Benzene					CAS #: 71-43-2		
5.942	5.942 (0.922)	78	264476	200.000	230.55	80.00- 120.00	100.00
5.942	5.942 (0.922)	77	62079			0.00- 53.47	23.47
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.040	6.040 (1.137)	73	246361	200.000	222.17	80.00- 120.00	100.00(A)
6.040	6.040 (1.137)	87	64437			0.00- 56.16	26.16
6.040	6.040 (1.137)	55	71259			0.00- 58.92	28.92
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.068	6.068 (0.941)	62	115794	200.000	210.77	80.00- 120.00	100.00
6.068	6.068 (0.941)	64	36410			1.44- 61.44	31.44
121 Heptane					CAS #: 142-82-5		
6.152	6.152 (0.954)	71	93851	200.000	198.61	80.00- 120.00	100.00
6.152	6.152 (0.954)	43	185038			167.16- 227.16	197.16
6.152	6.152 (0.954)	100	32462			4.59- 64.59	34.59
125 Trichloroethene					CAS #: 79-01-6		
6.698	6.698 (1.039)	95	123806	200.000	221.82	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.698	6.698 (1.039)	130	136600			80.33- 140.33	110.33
6.698	6.698 (1.039)	97	79378			34.11- 94.11	64.11
127 Methylcyclohexane					CAS #: 108-87-2		
6.823	6.823 (1.059)	83	164081	200.000	231.73	80.00- 120.00	100.00
6.823	6.823 (1.059)	98	79348			18.36- 78.36	48.36
6.823	6.823 (1.059)	55	154417			64.11- 124.11	94.11
132 1,2-Dichloropropane					CAS #: 78-87-5		
7.047	7.047 (1.093)	63	101724	200.000	211.78	80.00- 120.00	100.00
7.047	7.047 (1.093)	62	70173			38.98- 98.98	68.98
7.047	7.047 (1.093)	41	57901			26.92- 86.92	56.92
136 1,4-Dioxane					CAS #: 123-91-1		
7.187	7.187 (1.115)	88	68514	200.000	219.78	80.00- 120.00	100.00
7.187	7.187 (1.115)	58	51540			45.23- 105.23	75.23
7.187	7.187 (1.115)	57	17022			0.00- 54.84	24.84
138 Bromodichloromethane					CAS #: 75-27-4		
7.411	7.411 (1.150)	83	188582	200.000	212.72	80.00- 120.00	100.00
7.411	7.411 (1.150)	85	123337			35.40- 95.40	65.40
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
8.125	8.125 (1.260)	75	149964	200.000	211.88	80.00- 120.00	100.00
8.125	8.125 (1.260)	77	51008			4.01- 64.01	34.01
8.125	8.125 (1.260)	39	88118			28.76- 88.76	58.76
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
8.419	8.419 (1.306)	85	40622	200.000	201.55	80.00- 120.00	100.00
8.405	8.405 (1.304)	43	259286			608.29- 668.29	638.29
8.419	8.419 (1.306)	58	100971			218.56- 278.56	248.56
147 Toluene					CAS #: 108-88-3		
8.614	8.614 (1.336)	91	352781	200.000	222.02	80.00- 120.00	100.00
8.614	8.614 (1.336)	92	206062			28.41- 88.41	58.41
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
9.104	9.104 (0.881)	75	140968	200.000	214.76	80.00- 120.00	100.00
9.104	9.104 (0.881)	77	47063			3.39- 63.39	33.39
9.104	9.104 (0.881)	39	76105			23.99- 83.99	53.99
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
9.342	9.342 (0.904)	97	118353	200.000	204.21	80.00- 120.00	100.00
9.342	9.342 (0.904)	99	71196			30.16- 90.16	60.16
9.342	9.342 (0.904)	83	97925			52.74- 112.74	82.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
156 Tetrachloroethene					CAS #: 127-18-4		
9.356	9.356 (0.905)	166	184055	200.000	222.82	80.00- 120.00	100.00
9.356	9.356 (0.905)	129	137636			44.78- 104.78	74.78
9.356	9.356 (0.905)	131	135757			43.76- 103.76	73.76
158 2-Hexanone					CAS #: 591-78-6		
9.636	9.636 (0.932)	58	132200	200.000	210.88	80.00- 120.00	100.00
9.636	9.636 (0.932)	43	248596			158.05- 218.05	188.05
9.636	9.636 (0.932)	100	28061			0.00- 51.23	21.23
160 Dibromochloromethane					CAS #: 124-48-1		
9.762	9.762 (0.944)	129	238280	200.000	212.72	80.00- 120.00	100.00
9.762	9.762 (0.944)	127	186204			48.15- 108.15	78.15
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
9.888	9.888 (0.957)	107	189285	200.000	213.66	80.00- 120.00	100.00
9.888	9.888 (0.957)	109	179390			64.77- 124.77	94.77
165 Chlorobenzene					CAS #: 108-90-7		
10.363	10.363 (1.003)	112	294127	200.000	214.96	80.00- 120.00	100.00
10.363	10.363 (1.003)	114	94253			2.05- 62.05	32.05
10.363	10.363 (1.003)	77	163343			25.53- 85.53	55.53
167 Ethyl Benzene					CAS #: 100-41-4		
10.447	10.447 (1.011)	106	149389	200.000	211.80	80.00- 120.00	100.00
10.447	10.447 (1.011)	91	456210			275.38- 335.38	305.38
169 m,p-Xylene					CAS #: 108-38-3		
10.559	10.559 (1.022)	106	184611	200.000	214.57	80.00- 120.00	100.00
10.559	10.559 (1.022)	91	358069			163.96- 223.96	193.96
171 o-Xylene					CAS #: 95-47-6		
10.909	10.909 (1.056)	106	171451	200.000	209.84	80.00- 120.00	100.00
10.909	10.909 (1.056)	91	356738			178.07- 238.07	208.07
172 Styrene					CAS #: 100-42-5		
10.937	10.937 (1.058)	104	293788	200.000	209.34	80.00- 120.00	100.00
10.937	10.937 (1.058)	78	139554			17.50- 77.50	47.50
174 Bromoform					CAS #: 75-25-2		
11.105	11.105 (1.074)	173	228239	200.000	212.15	80.00- 120.00	100.00
11.105	11.105 (1.074)	171	116384			20.99- 80.99	50.99
175 Cumene					CAS #: 98-82-8		
11.203	11.203 (1.084)	105	542675	200.000	211.97	80.00- 120.00	100.00
11.203	11.203 (1.084)	120	151255			0.00- 57.87	27.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
175 Cumene (continued)							
11.189	11.189 (1.083)	51	55428			0.00- 40.21	10.21
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.483	11.483 (1.111)	83	246044	200.000	209.62	80.00- 120.00	100.00
11.483	11.483 (1.111)	85	164557			36.88- 96.88	66.88
182 Propylbenzene					CAS #: 103-65-1		
11.497	11.497 (1.112)	91	590722	200.000	209.51	80.00- 120.00	100.00
11.497	11.497 (1.112)	120	150991			0.00- 55.56	25.56
11.497	11.497 (1.112)	105	23786			0.00- 34.03	4.03
188 4-Ethyltoluene					CAS #: 622-96-8		
11.581	11.581 (1.120)	105	570503	200.000	218.32	80.00- 120.00	100.00
11.581	11.581 (1.120)	120	157555			0.00- 57.62	27.62
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.623	11.623 (1.125)	105	447937	200.000	223.09	80.00- 120.00	100.00
11.623	11.623 (1.125)	120	240663			23.73- 83.73	53.73
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.861	11.861 (1.148)	105	421770	200.000	213.50	80.00- 120.00	100.00
11.861	11.861 (1.148)	120	198776			17.13- 77.13	47.13
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.056	12.056 (1.167)	146	312569	200.000	205.96	80.00- 120.00	100.00
12.056	12.056 (1.167)	148	198450			33.49- 93.49	63.49
12.056	12.056 (1.167)	111	117309			7.53- 67.53	37.53
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.112	12.112 (1.172)	146	308146	200.000	206.62	80.00- 120.00	100.00
12.112	12.112 (1.172)	148	194957			33.27- 93.27	63.27
12.112	12.112 (1.172)	111	114901			7.29- 67.29	37.29
212 alpha-Chlorotoluene					CAS #: 100-44-7		
12.210	12.210 (1.181)	91	365810	200.000	208.71	80.00- 120.00	100.00
12.210	12.210 (1.181)	126	87609			0.00- 53.95	23.95
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.336	12.336 (1.194)	146	280080	200.000	208.30	80.00- 120.00	100.00
12.336	12.336 (1.194)	148	175461			32.65- 92.65	62.65
12.336	12.336 (1.194)	111	110346			9.40- 69.40	39.40
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
13.190	13.190 (1.276)	180	137429	200.000	196.20	80.00- 120.00	100.00
13.190	13.190 (1.276)	182	127941			63.10- 123.10	93.10

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
227 Hexachlorobutadiene						CAS #: 87-68-3		
13.232	13.232	(1.280)	225	116687	200.000	194.76	80.00- 120.00	100.00
13.232	13.232	(1.280)	223	73872			33.31- 93.31	63.31
228 Naphthalene						CAS #: 91-20-3		
13.316	13.316	(1.288)	128	28415	20.0000	25.362	80.00- 120.00	100.00
13.316	13.316	(1.288)	127	4137			0.00- 44.56	14.56

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: msd14.i
Lab File ID: 14120106.d
Lab Smp Id: ICAL Level #6
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msd14.i/01dec16.b/14651201a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 01-DEC-2016
Calibration Time: 14:23
Client Smp ID: ICAL Level #6
Level: LOW
Sample Type: AIR

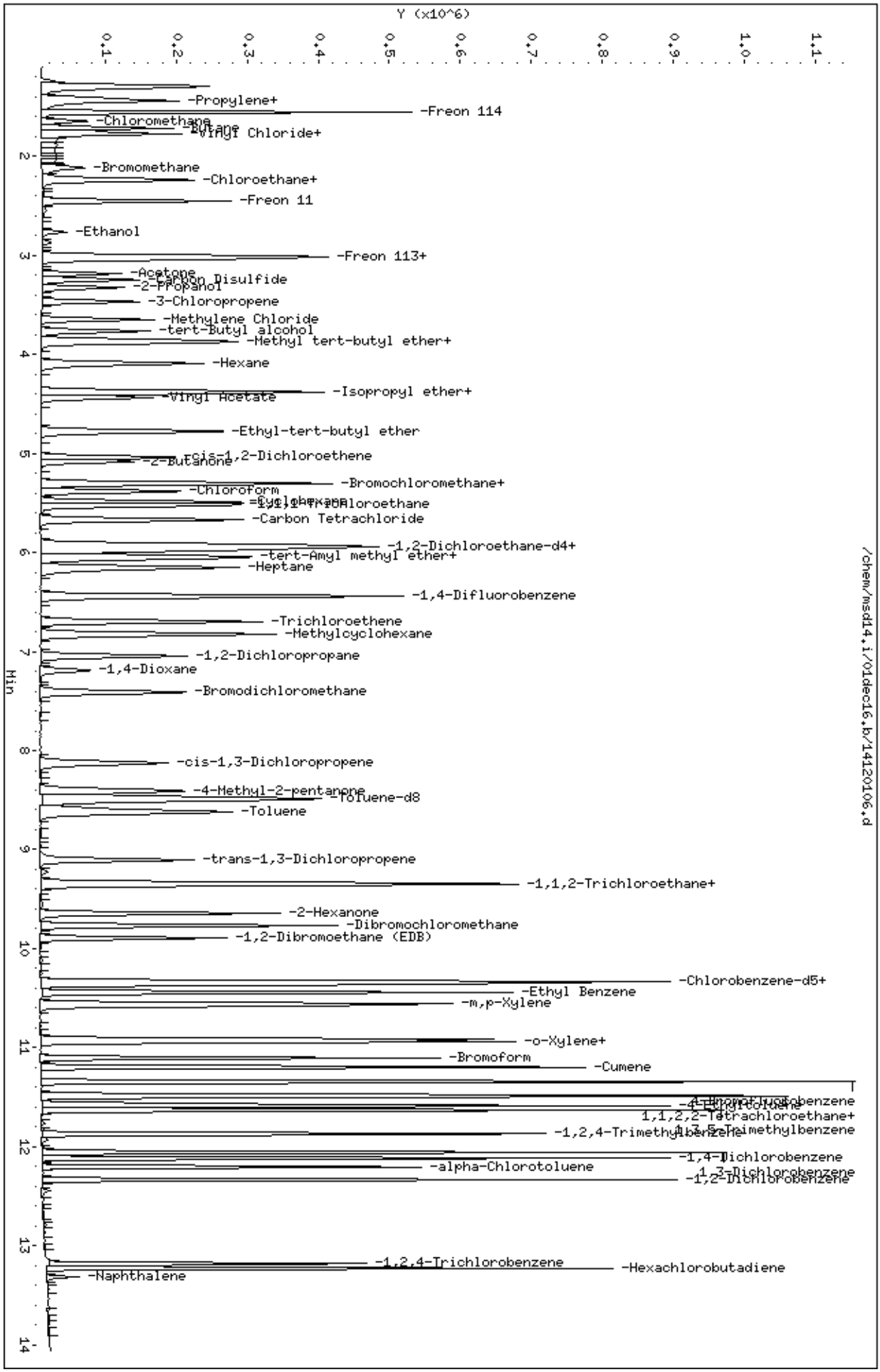
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	124267	74560	173974	124267	0.00
123 1,4-Difluorobenze	508921	305353	712489	508921	0.00
163 Chlorobenzene-d5	476110	285666	666554	476110	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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/msd14.i/01dec16.b/14120106.d
Date : 01-DEC-2016 14:23
Client ID: ICAL Level #6
Sample Info: 50ml #2819-132
Column phase: RTX-624

Instrument: msd14.i
Operator: jg
Column diameter: 0.18



Page 1

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/01dec16.b/14120107.d
Lab Smp Id: ICAL Level #7 Client Smp ID: ICAL Level #7
Inj Date : 01-DEC-2016 15:16
Operator : mjs Inst ID: msd14.i
Smp Info : 50ml #2819-84
Misc Info : 1000ppbv (1000ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/01dec16.b/14651201a.m
Meth Date : 02-Dec-2016 16:29 jscarbro Quant Type: ISTD
Cal Date : 01-DEC-2016 15:16 Cal File: 14120107.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.312	5.312 (1.000)	130	123614	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	98801			46.96- 106.96	79.93
5.312	5.312 (1.000)	49	161191			97.69- 157.69	130.40
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.446	6.446 (1.000)	114	525830	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	79995			0.00- 45.92	15.21
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
10.335	10.335 (1.000)	117	480207	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	235902			19.32- 79.32	49.13
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.984	5.984 (1.126)	65	153331	400.000	406.41	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	82349			24.72- 84.72	53.71
$ 146 Toluene-d8					CAS #: 2037-26-5		
8.489	8.489 (1.317)	98	512407	400.000	394.01	80.00- 120.00	100.00
8.489	8.489 (1.317)	70	55175			0.00- 40.20	10.77

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

$ 146 Toluene-d8 (continued)
  8.489   8.489 (1.317)   100    366376                    38.62-  98.62    71.50
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 11.343  11.343 (1.097)   174    293105 400.000   391.78  80.00- 120.00   100.00
 11.343  11.343 (1.097)    95    359072                    89.78- 149.78   122.51
 11.343  11.343 (1.097)   176    283871                    66.10- 126.10    96.85
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.423   1.423 (0.268)    41    339354 1000.00   990.53  80.00- 120.00   100.00
  1.423   1.423 (0.268)    42    223774                    33.78-  93.78    65.94
  1.423   1.423 (0.268)    39    240256                    36.58-  96.58    70.80
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.451   1.451 (0.273)    85   1033451 1000.00   1048.7  80.00- 120.00   100.00(A)
  1.451   1.451 (0.273)    87    331899                     1.64-  61.64    32.12
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.563   1.563 (0.294)   135    868696 1000.00   1047.0  80.00- 120.00   100.00(A)
  1.563   1.563 (0.294)   137    278243                     1.10-  61.10    32.03
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.633   1.633 (0.307)    50    363197 1000.00   959.41  80.00- 120.00   100.00
  1.633   1.633 (0.307)    52    119056                     2.75-  62.75    32.78
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.716   1.716 (0.323)    58     82940 1000.00   895.30  80.00- 120.00   100.00
  1.716   1.716 (0.323)    43    629786                   736.71- 796.71   759.33
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.744   1.744 (0.328)    62    376320 1000.00   995.21  80.00- 120.00   100.00
  1.744   1.744 (0.328)    64    115263                     1.78-  61.78    30.63
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.772   1.772 (0.334)    54    325634 1000.00   858.44  80.00- 120.00   100.00
  1.772   1.772 (0.334)    39    320542                    67.57- 127.57    98.44
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.122   2.122 (0.399)    94    286744 1000.00   1227.2  80.00- 120.00   100.00(A)
  2.122   2.122 (0.399)    96    268122                    62.49- 122.49    93.51
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.220   2.220 (0.418)    64    199196 1000.00   1083.4  80.00- 120.00   100.00(A)
  2.220   2.220 (0.418)    66     61364                     0.76-  60.76    30.81
-------------------------------------------------------------------------------
   31 Isopentane                                    CAS #: 78-78-4
  2.248   2.248 (0.423)    43    523824 1000.00   1148.5  80.00- 120.00   100.00
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
31 Isopentane (continued)							
2.248	2.248 (0.423)	57	360820			37.62- 97.62	68.88
2.248	2.248 (0.423)	72	35855			0.00- 36.64	6.84
35 Freon 11					CAS #: 75-69-4		
2.458	2.458 (0.463)	101	1094838	1000.00	1128.1	80.00- 120.00	100.00
2.458	2.458 (0.463)	103	710387			34.68- 94.68	64.89
42 Ethanol					CAS #: 64-17-5		
2.752	2.752 (0.518)	45	181661	1000.00	1012.1	80.00- 120.00	100.00
2.752	2.752 (0.518)	46	75157			11.88- 71.88	41.37
49 Freon 113					CAS #: 76-13-1		
3.018	3.018 (0.568)	151	827900	1000.00	1134.0	80.00- 120.00	100.00
3.018	3.018 (0.568)	153	523174			36.16- 96.16	63.19
3.018	3.018 (0.568)	101	950162			85.93- 145.93	114.77
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.046	3.046 (0.573)	61	691956	1000.00	1116.8	80.00- 120.00	100.00
3.046	3.046 (0.573)	96	421641			30.16- 90.16	60.93
3.046	3.046 (0.573)	98	268907			8.09- 68.09	38.86
52 Acetone					CAS #: 67-64-1		
3.186	3.186 (0.600)	58	214157	1000.00	1076.4	80.00- 120.00	100.00
3.186	3.186 (0.600)	43	700503			284.49- 344.49	327.10
56 Carbon Disulfide					CAS #: 75-15-0		
3.256	3.256 (0.613)	76	1080169	1000.00	1068.1	80.00- 120.00	100.00(A)
57 2-Propanol					CAS #: 67-63-0		
3.326	3.326 (0.626)	45	826187	1000.00	1076.8	80.00- 120.00	100.00
3.326	3.326 (0.626)	43	150316			0.00- 46.84	18.19
3.326	3.326 (0.626)	59	32267			0.00- 34.10	3.91
58 3-Chloropropene					CAS #: 107-05-1		
3.479	3.479 (0.655)	76	174193	1000.00	1104.9	80.00- 120.00	100.00(A)
3.479	3.479 (0.655)	41	575962			310.63- 370.63	330.65
66 Methylene Chloride					CAS #: 75-09-2		
3.647	3.647 (0.687)	49	519893	1000.00	1079.9	80.00- 120.00	100.00
3.647	3.647 (0.687)	84	354314			35.90- 95.90	68.15
3.647	3.647 (0.687)	51	158086			0.00- 59.48	30.41
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.857	3.857 (0.726)	73	1156322	1000.00	1124.8	80.00- 120.00	100.00
3.857	3.857 (0.726)	57	310219			0.00- 56.69	26.83

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

   72 Methyl tert-butyl ether (continued)
  3.857   3.857 (0.726)    41    282730                     0.00-  54.89    24.45
-------------------------------------------------------------------------------
   73 trans-1,2-Dichloroethene                      CAS #: 156-60-5
  3.885   3.885 (0.731)    96    407589 1000.00   1006.4  80.00- 120.00   100.00(A)
  3.885   3.885 (0.731)    61    587726                  113.59- 173.59   144.20
  3.885   3.885 (0.731)    98    260677                   32.57-  92.57    63.96
-------------------------------------------------------------------------------
   78 Hexane                                        CAS #: 110-54-3
  4.095   4.095 (0.771)    57    765122 1000.00   1070.8  80.00- 120.00   100.00
  4.095   4.095 (0.771)    43    491742                   34.03-  94.03    64.27
  4.095   4.095 (0.771)    86    118204                    0.00-  45.63    15.45
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                            CAS #: 75-34-3
  4.389   4.389 (0.826)    63    771597 1000.00   1097.6  80.00- 120.00   100.00
  4.389   4.389 (0.826)    65    237817                    1.36-  61.36    30.82
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                 CAS #: 108-05-4
  4.445   4.445 (0.837)    86    119444 1000.00   1126.8  80.00- 120.00   100.00(A)
  4.445   4.445 (0.837)    43   1311515                  1119.78-1179.78  1098.02
  4.445   4.445 (0.837)    42    102467                   63.36- 123.36    85.79
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                        CAS #: 156-59-2
  5.033   5.033 (0.947)    61    649464 1000.00   1100.6  80.00- 120.00   100.00
  5.047   5.047 (0.950)    96    504204                   46.92- 106.92    77.63
  5.047   5.047 (0.950)    98    313698                   18.93-  78.93    48.30
-------------------------------------------------------------------------------
   92 2-Butanone                                    CAS #: 78-93-3
  5.075   5.075 (0.955)    72    208081 1000.00   1078.5  80.00- 120.00   100.00(A)
  5.075   5.075 (0.955)    43    980878                  439.29- 499.29   471.39
  5.075   5.075 (0.955)    57     77215                    8.51-  68.51    37.11
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                               CAS #: 109-99-9
  5.298   5.298 (0.997)    42    539146 1000.00   1027.2  80.00- 120.00   100.00(A)
  5.298   5.298 (0.997)    71    186336                    3.78-  63.78    34.56
  5.298   5.298 (0.997)    72    199555                    4.55-  64.55    37.01
-------------------------------------------------------------------------------
  100 Chloroform                                    CAS #: 67-66-3
  5.382   5.382 (1.013)    83    860716 1000.00   1086.7  80.00- 120.00   100.00
  5.382   5.382 (1.013)    85    581141                   35.58-  95.58    67.52
-------------------------------------------------------------------------------
  102 Cyclohexane                                   CAS #: 110-82-7
  5.494   5.494 (1.034)    84    581760 1000.00   1077.4  80.00- 120.00   100.00
  5.494   5.494 (1.034)    56    787687                  109.96- 169.96   135.40
  5.494   5.494 (1.034)    41    426097                   47.10- 107.10    73.24
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.536	5.536 (1.042)	97	947020	1000.00	1073.7	80.00- 120.00	100.00
5.536	5.536 (1.042)	99	612754			34.47- 94.47	64.70
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.662	5.662 (1.066)	119	1020182	1000.00	1109.6	80.00- 120.00	100.00
5.662	5.662 (1.066)	117	1072272			75.51- 135.51	105.11
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.914	5.914 (1.113)	57	2507691	1000.00	1074.9	80.00- 120.00	100.00
5.914	5.914 (1.113)	56	798554			1.61- 61.61	31.84
5.914	5.914 (1.113)	41	638781			0.00- 55.08	25.47
116 Benzene					CAS #: 71-43-2		
5.942	5.942 (0.922)	78	1325555	1000.00	1064.9	80.00- 120.00	100.00
5.942	5.942 (0.922)	77	315871			0.00- 53.47	23.83
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.068	6.068 (0.941)	62	581019	1000.00	1023.6	80.00- 120.00	100.00(A)
6.068	6.068 (0.941)	64	183404			1.44- 61.44	31.57
121 Heptane					CAS #: 142-82-5		
6.152	6.152 (0.954)	71	470793	1000.00	964.27	80.00- 120.00	100.00
6.152	6.152 (0.954)	43	944803			167.16- 227.16	200.68
6.152	6.152 (0.954)	100	168392			4.59- 64.59	35.77
125 Trichloroethene					CAS #: 79-01-6		
6.698	6.698 (1.039)	95	637820	1000.00	1066.5	80.00- 120.00	100.00
6.698	6.698 (1.039)	130	691571			80.33- 140.33	108.43
6.698	6.698 (1.039)	97	404468			34.11- 94.11	63.41
127 Methylcyclohexane					CAS #: 108-87-2		
6.824	6.824 (1.059)	83	822161	1000.00	1065.7	80.00- 120.00	100.00
6.824	6.824 (1.059)	98	406946			18.36- 78.36	49.50
6.824	6.824 (1.059)	55	771939			64.11- 124.11	93.89
132 1,2-Dichloropropane					CAS #: 78-87-5		
7.047	7.047 (1.093)	63	516382	1000.00	1040.5	80.00- 120.00	100.00(A)
7.047	7.047 (1.093)	62	354888			38.98- 98.98	68.73
7.047	7.047 (1.093)	41	286916			26.92- 86.92	55.56
136 1,4-Dioxane					CAS #: 123-91-1		
7.187	7.187 (1.115)	88	329958	1000.00	1024.4	80.00- 120.00	100.00(A)
7.187	7.187 (1.115)	58	251805			45.23- 105.23	76.31
7.187	7.187 (1.115)	57	81050			0.00- 54.84	24.56

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

  138 Bromodichloromethane                        CAS #: 75-27-4
  7.411   7.411 (1.150)    83    958133 1000.00   1046.0  80.00- 120.00   100.00(A)
  7.411   7.411 (1.150)    85    633520                   35.40-  95.40    66.12
-------------------------------------------------------------------------------
  144 cis-1,3-Dichloropropene                     CAS #: 10061-01-5
  8.125   8.125 (1.260)    75    759833 1000.00   1039.0  80.00- 120.00   100.00(A)
  8.125   8.125 (1.260)    77    248383                    4.01-  64.01    32.69
  8.125   8.125 (1.260)    39    429126                   28.76-  88.76    56.48
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                        CAS #: 108-10-1
  8.405   8.405 (1.304)    85    198210 1000.00   951.83  80.00- 120.00   100.00
  8.405   8.405 (1.304)    43   1262611                  608.29- 668.29   637.01
  8.405   8.405 (1.304)    58    478321                  218.56- 278.56   241.32
-------------------------------------------------------------------------------
  147 Toluene                                     CAS #: 108-88-3
  8.614   8.614 (1.336)    91   1729571 1000.00   1025.0  80.00- 120.00   100.00
  8.614   8.614 (1.336)    92   1020462                   28.41-  88.41    59.00
-------------------------------------------------------------------------------
  150 trans-1,3-Dichloropropene                   CAS #: 10061-02-6
  9.104   9.104 (0.881)    75    712161 1000.00   1075.7  80.00- 120.00   100.00(A)
  9.104   9.104 (0.881)    77    237039                    3.39-  63.39    33.28
  9.104   9.104 (0.881)    39    386825                   23.99-  83.99    54.32
-------------------------------------------------------------------------------
  155 1,1,2-Trichloroethane                       CAS #: 79-00-5
  9.342   9.342 (0.904)    97    579641 1000.00   991.58  80.00- 120.00   100.00
  9.342   9.342 (0.904)    99    360019                   30.16-  90.16    62.11
  9.342   9.342 (0.904)    83    486200                   52.74- 112.74    83.88
-------------------------------------------------------------------------------
  156 Tetrachloroethene                           CAS #: 127-18-4
  9.356   9.356 (0.905)   166    920512 1000.00   1081.9  80.00- 120.00   100.00
  9.356   9.356 (0.905)   129    692375                   44.78- 104.78    75.22
  9.356   9.356 (0.905)   131    681237                   43.76- 103.76    74.01
-------------------------------------------------------------------------------
  158 2-Hexanone                                  CAS #: 591-78-6
  9.636   9.636 (0.932)    58    630276 1000.00   996.80  80.00- 120.00   100.00
  9.636   9.636 (0.932)    43   1201272                  158.05- 218.05   190.59
  9.636   9.636 (0.932)   100    135418                    0.00-  51.23    21.49
-------------------------------------------------------------------------------
  160 Dibromochloromethane                        CAS #: 124-48-1
  9.762   9.762 (0.944)   129   1191218 1000.00   1054.4  80.00- 120.00   100.00(A)
  9.762   9.762 (0.944)   127    920859                   48.15- 108.15    77.30
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                     CAS #: 106-93-4
  9.888   9.888 (0.957)   107    933113 1000.00   1044.3  80.00- 120.00   100.00(A)
  9.888   9.888 (0.957)   109    911986                   64.77- 124.77    97.74
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene					CAS #: 108-90-7		
10.363	10.363 (1.003)	112	1441339	1000.00	1044.4	80.00- 120.00	100.00(A)
10.363	10.363 (1.003)	114	460808			2.05- 62.05	31.97
10.363	10.363 (1.003)	77	798823			25.53- 85.53	55.42
167 Ethyl Benzene					CAS #: 100-41-4		
10.447	10.447 (1.011)	106	737950	1000.00	1037.3	80.00- 120.00	100.00(A)
10.447	10.447 (1.011)	91	2253643			275.38- 335.38	305.39
169 m,p-Xylene					CAS #: 108-38-3		
10.559	10.559 (1.022)	106	913532	1000.00	1038.0	80.00- 120.00	100.00
10.559	10.559 (1.022)	91	1783488			163.96- 223.96	195.23
171 o-Xylene					CAS #: 95-47-6		
10.909	10.909 (1.056)	106	857834	1000.00	1029.0	80.00- 120.00	100.00
10.909	10.909 (1.056)	91	1763222			178.07- 238.07	205.54
172 Styrene					CAS #: 100-42-5		
10.937	10.937 (1.058)	104	1450802	1000.00	1024.9	80.00- 120.00	100.00(A)
10.937	10.937 (1.058)	78	690283			17.50- 77.50	47.58
174 Bromoform					CAS #: 75-25-2		
11.105	11.105 (1.074)	173	1130129	1000.00	1041.5	80.00- 120.00	100.00(A)
11.105	11.105 (1.074)	171	584142			20.99- 80.99	51.69
175 Cumene					CAS #: 98-82-8		
11.203	11.203 (1.084)	105	2628977	1000.00	1018.1	80.00- 120.00	100.00(A)
11.203	11.203 (1.084)	120	728036			0.00- 57.87	27.69
11.189	11.189 (1.083)	51	272542			0.00- 40.21	10.37
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.483	11.483 (1.111)	83	1195405	1000.00	1009.7	80.00- 120.00	100.00(A)
11.483	11.483 (1.111)	85	799040			36.88- 96.88	66.84
182 Propylbenzene					CAS #: 103-65-1		
11.497	11.497 (1.112)	91	2931922	1000.00	1031.0	80.00- 120.00	100.00(A)
11.497	11.497 (1.112)	120	730428			0.00- 55.56	24.91
11.497	11.497 (1.112)	105	112626			0.00- 34.03	3.84
188 4-Ethyltoluene					CAS #: 622-96-8		
11.581	11.581 (1.120)	105	2513691	1000.00	953.76	80.00- 120.00	100.00
11.581	11.581 (1.120)	120	771318			0.00- 57.62	30.68
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.623	11.623 (1.125)	105	2379748	1000.00	1170.2	80.00- 120.00	100.00
11.623	11.623 (1.125)	120	1148549			23.73- 83.73	48.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.861	11.861 (1.148)	105	2023580	1000.00	1007.7	80.00- 120.00	100.00
11.861	11.861 (1.148)	120	939145			17.13- 77.13	46.41
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.056	12.056 (1.167)	146	1466163	1000.00	957.83	80.00- 120.00	100.00
12.056	12.056 (1.167)	148	935870			33.49- 93.49	63.83
12.056	12.056 (1.167)	111	562122			7.53- 67.53	38.34
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.112	12.112 (1.172)	146	1465949	1000.00	974.58	80.00- 120.00	100.00
12.112	12.112 (1.172)	148	930335			33.27- 93.27	63.46
12.112	12.112 (1.172)	111	547622			7.29- 67.29	37.36
212 alpha-Chlorotoluene					CAS #: 100-44-7		
12.210	12.210 (1.181)	91	1791433	1000.00	1013.4	80.00- 120.00	100.00(A)
12.210	12.210 (1.181)	126	422217			0.00- 53.95	23.57
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.336	12.336 (1.194)	146	1317025	1000.00	971.14	80.00- 120.00	100.00
12.336	12.336 (1.194)	148	838187			32.65- 92.65	63.64
12.336	12.336 (1.194)	111	525427			9.40- 69.40	39.89
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
13.190	13.190 (1.276)	180	605006	1000.00	856.34	80.00- 120.00	100.00
13.190	13.190 (1.276)	182	568332			63.10- 123.10	93.94
227 Hexachlorobutadiene					CAS #: 87-68-3		
13.232	13.232 (1.280)	225	515391	1000.00	852.90	80.00- 120.00	100.00
13.232	13.232 (1.280)	223	329822			33.31- 93.31	63.99
228 Naphthalene					CAS #: 91-20-3		
13.316	13.316 (1.288)	128	97736	100.000	85.727	80.00- 120.00	100.00
13.316	13.316 (1.288)	127	12262			0.00- 44.56	12.55

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: msd14.i
Lab File ID: 14120107.d
Lab Smp Id: ICAL Level #7
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msd14.i/01dec16.b/14651201a.m
Misc Info: 1000ppbv (1000ppbv)

Calibration Date: 01-DEC-2016
Calibration Time: 14:23
Client Smp ID: ICAL Level #7
Level: LOW
Sample Type: AIR

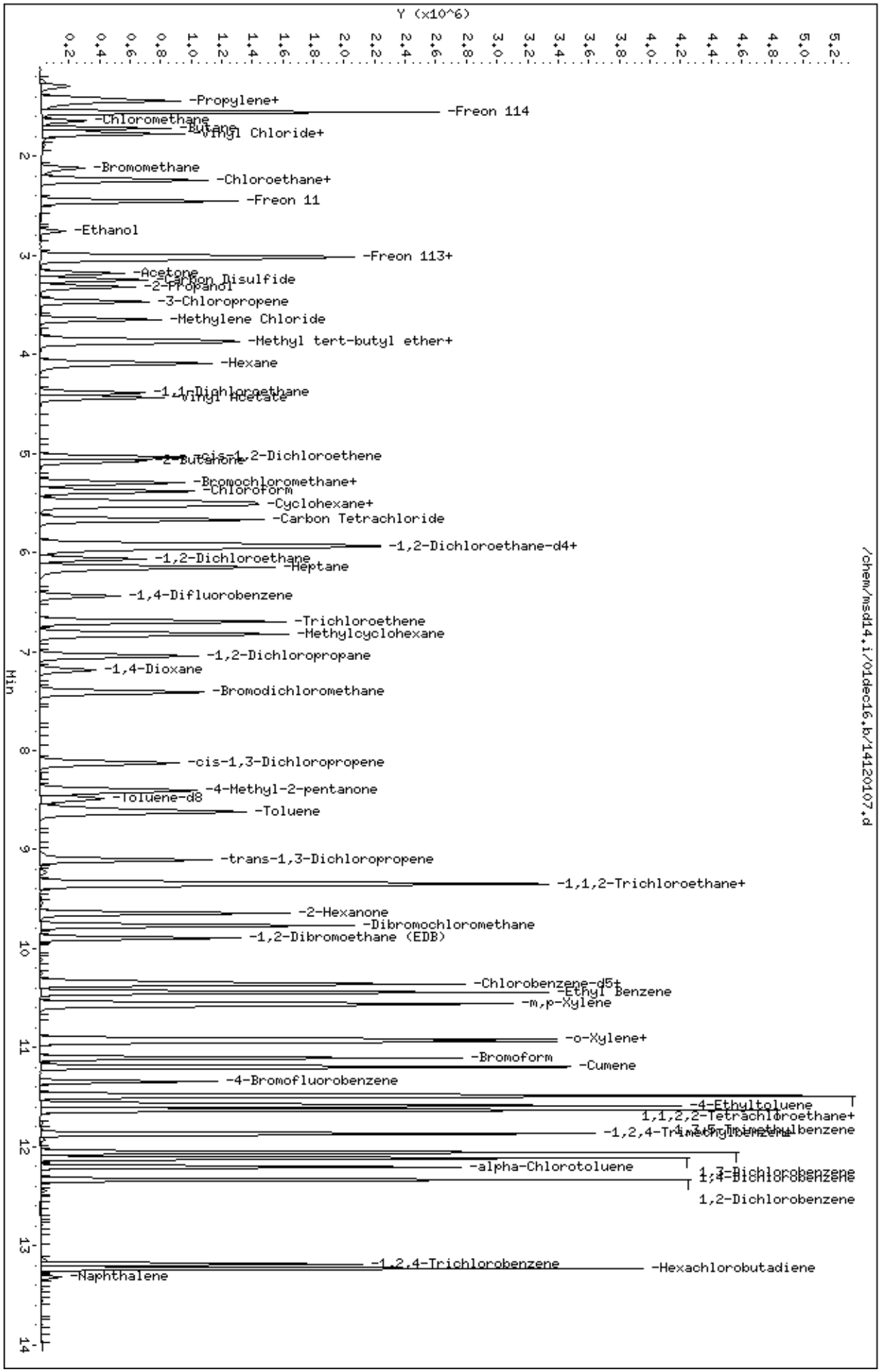
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	124267	74560	173974	123614	-0.53
123 1,4-Difluorobenze	508921	305353	712489	525830	3.32
163 Chlorobenzene-d5	476110	285666	666554	480207	0.86

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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/msd14.i/01dec16.b/14120107.d
Date : 01-DEC-2016 15:16
Client ID: ICAL Level #7
Sample Info: 50ml #2819-84
Column phase: RTX-624

Instrument: msd14.i
Operator: mjs
Column diameter: 0.18



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/01dec16.b/14120115.d
Lab Smp Id: ICAL Level #8 Client Smp ID: ICAL Level #8
Inj Date : 02-DEC-2016 10:15
Operator : jg Inst ID: msd14.i
Smp Info : 25ml #2819-154
Misc Info : 250ppbv (500ppbv) Naph only
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/01dec16.b/14651201a.m
Meth Date : 02-Dec-2016 16:29 jscarbro Quant Type: ISTD
Cal Date : 02-DEC-2016 10:15 Cal File: 14120115.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphICAL.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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.312	5.312 (1.000)	130	120388	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	94179			46.96- 106.96	78.23
5.312	5.312 (1.000)	49	158190			97.69- 157.69	131.40
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.446	6.446 (1.000)	114	516106	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	76804			0.00- 45.92	14.88
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
10.335	10.335 (1.000)	117	477944	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	232211			19.32- 79.32	48.59
228 Naphthalene						CAS #: 91-20-3	
13.316	13.316 (1.288)	128	260757	250.000	234.54	80.00- 120.00	100.00
13.316	13.316 (1.288)	127	33835			0.00- 44.56	12.98

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14120115.d
Lab Smp Id: ICAL Level #8
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msd14.i/01dec16.b/14651201a.m
Misc Info: 250ppbv (500ppbv) Naph only

Calibration Date: 01-DEC-2016
Calibration Time: 14:23
Client Smp ID: ICAL Level #8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	124267	74560	173974	120388	-3.12
123 1,4-Difluorobenze	508921	305353	712489	516106	1.41
163 Chlorobenzene-d5	476110	285666	666554	477944	0.39

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	0.00

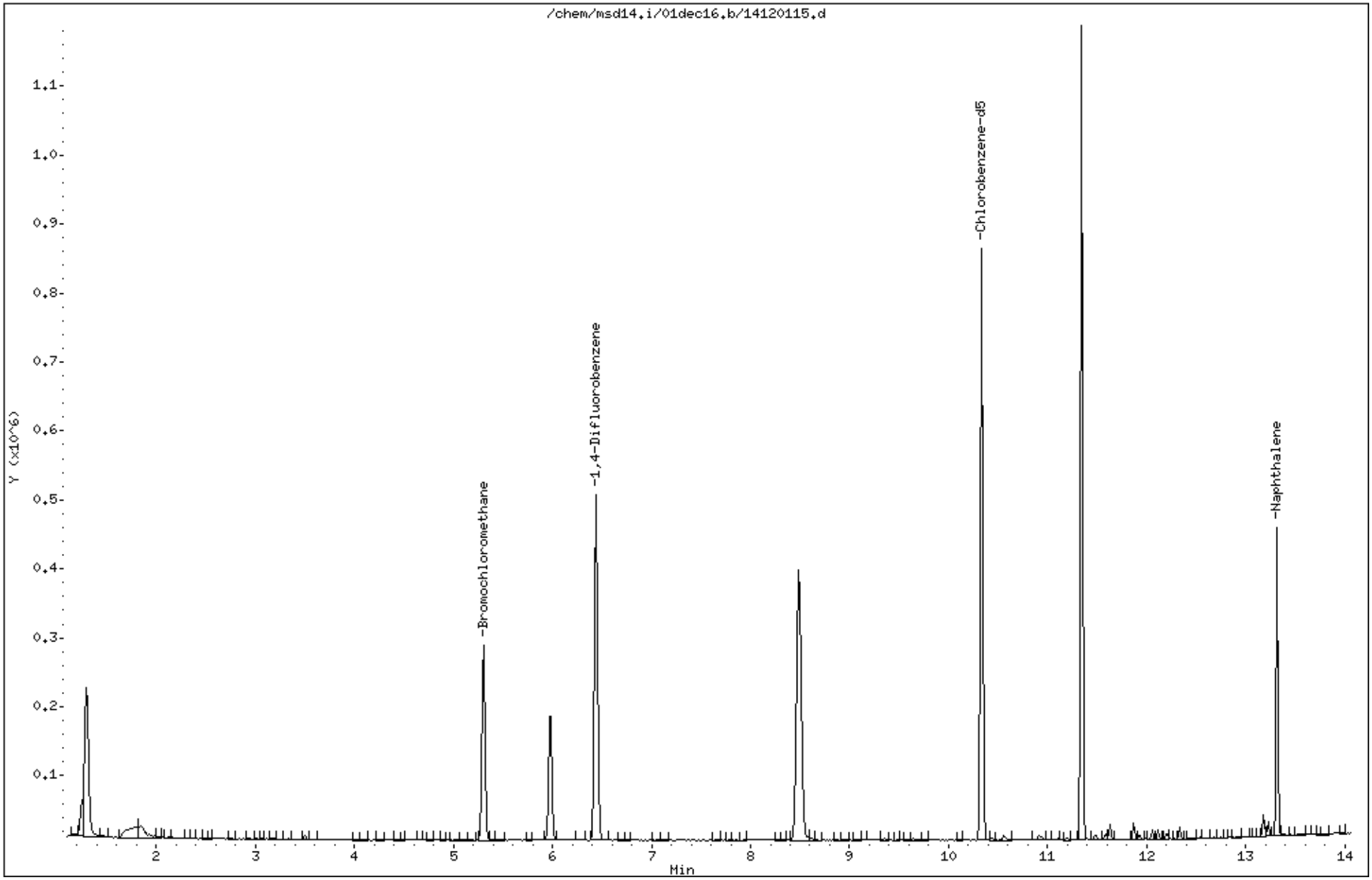
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd14.i/01dec16.b/14120115.d
Date : 02-DEC-2016 10:15
Client ID: ICAL Level #8
Sample Info: 25ml #2819-154

Column phase: RTX-624

Instrument: msd14.i

Operator: jg
Column diameter: 0.18



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/01dec16.b/14120113.d
Lab Smp Id: ICAL Level #8 Client Smp ID: ICAL Level #8
Inj Date : 02-DEC-2016 07:48
Operator : jg Inst ID: msd14.i
Smp Info : 12.5ml #2819-153
Misc Info : 2500ppbv (10000ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/01dec16.b/14651201a.m
Meth Date : 02-Dec-2016 16:29 jscarbro Quant Type: ISTD
Cal Date : 02-DEC-2016 07:48 Cal File: 14120113.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 520HL.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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.312	5.312 (1.000)	130	132196	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	106576			46.96- 106.96	80.62
5.312	5.312 (1.000)	49	173478			97.69- 157.69	131.23
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.446	6.446 (1.000)	114	568296	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	86445			0.00- 45.92	15.21
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
10.335	10.335 (1.000)	117	515139	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	256413			19.32- 79.32	49.78
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.984	5.984 (1.126)	65	166381	400.000	410.78	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	93362			24.72- 84.72	56.11
$ 146 Toluene-d8						CAS #: 2037-26-5	
8.488	8.488 (1.317)	98	553102	400.000	394.32	80.00- 120.00	100.00
8.488	8.488 (1.317)	70	58662			0.00- 40.20	10.61

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

$ 146 Toluene-d8 (continued)
  8.488   8.488 (1.317)   100    372627                    38.62-  98.62    67.37
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 11.343  11.343 (1.097)   174    315132 400.000   393.56  80.00- 120.00   100.00
 11.343  11.343 (1.097)    95    386456                    89.78- 149.78   122.63
 11.343  11.343 (1.097)   176    306637                    66.10- 126.10    97.30
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.716   1.716 (0.323)    58    197625 2500.00   2054.1  80.00- 120.00   100.00
  1.716   1.716 (0.323)    43   1476514                   736.71- 796.71   747.13
-------------------------------------------------------------------------------
   31 Isopentane                                    CAS #: 78-78-4
  2.248   2.248 (0.423)    43    574672 2500.00   1274.5  80.00- 120.00   100.00
  2.248   2.248 (0.423)    57    389685                    37.62-  97.62    67.81
  2.248   2.248 (0.423)    72     39802                     0.00-  36.64     6.93
-------------------------------------------------------------------------------
   35 Freon 11                                      CAS #: 75-69-4
  2.472   2.472 (0.465)   101   1531062 2500.00   1554.9  80.00- 120.00   100.00
  2.472   2.472 (0.465)   103    981426                    34.68-  94.68    64.10
-------------------------------------------------------------------------------
   42 Ethanol                                       CAS #: 64-17-5
  2.752   2.752 (0.518)    45    368142 2500.00   1983.9  80.00- 120.00   100.00
  2.752   2.752 (0.518)    46    149098                    11.88-  71.88    40.50
-------------------------------------------------------------------------------
   49 Freon 113                                     CAS #: 76-13-1
  3.018   3.018 (0.568)   151   1208544 2500.00   1625.3  80.00- 120.00   100.00
  3.018   3.018 (0.568)   153    765409                    36.16-  96.16    63.33
  3.018   3.018 (0.568)   101   1378734                    85.93- 145.93   114.08
-------------------------------------------------------------------------------
   50 1,1-Dichloroethene                            CAS #: 75-35-4
  3.046   3.046 (0.573)    61    978747 2500.00   1556.7  80.00- 120.00   100.00
  3.046   3.046 (0.573)    96    599747                    30.16-  90.16    61.28
  3.046   3.046 (0.573)    98    381187                     8.09-  68.09    38.95
-------------------------------------------------------------------------------
   52 Acetone                                       CAS #: 67-64-1
  3.185   3.185 (0.600)    58    433988 2500.00   2094.7  80.00- 120.00   100.00
  3.185   3.185 (0.600)    43   1392628                   284.49- 344.49   320.89
-------------------------------------------------------------------------------
   57 2-Propanol                                    CAS #: 67-63-0
  3.325   3.325 (0.626)    45   1755984 2500.00   2192.7  80.00- 120.00   100.00
  3.325   3.325 (0.626)    43    313644                     0.00-  46.84    17.86
  3.325   3.325 (0.626)    59     68011                     0.00-  34.10     3.87
-------------------------------------------------------------------------------
   66 Methylene Chloride                            CAS #: 75-09-2
  3.647   3.647 (0.687)    49    857023 2500.00   1748.0  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
66 Methylene Chloride (continued)							
3.647	3.647 (0.687)	84	589136			35.90- 95.90	68.74
3.647	3.647 (0.687)	51	265684			0.00- 59.48	31.00
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.857	3.857 (0.726)	73	2116954	2500.00	1982.5	80.00- 120.00	100.00
3.857	3.857 (0.726)	57	557320			0.00- 56.69	26.33
3.857	3.857 (0.726)	41	506126			0.00- 54.89	23.91
78 Hexane					CAS #: 110-54-3		
4.095	4.095 (0.771)	57	1101927	2500.00	1522.5	80.00- 120.00	100.00
4.095	4.095 (0.771)	43	699243			34.03- 94.03	63.46
4.095	4.095 (0.771)	86	169470			0.00- 45.63	15.38
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.389	4.389 (0.826)	63	1323630	2500.00	1828.2	80.00- 120.00	100.00
4.389	4.389 (0.826)	65	403671			1.36- 61.36	30.50
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.032	5.032 (0.947)	61	1072092	2500.00	1769.7	80.00- 120.00	100.00
5.046	5.046 (0.950)	96	820896			46.92- 106.92	76.57
5.046	5.046 (0.950)	98	519056			18.93- 78.93	48.42
100 Chloroform					CAS #: 67-66-3		
5.382	5.382 (1.013)	83	1625483	2500.00	1976.4	80.00- 120.00	100.00
5.382	5.382 (1.013)	85	1086563			35.58- 95.58	66.85
102 Cyclohexane					CAS #: 110-82-7		
5.494	5.494 (1.034)	84	917298	2500.00	1664.4	80.00- 120.00	100.00
5.494	5.494 (1.034)	56	1257609			109.96- 169.96	137.10
5.494	5.494 (1.034)	41	670217			47.10- 107.10	73.06
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.536	5.536 (1.042)	97	1706219	2500.00	1873.7	80.00- 120.00	100.00
5.536	5.536 (1.042)	99	1095704			34.47- 94.47	64.22
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.662	5.662 (1.066)	119	1832890	2500.00	1925.4	80.00- 120.00	100.00
5.662	5.662 (1.066)	117	1908968			75.51- 135.51	104.15
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.914	5.914 (1.113)	57	4389409	2500.00	1827.0	80.00- 120.00	100.00
5.914	5.914 (1.113)	56	1388202			1.61- 61.61	31.63
5.914	5.914 (1.113)	41	1119880			0.00- 55.08	25.51
116 Benzene					CAS #: 71-43-2		
5.942	5.942 (0.922)	78	2356683	2500.00	1819.9	80.00- 120.00	100.00

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

  116 Benzene (continued)
  5.942   5.942 (0.922)    77    552866                     0.00-  53.47    23.46
-------------------------------------------------------------------------------
  125 Trichloroethene                                CAS #: 79-01-6
  6.697   6.697 (1.039)    95   1211942 2500.00   1935.6  80.00- 120.00   100.00
  6.697   6.697 (1.039)   130   1326369                   80.33- 140.33   109.44
  6.697   6.697 (1.039)    97    774645                   34.11-  94.11    63.92
-------------------------------------------------------------------------------
  127 Methylcyclohexane                              CAS #: 108-87-2
  6.823   6.823 (1.059)    83   1470126 2500.00   1840.7  80.00- 120.00   100.00
  6.823   6.823 (1.059)    98    717871                   18.36-  78.36    48.83
  6.823   6.823 (1.059)    55   1374121                   64.11- 124.11    93.47
-------------------------------------------------------------------------------
  147 Toluene                                        CAS #: 108-88-3
  8.614   8.614 (1.336)    91   3484474 2500.00   1968.7  80.00- 120.00   100.00
  8.614   8.614 (1.336)    92   2063731                   28.41-  88.41    59.23
-------------------------------------------------------------------------------
  156 Tetrachloroethene                              CAS #: 127-18-4
  9.356   9.356 (0.905)   166   1850887 2500.00   2076.8  80.00- 120.00   100.00
  9.356   9.356 (0.905)   129   1407340                   44.78- 104.78    76.04
  9.356   9.356 (0.905)   131   1379612                   43.76- 103.76    74.54
-------------------------------------------------------------------------------
  169 m,p-Xylene                                     CAS #: 108-38-3
 10.559  10.559 (1.022)   106   1962488 2500.00   2123.5  80.00- 120.00   100.00
 10.559  10.559 (1.022)    91   3876929                  163.96- 223.96   197.55
-------------------------------------------------------------------------------
  171 o-Xylene                                       CAS #: 95-47-6
 10.909  10.909 (1.056)   106   1911670 2500.00   2177.1  80.00- 120.00   100.00
 10.909  10.909 (1.056)    91   3963186                  178.07- 238.07   207.32
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                         CAS #: 108-67-8
 11.623  11.623 (1.125)   105   5092213 2500.00   2353.8  80.00- 120.00   100.00
 11.623  11.623 (1.125)   120   2544794                   23.73-  83.73    49.97
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                         CAS #: 95-63-6
 11.860  11.860 (1.148)   105   5011978 2500.00   2349.8  80.00- 120.00   100.00
 11.860  11.860 (1.148)   120   2341779                   17.13-  77.13    46.72
-------------------------------------------------------------------------------
```

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14120113.d
Lab Smp Id: ICAL Level #8
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msd14.i/01dec16.b/14651201a.m
Misc Info: 2500ppbv (10000ppbv)

Calibration Date: 01-DEC-2016
Calibration Time: 14:23
Client Smp ID: ICAL Level #8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	124267	74560	173974	132196	6.38
123 1,4-Difluorobenze	508921	305353	712489	568296	11.67
163 Chlorobenzene-d5	476110	285666	666554	515139	8.20

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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.

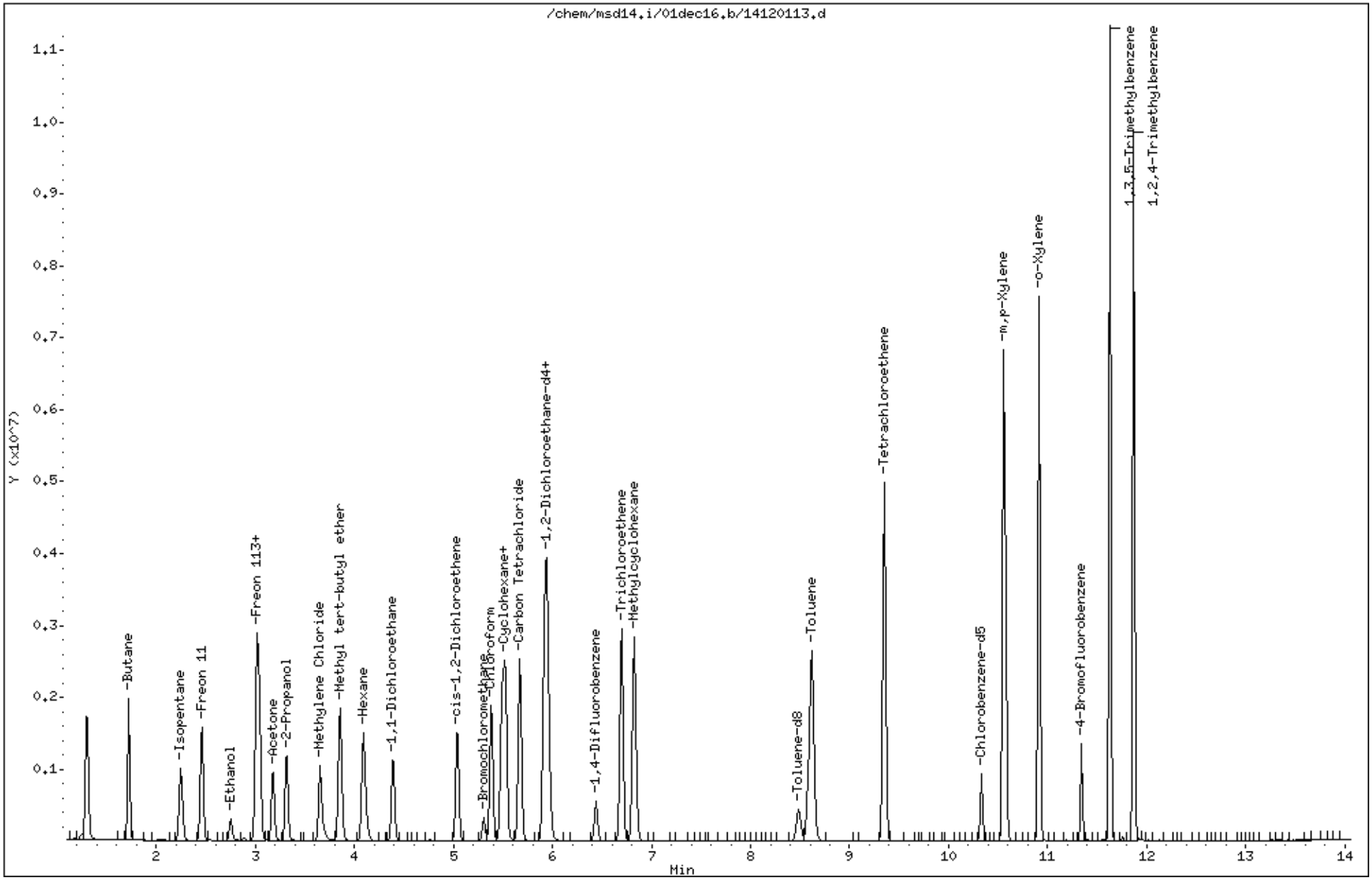
Data File: /chem/msd14.i/01dec16.b/14120113.d
Date : 02-DEC-2016 07:48
Client ID: ICAL Level #8
Sample Info: 12.5ml #2819-153

Instrument: msd14.i

Operator: jg

Column phase: RTX-624

Column diameter: 0.18



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/01dec16.b/14120116.d
Lab Smp Id: ICAL Level #9 Client Smp ID: ICAL Level #9
Inj Date : 02-DEC-2016 10:34
Operator : jg Inst ID: msd14.i
Smp Info : 50ml #2819-154
Misc Info : 500ppbv (500ppbv) Naph only
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/01dec16.b/14651201a.m
Meth Date : 02-Dec-2016 16:29 jscarbro Quant Type: ISTD
Cal Date : 02-DEC-2016 10:34 Cal File: 14120116.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphICAL.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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.312	5.312 (1.000)	130	120245	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	92099			46.96- 106.96	76.59
5.312	5.312 (1.000)	49	154796			97.69- 157.69	128.73
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.446	6.446 (1.000)	114	513397	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	76681			0.00- 45.92	14.94
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
10.336	10.336 (1.000)	117	473045	400.000		80.00- 120.00	100.00
10.336	10.336 (1.000)	82	233843			19.32- 79.32	49.43
228 Naphthalene						CAS #: 91-20-3	
13.316	13.316 (1.288)	128	582162	500.000	522.97	80.00- 120.00	100.00(A)
13.316	13.316 (1.288)	127	71560			0.00- 44.56	12.29

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: msd14.i
Lab File ID: 14120116.d
Lab Smp Id: ICAL Level #9
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msd14.i/01dec16.b/14651201a.m
Misc Info: 500ppbv (500ppbv) Naph only

Calibration Date: 01-DEC-2016
Calibration Time: 14:23
Client Smp ID: ICAL Level #9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	124267	74560	173974	120245	-3.24
123 1,4-Difluorobenze	508921	305353	712489	513397	0.88
163 Chlorobenzene-d5	476110	285666	666554	473045	-0.64

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	0.00

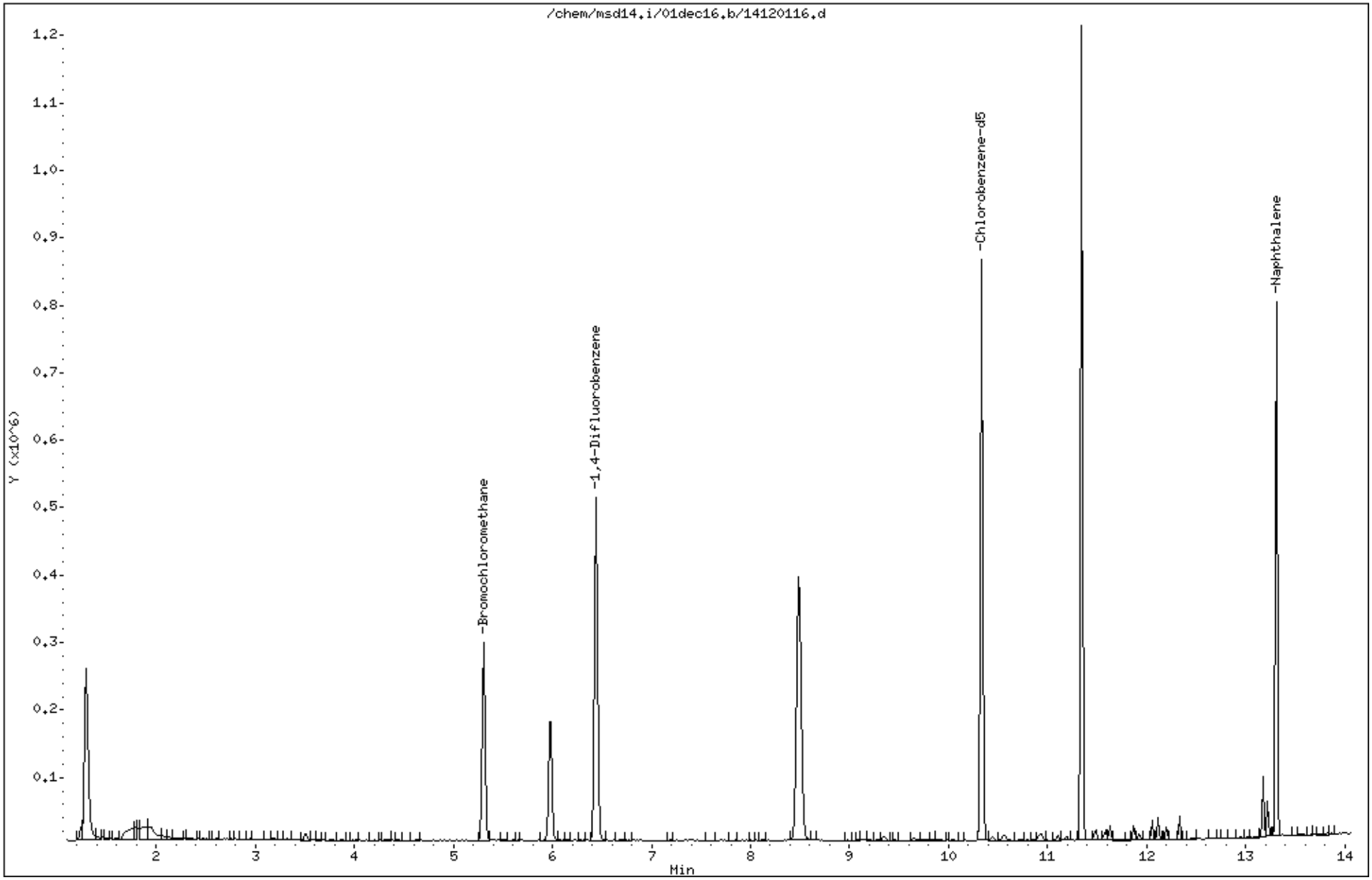
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd14.i/01dec16.b/14120116.d
Date : 02-DEC-2016 10:34
Client ID: ICAL Level #9
Sample Info: 50ml #2819-154

Column phase: RTX-624

Instrument: msd14.i

Operator: jg
Column diameter: 0.18



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/01dec16.b/14120114.d
Lab Smp Id: ICAL Level #9 Client Smp ID: ICAL Level #9
Inj Date : 02-DEC-2016 08:15
Operator : jg Inst ID: msd14.i
Smp Info : 25ml #2819-153
Misc Info : 5000ppbv (10000ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/01dec16.b/14651201a.m
Meth Date : 02-Dec-2016 16:29 jscarbro Quant Type: ISTD
Cal Date : 02-DEC-2016 08:15 Cal File: 14120114.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 520HL.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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.312	5.312 (1.000)	130	129421	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	100004			46.96- 106.96	77.27
5.312	5.312 (1.000)	49	164836			97.69- 157.69	127.36
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.446	6.446 (1.000)	114	513215	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	79644			0.00- 45.92	15.52
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
10.335	10.335 (1.000)	117	478841	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	231758			19.32- 79.32	48.40
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.984	5.984 (1.126)	65	157626	400.000	397.79	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	98730			24.72- 84.72	62.64
$ 146 Toluene-d8						CAS #: 2037-26-5	
8.489	8.489 (1.317)	98	508949	400.000	401.58	80.00- 120.00	100.00
8.489	8.489 (1.317)	70	53562			0.00- 40.20	10.52

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

$ 146 Toluene-d8 (continued)
  8.489   8.489 (1.317)   100    341303                    38.62-  98.62    67.06
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 11.343  11.343 (1.097)   174    293391 400.000   394.82  80.00- 120.00   100.00
 11.343  11.343 (1.097)    95    355823                    89.78- 149.78   121.28
 11.343  11.343 (1.097)   176    286767                    66.10- 126.10    97.74
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.717   1.717 (0.323)    58    492499 5000.00   5199.0  80.00- 120.00   100.00(A)
  1.717   1.717 (0.323)    43   3601162                   736.71- 796.71   731.20
-------------------------------------------------------------------------------
   31 Isopentane                                    CAS #: 78-78-4
  2.206   2.206 (0.415)    43   1283107 5000.00   3067.1  80.00- 120.00   100.00
  2.206   2.206 (0.415)    57    897234                    37.62-  97.62    69.93
  2.220   2.220 (0.418)    72     90472                     0.00-  36.64     7.05
-------------------------------------------------------------------------------
   35 Freon 11                                      CAS #: 75-69-4
  2.444   2.444 (0.460)   101   3423224 5000.00   3669.1  80.00- 120.00   100.00
  2.444   2.444 (0.460)   103   2206639                    34.68-  94.68    64.46
-------------------------------------------------------------------------------
   42 Ethanol                                       CAS #: 64-17-5
  2.780   2.780 (0.523)    45   1710380 5000.00   8479.0  80.00- 120.00   100.00(A)
  2.780   2.780 (0.523)    46    694835                    11.88-  71.88    40.62
-------------------------------------------------------------------------------
   49 Freon 113                                     CAS #: 76-13-1
  3.004   3.004 (0.565)   151   2673146 5000.00   3783.8  80.00- 120.00   100.00
  3.004   3.004 (0.565)   153   1696416                    36.16-  96.16    63.46
  3.004   3.004 (0.565)   101   3078132                    85.93- 145.93   115.15
-------------------------------------------------------------------------------
   50 1,1-Dichloroethene                            CAS #: 75-35-4
  3.032   3.032 (0.571)    61   2217167 5000.00   3717.6  80.00- 120.00   100.00
  3.032   3.032 (0.571)    96   1369999                    30.16-  90.16    61.79
  3.032   3.032 (0.571)    98    865465                     8.09-  68.09    39.03
-------------------------------------------------------------------------------
   52 Acetone                                       CAS #: 67-64-1
  3.186   3.186 (0.600)    58   1025532 5000.00   5049.0  80.00- 120.00   100.00(A)
  3.186   3.186 (0.600)    43   3276253                   284.49- 344.49   319.47
-------------------------------------------------------------------------------
   66 Methylene Chloride                            CAS #: 75-09-2
  3.633   3.633 (0.684)    49   1950029 5000.00   4160.1  80.00- 120.00   100.00
  3.647   3.647 (0.687)    84   1321247                    35.90-  95.90    67.76
  3.633   3.633 (0.684)    51    597023                     0.00-  59.48    30.62
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                       CAS #: 1634-04-4
  3.857   3.857 (0.726)    73   4867393 5000.00   4691.9  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether (continued)							
3.857	3.857 (0.726)	57	1281496			0.00- 56.69	26.33
3.857	3.857 (0.726)	41	1173617			0.00- 54.89	24.11
78 Hexane					CAS #: 110-54-3		
4.081	4.081 (0.768)	57	2489623	5000.00	3633.7	80.00- 120.00	100.00
4.081	4.081 (0.768)	43	1599258			34.03- 94.03	64.24
4.081	4.081 (0.768)	86	385500			0.00- 45.63	15.48
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.389	4.389 (0.826)	63	2987886	5000.00	4290.1	80.00- 120.00	100.00
4.389	4.389 (0.826)	65	913679			1.36- 61.36	30.58
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.033	5.033 (0.947)	61	2412756	5000.00	4154.1	80.00- 120.00	100.00
5.033	5.033 (0.947)	96	1830125			46.92- 106.92	75.85
5.033	5.033 (0.947)	98	1175019			18.93- 78.93	48.70
100 Chloroform					CAS #: 67-66-3		
5.382	5.382 (1.013)	83	3632568	5000.00	4561.0	80.00- 120.00	100.00
5.382	5.382 (1.013)	85	2441587			35.58- 95.58	67.21
102 Cyclohexane					CAS #: 110-82-7		
5.494	5.494 (1.034)	84	2042344	5000.00	3890.2	80.00- 120.00	100.00
5.494	5.494 (1.034)	56	2785679			109.96- 169.96	136.40
5.494	5.494 (1.034)	41	1488966			47.10- 107.10	72.90
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.536	5.536 (1.042)	97	3771360	5000.00	4303.9	80.00- 120.00	100.00
5.536	5.536 (1.042)	99	2428380			34.47- 94.47	64.39
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.662	5.662 (1.066)	119	4086559	5000.00	4445.7	80.00- 120.00	100.00
5.662	5.662 (1.066)	117	4237274			75.51- 135.51	103.69
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.914	5.914 (1.113)	57	10334910	5000.00	4454.0	80.00- 120.00	100.00
5.914	5.914 (1.113)	56	3283133			1.61- 61.61	31.77
5.914	5.914 (1.113)	41	2637239			0.00- 55.08	25.52
116 Benzene					CAS #: 71-43-2		
5.942	5.942 (0.922)	78	5278531	5000.00	4563.0	80.00- 120.00	100.00
5.942	5.942 (0.922)	77	1245402			0.00- 53.47	23.59
125 Trichloroethene					CAS #: 79-01-6		
6.698	6.698 (1.039)	95	2709254	5000.00	4813.6	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.698	6.698 (1.039)	130	2948833			80.33- 140.33	108.84
6.698	6.698 (1.039)	97	1725532			34.11- 94.11	63.69
127 Methylcyclohexane					CAS #: 108-87-2		
6.824	6.824 (1.059)	83	3317850	5000.00	4646.6	80.00- 120.00	100.00
6.824	6.824 (1.059)	98	1615567			18.36- 78.36	48.69
6.824	6.824 (1.059)	55	3118688			64.11- 124.11	94.00
147 Toluene					CAS #: 108-88-3		
8.614	8.614 (1.336)	91	8169155	5000.00	5098.2	80.00- 120.00	100.00(A)
8.614	8.614 (1.336)	92	4832318			28.41- 88.41	59.15
156 Tetrachloroethene					CAS #: 127-18-4		
9.356	9.356 (0.905)	166	4248303	5000.00	5113.7	80.00- 120.00	100.00(A)
9.356	9.356 (0.905)	129	3254963			44.78- 104.78	76.62
9.356	9.356 (0.905)	131	3181884			43.76- 103.76	74.90
169 m,p-Xylene					CAS #: 108-38-3		
10.559	10.559 (1.022)	106	4575795	5000.00	5288.1	80.00- 120.00	100.00(A)
10.559	10.559 (1.022)	91	8986350			163.96- 223.96	196.39
171 o-Xylene					CAS #: 95-47-6		
10.909	10.909 (1.056)	106	4329296	5000.00	5268.5	80.00- 120.00	100.00(A)
10.909	10.909 (1.056)	91	8970033			178.07- 238.07	207.19
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.623	11.623 (1.125)	105	10432564	5000.00	5166.2	80.00- 120.00	100.00(A)
11.623	11.623 (1.125)	120	5339724			23.73- 83.73	51.18
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.861	11.861 (1.148)	105	10081123	5000.00	5074.0	80.00- 120.00	100.00(A)
11.861	11.861 (1.148)	120	4729389			17.13- 77.13	46.91

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: msd14.i
Lab File ID: 14120114.d
Lab Smp Id: ICAL Level #9
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msd14.i/01dec16.b/14651201a.m
Misc Info: 5000ppbv (10000ppbv)

Calibration Date: 01-DEC-2016
Calibration Time: 14:23
Client Smp ID: ICAL Level #9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	124267	74560	173974	129421	4.15
123 1,4-Difluorobenze	508921	305353	712489	513215	0.84
163 Chlorobenzene-d5	476110	285666	666554	478841	0.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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.

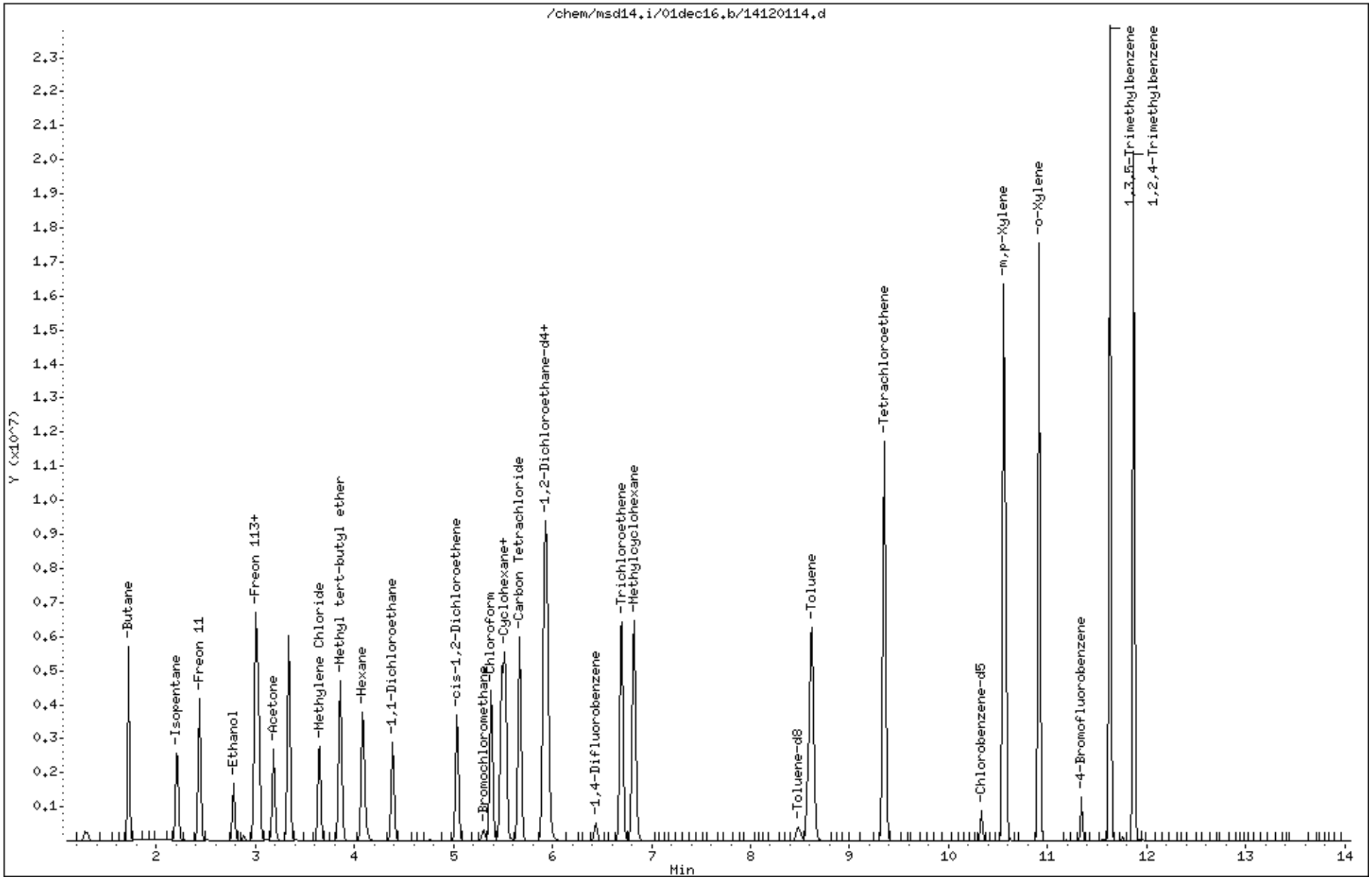
Data File: /chem/msd14.i/01dec16.b/14120114.d
Date : 02-DEC-2016 08:15
Client ID: ICAL Level #9
Sample Info: 25ml #2819-153

Instrument: msd14.i

Operator: jg

Column phase: RTX-624

Column diameter: 0.18



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/01dec16.b/14120118.d
Lab Smp Id: ICAL Level #10 Client Smp ID: ICAL Level #10
Inj Date : 02-DEC-2016 11:32
Operator : jg Inst ID: msd14.i
Smp Info : 50ml #2819-154
Misc Info : 10000ppbv (10000ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/01dec16.b/14651201a.m
Meth Date : 02-Dec-2016 16:29 jscarbro Quant Type: ISTD
Cal Date : 02-DEC-2016 11:32 Cal File: 14120118.d
Als bottle: 1 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 520HL.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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.312	5.312 (1.000)	130	135711	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	107152			46.96- 106.96	78.96
5.312	5.312 (1.000)	49	174715			97.69- 157.69	128.74
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.446	6.446 (1.000)	114	539450	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	82347			0.00- 45.92	15.26
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
10.335	10.335 (1.000)	117	495881	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	247315			19.32- 79.32	49.87
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.984	5.984 (1.126)	65	171393	400.000	412.48	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	96147			24.72- 84.72	56.10
$ 146 Toluene-d8						CAS #: 2037-26-5	
8.488	8.488 (1.317)	98	532266	400.000	399.56	80.00- 120.00	100.00
8.488	8.488 (1.317)	70	58959			0.00- 40.20	11.08

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

$ 146 Toluene-d8 (continued)
  8.488   8.488 (1.317)   100    363073                    38.62-  98.62    68.21
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 11.343  11.343 (1.097)   174    305500 400.000   396.99  80.00- 120.00   100.00
 11.343  11.343 (1.097)    95    363937                    89.78- 149.78   119.13
 11.343  11.343 (1.097)   176    292430                    66.10- 126.10    95.72
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.716   1.716 (0.323)    58    985626 10000.0   9922.4  80.00- 120.00   100.00(A)
  1.716   1.716 (0.323)    43   7311230                   736.71- 796.71   741.79
-------------------------------------------------------------------------------
   31 Isopentane                                    CAS #: 78-78-4
  2.220   2.220 (0.418)    43   2458110 10000.0   5603.5  80.00- 120.00   100.00(A)
  2.220   2.220 (0.418)    57   1658091                    37.62-  97.62    67.45
  2.220   2.220 (0.418)    72    160401                     0.00-  36.64     6.53
-------------------------------------------------------------------------------
   35 Freon 11                                      CAS #: 75-69-4
  2.444   2.444 (0.460)   101   6295297 10000.0   6434.8  80.00- 120.00   100.00(A)
  2.444   2.444 (0.460)   103   4074355                    34.68-  94.68    64.72
-------------------------------------------------------------------------------
   42 Ethanol                                       CAS #: 64-17-5
  2.808   2.808 (0.529)    45   1718247 10000.0   8123.2  80.00- 120.00   100.00(A)
  2.808   2.808 (0.529)    46    702966                    11.88-  71.88    40.91
-------------------------------------------------------------------------------
   49 Freon 113                                     CAS #: 76-13-1
  3.004   3.004 (0.565)   151   5296350 10000.0   7149.4  80.00- 120.00   100.00(A)
  3.004   3.004 (0.565)   153   3382908                    36.16-  96.16    63.87
  3.004   3.004 (0.565)   101   6147366                    85.93- 145.93   116.07
-------------------------------------------------------------------------------
   50 1,1-Dichloroethene                            CAS #: 75-35-4
  3.032   3.032 (0.571)    61   4402012 10000.0   7038.8  80.00- 120.00   100.00(A)
  3.032   3.032 (0.571)    96   2710191                    30.16-  90.16    61.57
  3.032   3.032 (0.571)    98   1725747                     8.09-  68.09    39.20
-------------------------------------------------------------------------------
   52 Acetone                                       CAS #: 67-64-1
  3.200   3.200 (0.602)    58   1791911 10000.0   8413.2  80.00- 120.00   100.00(A)
  3.200   3.200 (0.602)    43   5737294                   284.49- 344.49   320.18
-------------------------------------------------------------------------------
   66 Methylene Chloride                            CAS #: 75-09-2
  3.647   3.647 (0.687)    49   3897295 10000.0   7929.0  80.00- 120.00   100.00(A)
  3.647   3.647 (0.687)    84   2658236                    35.90-  95.90    68.21
  3.647   3.647 (0.687)    51   1193698                     0.00-  59.48    30.63
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                       CAS #: 1634-04-4
  3.857   3.857 (0.726)    73   9467590 10000.0   8703.3  80.00- 120.00   100.00(A)
```

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

   72 Methyl tert-butyl ether (continued)
  3.857   3.857 (0.726)    57   2502339                     0.00-  56.69    26.43
  3.857   3.857 (0.726)    41   2281650                     0.00-  54.89    24.10
-------------------------------------------------------------------------------
   78 Hexane                                        CAS #: 110-54-3
  4.081   4.081 (0.768)    57   4830733 10000.0   6723.8  80.00- 120.00   100.00(A)
  4.081   4.081 (0.768)    43   3072758                    34.03-  94.03    63.61
  4.081   4.081 (0.768)    86    745156                     0.00-  45.63    15.43
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                            CAS #: 75-34-3
  4.389   4.389 (0.826)    63   5957902 10000.0   8158.0  80.00- 120.00   100.00(A)
  4.389   4.389 (0.826)    65   1814901                     1.36-  61.36    30.46
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                        CAS #: 156-59-2
  5.032   5.032 (0.947)    61   4763568 10000.0   7821.5  80.00- 120.00   100.00(A)
  5.046   5.046 (0.950)    96   3628607                    46.92- 106.92    76.17
  5.046   5.046 (0.950)    98   2313339                    18.93-  78.93    48.56
-------------------------------------------------------------------------------
  100 Chloroform                                    CAS #: 67-66-3
  5.382   5.382 (1.013)    83   7158832 10000.0   8571.8  80.00- 120.00   100.00(A)
  5.382   5.382 (1.013)    85   4811751                    35.58-  95.58    67.21
-------------------------------------------------------------------------------
  102 Cyclohexane                                   CAS #: 110-82-7
  5.494   5.494 (1.034)    84   4020913 10000.0   7304.0  80.00- 120.00   100.00(A)
  5.494   5.494 (1.034)    56   5506712                   109.96- 169.96   136.95
  5.494   5.494 (1.034)    41   2954351                    47.10- 107.10    73.47
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                         CAS #: 71-55-6
  5.536   5.536 (1.042)    97   7433850 10000.0   8090.4  80.00- 120.00   100.00(A)
  5.536   5.536 (1.042)    99   4768055                    34.47-  94.47    64.14
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                          CAS #: 56-23-5
  5.662   5.662 (1.066)   119   7937033 10000.0   8234.3  80.00- 120.00   100.00(A)
  5.662   5.662 (1.066)   117   8272262                    75.51- 135.51   104.22
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                        CAS #: 540-84-1
  5.914   5.914 (1.113)    57  19380401 10000.0   7965.3  80.00- 120.00   100.00(A)
  5.914   5.914 (1.113)    56   6165646                     1.61-  61.61    31.81
  5.914   5.914 (1.113)    41   4928014                     0.00-  55.08    25.43
-------------------------------------------------------------------------------
  116 Benzene                                       CAS #: 71-43-2
  5.942   5.942 (0.922)    78  10285833 10000.0   8459.1  80.00- 120.00   100.00(A)
  5.942   5.942 (0.922)    77   2421774                     0.00-  53.47    23.54
-------------------------------------------------------------------------------
  125 Trichloroethene                               CAS #: 79-01-6
  6.697   6.697 (1.039)    95   5209864 10000.0   8806.3  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
125 Trichloroethene (continued)							
6.697	6.697 (1.039)	130	5664411			80.33- 140.33	108.72
6.697	6.697 (1.039)	97	3338577			34.11- 94.11	64.08
127 Methylcyclohexane					CAS #: 108-87-2		
6.823	6.823 (1.059)	83	6412358	10000.0	8543.7	80.00- 120.00	100.00(A)
6.823	6.823 (1.059)	98	3107368			18.36- 78.36	48.46
6.823	6.823 (1.059)	55	6010924			64.11- 124.11	93.74
147 Toluene					CAS #: 108-88-3		
8.614	8.614 (1.336)	91	15390974	10000.0	9138.1	80.00- 120.00	100.00(A)
8.614	8.614 (1.336)	92	9088353			28.41- 88.41	59.05
156 Tetrachloroethene					CAS #: 127-18-4		
9.356	9.356 (0.905)	166	7918665	10000.0	9204.2	80.00- 120.00	100.00(A)
9.356	9.356 (0.905)	129	6101004			44.78- 104.78	77.05
9.356	9.356 (0.905)	131	5999701			43.76- 103.76	75.77
169 m,p-Xylene					CAS #: 108-38-3		
10.559	10.559 (1.022)	106	8487924	10000.0	9472.2	80.00- 120.00	100.00(A)
10.559	10.559 (1.022)	91	15071462			163.96- 223.96	177.56
171 o-Xylene					CAS #: 95-47-6		
10.909	10.909 (1.056)	106	7934536	10000.0	9324.0	80.00- 120.00	100.00(A)
10.909	10.909 (1.056)	91	14008568			178.07- 238.07	176.55
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.623	11.623 (1.125)	105	13191090	10000.0	6307.8	80.00- 120.00	100.00(A)
11.623	11.623 (1.125)	120	9958404			23.73- 83.73	75.49

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: msd14.i
Lab File ID: 14120118.d
Lab Smp Id: ICAL Level #10
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /chem/msd14.i/01dec16.b/14651201a.m
Misc Info: 10000ppbv (10000ppbv)

Calibration Date: 01-DEC-2016
Calibration Time: 14:23
Client Smp ID: ICAL Level #10
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	124267	74560	173974	135711	9.21
123 1,4-Difluorobenze	508921	305353	712489	539450	6.00
163 Chlorobenzene-d5	476110	285666	666554	495881	4.15

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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.

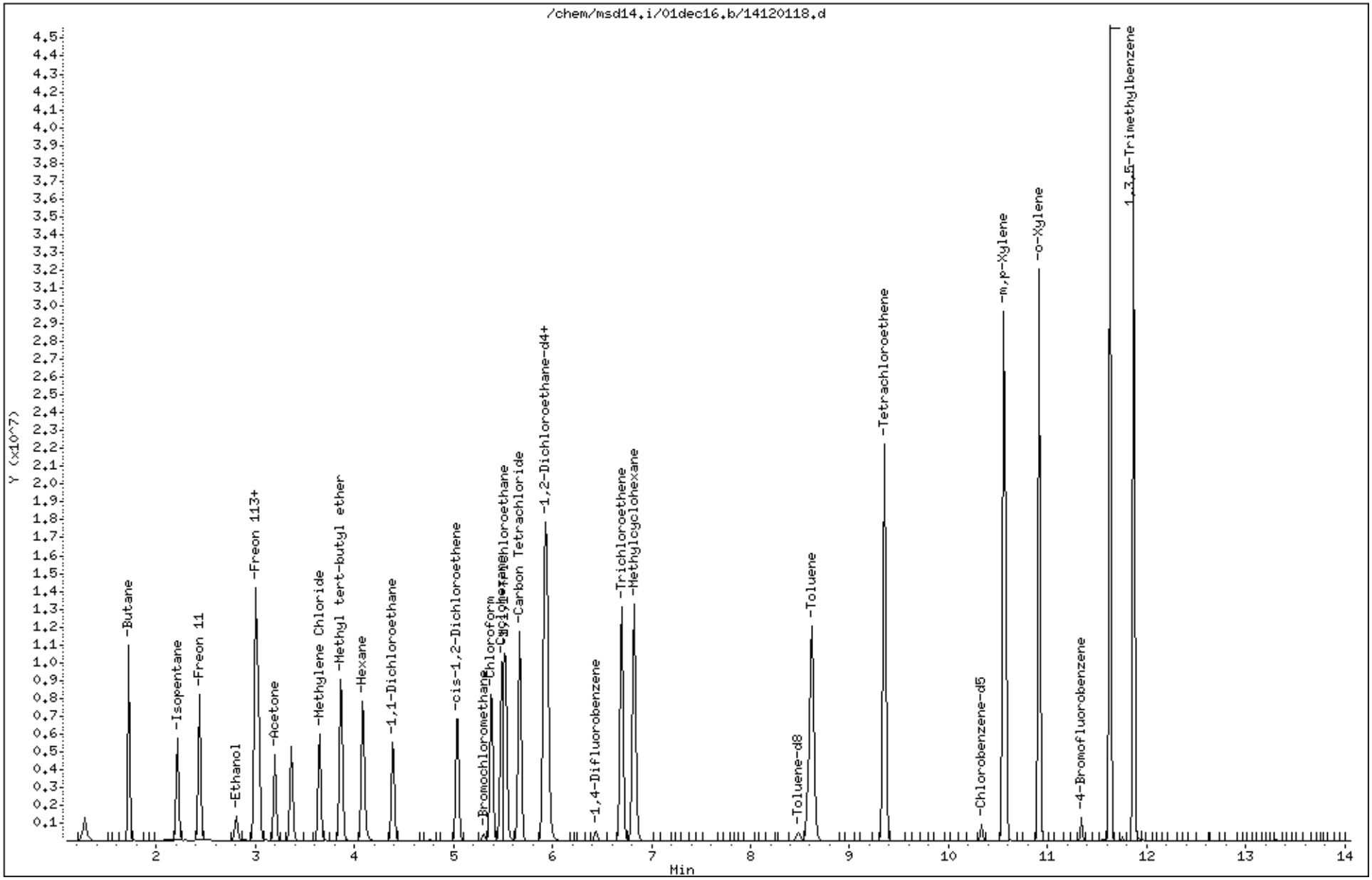
Data File: /chem/msd14.i/01dec16.b/14120118.d
Date : 02-DEC-2016 11:32
Client ID: ICAL Level #10
Sample Info: 50ml #2819-154

Instrument: msd14.i

Operator: jg

Column phase: RTX-624

Column diameter: 0.18



Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JAN-2017 14:09
End Cal Date : 16-JAN-2017 18:50
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/16jan17.b/a17q0116a.m
Cal Date : 17-Jan-2017 11:02 L7EZ
Curve Type : Average

Calibration File Names:
Level 2: /chem/msda.i/16jan17.b/a011603.d
Level 3: /chem/msda.i/16jan17.b/a011604.d
Level 4: /chem/msda.i/16jan17.b/a011605.d
Level 5: /chem/msda.i/16jan17.b/a011606.d
Level 6: /chem/msda.i/16jan17.b/a011607.d
Level 7: /chem/msda.i/16jan17.b/a011608.d
Level 8: /chem/msda.i/16jan17.b/a011609.d

Compound	0.50000 Level 2 / 200.000 Level 8	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
1 Dimethyl Ether	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Freon 14	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Acetaldehyde	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Hexafluoropropene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Freon 13	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Freon 143a	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Freon 134a	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
8 Propane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
9 Propylene	+++++	1.25241	1.03586	0.80023	0.86882	0.88275		
	0.87288						0.95216	17.466
10 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
11 Freon 12	2.15289	2.29701	2.39649	2.07226	2.29880	2.33993		
	2.32255						2.26856	5.026
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
15 Freon 114	2.03646	1.96485	2.00370	1.76479	1.88317	1.88159		
	1.87442						1.91557	4.834
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
17 Chloromethane	+++++	1.03219	0.86035	0.89376	0.88205	0.86179		
	0.77774						0.88465	9.376

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Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
19 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
20 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
21 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
22 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
23 Butane	+++++	0.36164	0.24520	0.21282	0.20483	0.20820		
	0.20776						0.24007	25.576
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
25 Vinyl Chloride	1.07929	1.13628	1.09140	0.95310	1.00820	1.04851		
	1.03399						1.05011	5.689
26 1,3-Butadiene	0.97471	1.01553	0.98529	0.84115	0.88743	0.89296		
	0.87781						0.92498	7.116
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
29 Bromomethane	1.19230	0.94908	0.79455	0.73928	0.81429	0.77041		
	0.78313						0.86329	18.508
30 Chloroethane	+++++	0.54483	0.56524	0.47266	0.48994	0.49931		
	0.51066						0.51377	6.793
31 Isopentane	+++++	1.33889	1.48521	1.30917	1.30577	1.30400		
	1.28048						1.33725	5.596
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
34 Pentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
35 Freon 11	2.41787	2.56326	2.61060	2.29868	2.42497	2.45949		
	2.42105						2.45656	4.198
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
37 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
40 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
41 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
42 Ethanol	+++++	0.54849	0.50866	0.46444	0.46599	0.49486		
	0.49947						0.49698	6.247
43 1,2-Dichloro-1-fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
44 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
45 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
46 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
47 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
48 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
49 Freon 113	1.91776	1.92470	1.94880	1.82991	1.86154	1.86187		
	1.83082						1.88220	2.541
50 1,1-Dichloroethene	0.54386	0.77404	0.68774	0.57320	0.63791	0.64584		
	0.62166						0.64061	11.807
51 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
52 Acetone	+++++	0.58019	0.59857	0.52799	0.57327	0.57026		
	0.55359						0.56731	4.261
53 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
54 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
55 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
56 Carbon Disulfide	+++++	3.02989	2.82051	2.42788	2.67548	2.73344		
	2.71572						2.73382	7.177
57 2-Propanol	+++++	2.20167	2.12668	1.93197	2.12793	2.12858		
	2.03308						2.09165	4.533

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
58 3-Chloropropene	+++++	0.50420	0.47397	0.40215	0.45640	0.45666		
	0.45446						0.45797	7.259
59 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
60 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
61 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
62 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
63 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
64 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
65 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
66 Methylene Chloride	+++++	1.51261	1.52610	1.28284	1.40781	1.41526		
	1.39811						1.42379	6.220
67 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
68 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
69 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
70 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
71 tert-Butyl alcohol	+++++	2.73961	2.60006	2.40877	2.44891	2.48710		
	2.40538						2.51497	5.219
72 Methyl tert-butyl ether	3.01687	2.89200	2.92275	2.69598	2.74311	2.70193		
	2.67296						2.80652	4.826
73 trans-1,2-Dichloroethene	0.59923	0.73389	0.66846	0.56606	0.62774	0.62202		
	0.61350						0.63299	8.553
74 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
75 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
76 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
77 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
78 Hexane	1.95535	2.24734	2.30019	1.93284	2.03814	2.04579		
	1.99402						2.07338	6.925
79 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
80 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
81 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
82 1,1-Dichloroethane	2.34246	2.15008	2.19131	1.87445	2.02494	2.06256		
	1.99909						2.09213	7.230
83 Isopropyl ether	+++++	4.90971	4.75750	4.43585	4.57542	4.52288		
	4.40629						4.60127	4.256
84 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
86 Vinyl Acetate	+++++	0.32155	0.30298	0.24714	0.28223	0.28170		
	0.27277						0.28473	8.969
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
88 Ethyl-tert-butyl ether	+++++	4.34828	4.28380	3.93638	4.08717	4.12293		
	4.04220						4.13679	3.715
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
90 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
91 cis-1,2-Dichloroethene	0.74528	0.90665	0.87730	0.74128	0.81240	0.82129		
	0.79021						0.81349	7.648
92 2-Butanone	+++++	0.57455	0.58606	0.46859	0.51485	0.52406		
	0.50888						0.52950	8.279
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
94 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
99 Tetrahydrofuran	1.48964	1.53070	1.63263	1.37064	1.50592	1.54097		
	1.49748						1.50971	5.162
100 Chloroform	2.13535	2.42058	2.40479	1.99457	2.22185	2.24952		
	2.18143						2.22973	6.704
101 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
102 Cyclohexane	1.43883	1.70784	1.60078	1.46106	1.47820	1.47582		
	1.41755						1.51144	6.916
103 1,1,1-Trichloroethane	2.92824	2.44515	2.54240	2.33007	2.35579	2.32030		
	2.25253						2.45350	9.358
104 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
105 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
106 Carbon Tetrachloride	2.76875	2.61923	2.62399	2.44089	2.48531	2.49751		
	2.43521						2.55298	4.799
107 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
108 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
109 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
110 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
113 2,2,4-Trimethylpentane	7.21808	7.63542	7.69707	6.82466	7.36665	7.39132		
	7.07150						7.31496	4.200
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
115 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
116 Benzene	0.88717	0.86469	0.82542	0.70785	0.75868	0.76733		
	0.76776						0.79699	8.046
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
119 tert-Amyl methyl ether	+++++	0.85344	0.84045	0.80120	0.80386	0.81590		
	0.79851						0.81889	2.796
120 1,2-Dichloroethane	0.30509	0.36586	0.37091	0.31891	0.35105	0.35599		
	0.35724						0.34643	7.142

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
121 Heptane	0.32314	0.28665	0.28279	0.27201	0.27560	0.27395		
	0.27654						0.28438	6.275
122 2,3-Dichloro-1-propene	#####	#####	#####	#####	#####	#####		
	#####						#####	#####
124 n-Butanol	#####	#####	#####	#####	#####	#####		
	#####						#####	#####
125 Trichloroethene	0.43329	0.40973	0.40862	0.33365	0.36995	0.36777		
	0.37679						0.38569	8.681
126 Bromodichloroethene	#####	#####	#####	#####	#####	#####		
	#####						#####	#####
127 Methylcyclohexane	2.70268	2.56997	2.36340	2.16469	2.24424	2.22502		
	2.15922						2.34703	9.045
128 Ethyl acrylate	#####	#####	#####	#####	#####	#####		
	#####						#####	#####
129 2-Methylheptane	#####	#####	#####	#####	#####	#####		
	#####						#####	#####
130 3-Methylheptane	#####	#####	#####	#####	#####	#####		
	#####						#####	#####
131 2-Pentanone	#####	#####	#####	#####	#####	#####		
	#####						#####	#####

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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End Cal Date : 16-JAN-2017 18:50
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Integrator : HP RTE
Method file : /chem/msda.i/16jan17.b/a17q0116a.m
Cal Date : 17-Jan-2017 11:02 L7EZ
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
132 1,2-Dichloropropane	0.42487	0.38034	0.36713	0.33432	0.34972	0.35338		
	0.35632						0.36658	8.025
133 1-Bromo-2-Chloroethane	#####	#####	#####	#####	#####	#####		
	#####						#####	#####
134 Methyl Methacrylate	#####	#####	#####	#####	#####	#####		
	#####						#####	#####
135 Diethyl Ketone	#####	#####	#####	#####	#####	#####		
	#####						#####	#####
136 1,4-Dioxane	#####	0.20455	0.21039	0.19066	0.20205	0.20282		
	0.20622						0.20278	3.273
137 Dibromomethane	#####	#####	#####	#####	#####	#####		
	#####						#####	#####
138 Bromodichloromethane	0.60348	0.59617	0.61304	0.53826	0.58178	0.59454		
	0.60037						0.58966	4.167
139 2-Nitropropane	#####	#####	#####	#####	#####	#####		
	#####						#####	#####
140 bis(chloromethyl) Ether	#####	#####	#####	#####	#####	#####		
	#####						#####	#####
141 1-Octene	#####	#####	#####	#####	#####	#####		
	#####						#####	#####

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Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
142 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 cis-1,3-Dichloropropene	0.40444	0.49401	0.49248	0.45001	0.49353	0.49788	0.50368	0.47658	7.634
145 4-Methyl-2-pentanone	0.39566	0.34996	0.34008	0.33300	0.33987	0.33578	0.34021	0.34779	6.255
147 Toluene	1.10133	1.13147	1.10623	1.04227	1.06910	1.07596	1.07631	1.08610	2.685
148 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 trans-1,3-Dichloropropene	0.48409	0.60380	0.55683	0.50514	0.53437	0.52607	0.51876	0.53272	7.271
151 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
153 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
154 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
155 1,1,2-Trichloroethane	0.52374	0.54370	0.46565	0.42563	0.43861	0.42779		
	0.41859						0.46339	10.937
156 Tetrachloroethene	0.66837	0.71466	0.64973	0.63281	0.62898	0.61435		
	0.59663						0.64365	6.048
157 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
158 2-Hexanone	+++++	0.57182	0.56526	0.54657	0.54379	0.53399		
	0.52062						0.54701	3.493
159 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
160 Dibromochloromethane	0.89077	0.95105	0.88500	0.83210	0.85837	0.83058		
	0.82782						0.86795	5.174
161 1,2-Dibromoethane (EDB)	0.75662	0.81001	0.75666	0.71077	0.72150	0.69922		
	0.68200						0.73383	5.943
162 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
164 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
165 Chlorobenzene	1.11644	1.23189	1.14898	1.07123	1.09678	1.05919		
	1.03795						1.10892	5.920
166 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
167 Ethyl Benzene	0.58489	0.55201	0.59785	0.56461	0.55349	0.53405		
	0.51588						0.55754	5.051
168 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
169 m,p-Xylene	0.61562	0.75812	0.72793	0.69085	0.69463	0.66128		
	0.64561						0.68486	7.114
170 Nonane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
171 o-Xylene	0.65825	0.70888	0.69354	0.68044	0.66115	0.63680		
	0.62440						0.66621	4.533
172 Styrene	1.10524	1.15438	1.12440	1.08515	1.08379	1.04440		
	1.00904						1.08663	4.473
173 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
174 Bromoform	0.78609	0.92170	0.88215	0.84634	0.85924	0.82794	0.81051	0.84771	5.356
175 Cumene	2.30706	2.23649	2.13752	2.05160	2.02278	1.92614	1.86021	2.07740	7.746
176 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 1,1,2,2-Tetrachloroethane	1.00229	1.10960	1.06014	1.04132	1.04014	0.99743	0.96725	1.03117	4.554
182 Propylbenzene	2.41305	2.61335	2.48988	2.36344	2.33268	2.23633	2.10559	2.36490	7.001
183 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 trans-1,4-Dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
185 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
186 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
187 Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
188 4-Ethyltoluene	0.65599	0.69268	0.65215	0.67108	0.65138	0.63669		
	0.61311						0.65330	3.837
189 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
190 1,3,5-Trimethylbenzene	0.96835	1.03050	0.97635	0.89125	0.86521	0.82157		
	0.80079						0.90772	9.476
191 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
192 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
193 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
194 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
195 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
196 1,2,4-Trimethylbenzene	0.84569	0.92811	0.85597	0.81734	0.80565	0.77525		
	0.75965						0.82681	6.837
197 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
198 Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
199 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
200 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
201 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
202 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
203 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
204 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
205 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
206 bis(2-Chloroethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
207 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
208 1,3-Dichlorobenzene	1.20462	1.39051	1.33177	1.21772	1.24187	1.20716		
	1.16146						1.25073	6.468
209 1,4-Dichlorobenzene	1.37837	1.42949	1.37834	1.22044	1.25495	1.20997		
	1.16631						1.29112	7.926
210 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
211 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
212 alpha-Chlorotoluene	1.61499	1.67569	1.65851	1.56751	1.63110	1.57185		
	1.55964						1.61133	2.880
213 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
214 1,2-Dichlorobenzene	1.20432	1.43050	1.25465	1.19505	1.19689	1.14114		
	1.11668						1.21989	8.454

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
215 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 4-Ethyl-1,2-dimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 1,2,4,5-tetramethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 1,2-Dibromo-3-chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
225 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
226 1,2,4-Trichlorobenzene	+++++	1.30804	1.27003	1.07423	1.15391	1.12516		
	1.10756						1.17316	8.027
227 Hexachlorobutadiene	+++++	0.94542	0.96457	0.80711	0.85941	0.84130		
	0.80351						0.87022	7.952
228 Naphthalene	+++++	+++++	3.28019	2.66456	2.98689	2.92825		
	2.91513						2.95500	7.442
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
230 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
231 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
234 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
235 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
236 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 1,2-Dichloroethene (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 238 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 239 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 240 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 Total Volatile Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TPH reference to Gasoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
245 TPH reference MineralSpirits	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
246 TPH reference to Stoddard	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
247 TVOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
248 TVOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
249 TVOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
250 TVOC reference to Toluene-d8	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
251 NMOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
252 NMOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
253 NMOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
254 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
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	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
264 C8-C10 Aliphatic ref Decane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	

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End Cal Date : 16-JAN-2017 18:50
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/16jan17.b/a17q0116a.m
Cal Date : 17-Jan-2017 11:02 L7EZ
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
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	1.33838	1.30786	1.30266	1.27153	1.29381	1.33952		
	1.38584						1.31994	2.858
$ 146 Toluene-d8	1.03885	1.02450	1.05729	1.02990	1.03918	1.05167		
	1.07324						1.04495	1.617
$ 177 4-Bromofluorobenzene	0.59856	0.60803	0.59698	0.60605	0.61028	0.60846		
	0.60052						0.60413	0.883

Calibration History

Method : /chem/msda.i/16jan17.b/a17q0116a.m
Start Cal Date: 16-JAN-2017 14:09
End Cal Date : 16-JAN-2017 18:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 0.50000		
16-JAN-2017 14:09	AT12low	/chem/msda.i/16jan17.b/a011603.d
Cal Level: 3 , Cal Amount: 2.00000		
16-JAN-2017 16:39	AT12mdl	/chem/msda.i/16jan17.b/a011604.d
Cal Level: 4 , Cal Amount: 5.00000		
16-JAN-2017 17:10	AT12mdl	/chem/msda.i/16jan17.b/a011605.d
Cal Level: 5 , Cal Amount: 20.00000		
16-JAN-2017 17:34	AT12crv	/chem/msda.i/16jan17.b/a011606.d
Cal Level: 6 , Cal Amount: 50.00000		
16-JAN-2017 17:59	AT12crv	/chem/msda.i/16jan17.b/a011607.d
Cal Level: 7 , Cal Amount: 100.00000		
16-JAN-2017 18:24	AT12crv	/chem/msda.i/16jan17.b/a011608.d
Cal Level: 8 , Cal Amount: 200.00000		
16-JAN-2017 18:50	AT12crv	/chem/msda.i/16jan17.b/a011609.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

```
+------------------+-----------------+----------------------------------------+
| Ccal Level: 6 , Ccal Amount: 50.000                                        |
+==========================================================================+
|16-JAN-2017 17:59 |AT12             |/chem/msda.i/16jan17.b/a011607a.d        |
+------------------+-----------------+----------------------------------------+
| Ccal Level: 6 , Ccal Amount: 50.000                                        |
+==========================================================================+
|16-JAN-2017 17:59 |AT12crv          |/chem/msda.i/16jan17.b/a011607.d         |
+------------------+-----------------+----------------------------------------+
```

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 16-JAN-2017 14:09
End Cal Date : 16-JAN-2017 18:50
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/16jan17.b/a17q0116a.m
Cal Date : 17-Jan-2017 10:09 L7EZ
Curve Type : Average

Calibration File Names:
Level 2: /chem/msda.i/16jan17.b/a011603.d
Level 3: /chem/msda.i/16jan17.b/a011604.d
Level 4: /chem/msda.i/16jan17.b/a011605.d
Level 5: /chem/msda.i/16jan17.b/a011606.d
Level 6: /chem/msda.i/16jan17.b/a011607.d
Level 7: /chem/msda.i/16jan17.b/a011608.d
Level 8: /chem/msda.i/16jan17.b/a011609.d

DNG 1/17/17
1/17/17

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	___ RRF	% RSD
	200.000 Level 8							
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
6 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
7 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Initial Calibration Narrative

A17Q0116A.m

A 7 point initial calibration was analyzed on MSD-A on 01/16/17 for TO-15 compounds.

ICAL - 0 out.

ICV - 0 out.

ICV: File A011613; 100mL: #2819-114A (100ppbv); exp: 2/4/17

0 out DoD and in-house control limits.
A011613c (4.2)
A011613a (5.0)

Tune Files:

A) A011601

The MDL study was performed on 4/4/16.

MSDA

BFB verification of 176/174 ratio: (110888/116824)*100= 94.92%			
IS/S Std.#:	2819-206	Exp. Date:	3/27/2017
BCM	238,300		
1,4-DFB	1,061,216		
CB-d5	912,832		

Method TO-15/TO-14		
SOP# 6		
Vacuum: NA		
Please check all standards		
Surrogate# 2819-206	Exp. Date:	3/27/2017
Surrogate# NA	Exp. Date:	NA

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

Method: A17Q0116A.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
√	A011601	BFB Tune Check	2819-206	4	36ng	1.0mL	1.00	gd	gd	01/16/17	1222	gd	
X	A011602	ICAL Level #1	2819-222	5	0.1ppbv(1.0ppbv)	20mL	1.00	gd	gd	01/16/17	1312	gd	exp. 4/5/17
√	A011603	ICAL Level #2	2819-213	3	0.5ppbv(5.0ppbv)	20mL	1.00	gd	gd	01/16/17	1409	gd	exp. 3/21/17
√	A011604	ICAL Level #3	2819-213	3	2.0ppbv(5.0ppbv)	80mL	1.00	gh	gd	01/16/17	1639	DNa/gd	
√	A011605	ICAL Level #4	2819-213	3	5.0ppbv(5.0ppbv)	200mL	1.00	gh	gd	01/16/17	1710	DNa/gd	
√	A011606	ICAL Level #5	2819-200	13	20ppbv(200ppbv)	20mL	1.00	gh	gd	01/16/17	1734	DNa/gd	exp. 03/21/17
√	A011607	ICAL Level #6	2819-200	13	50ppbv(200ppbv)	50mL	1.00	gh	gd	01/16/17	1759	DNa/gd	
√	A011608	ICAL Level #7	2819-200	13	100ppbv(200ppbv)	100mL	1.00	gh	gd	01/16/17	1824	DNa/gd	
√	A011609	ICAL Level #8	2819-200	13	200ppbv(200ppbv)	200mL	1.00	gh	gd	01/16/17	1850	DNa/gd	
X	A011610	System Blank	35133	4	Humid	200mL	1.00	gh	gd	01/16/17	1917	DNa/gd	
X	A011611	System Blank	35133	4	Humid	200mL	1.00	gh	gd	01/16/17	1944	DNa/gd	
X	A011612	ICAL Level #1	2819-222	5	0.1ppbv(1.0ppbv)	20mL	1.00	gh	gd	01/16/17	2008	DNa/gd	exp. 4/5/17
√	A011613	ICV	2819-114A	14	50ppbv(100ppbv)	100mL	1.00	gh	gd	01/16/17	2032	DNa/gd	exp. 2/4/17
√	A011614	System Blank	35133	4	Humid	200mL	1.00	gh	gd	01/16/17	2059	DNa/gd	

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

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

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

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

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/16jan17.b/a011613.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 16-JAN-2017 20:32
Operator : gd Inst ID: msda.i
Smp Info : 100mL 2819-114A
Misc Info : 50ppbv(100ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/16jan17.b/a17q0116a.m
Meth Date : 17-Jan-2017 10:09 L7EZ Quant Type: ISTD
Cal Date : 16-JAN-2017 18:50 Cal File: a011609.d
Als bottle: 14 QC Sample: ICV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.521	5.528 (1.000)	130	245905	25.0000		80.00- 120.00	100.00
5.521	5.528 (1.000)	128	193210			50.57- 110.57	78.57
5.521	5.521 (1.000)	49	352873			118.90- 178.90	143.50
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	1061556	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	164220			0.00- 45.14	15.47
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	957360	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	492708			21.31- 81.31	51.47
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.058	6.058 (1.097)	65	314116	24.1940	24.194	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	180706			29.46- 89.46	57.53
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.620	7.620 (1.189)	98	1128272	25.4283	25.428	80.00- 120.00	100.00
7.620	7.620 (1.189)	70	109876			0.00- 39.82	9.74

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

$ 146 Toluene-d8 (continued)
  7.620   7.620 (1.189)   100    753842                    36.19-  96.19    66.81
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
  9.848   9.848 (1.112)   174    584548 25.2672   25.267  80.00- 120.00   100.00
  9.841   9.840 (1.111)    95    720184                   92.19- 152.19   123.20
  9.848   9.848 (1.112)   176    593897                   71.02- 131.02   101.60
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.517   1.524 (0.275)    41    399247 42.6290   42.629  80.00- 120.00   100.00
  1.517   1.524 (0.275)    42    267087                   37.76-  97.76    66.90
  1.524   1.524 (0.276)    39    281859                   38.24-  98.24    70.60
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.553   1.560 (0.281)    85   1090606 48.8753   48.875  80.00- 120.00   100.00
  1.553   1.560 (0.281)    87    350213                    2.19-  62.19    32.11
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.675   1.682 (0.303)   135    907189 48.1473   48.147  80.00- 120.00   100.00
  1.675   1.682 (0.303)   137    291969                    1.62-  61.62    32.18
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.761   1.768 (0.319)    50    423966 48.7229   48.723  80.00- 120.00   100.00
  1.761   1.768 (0.319)    52    145993                    4.04-  64.04    34.44
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.847   1.854 (0.334)    58     99191 42.0048   42.005  80.00- 120.00   100.00
  1.847   1.854 (0.334)    43    751744                  761.67- 821.67   757.88
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.882   1.882 (0.341)    62    499407 48.3495   48.349  80.00- 120.00   100.00
  1.882   1.882 (0.341)    64    150256                    0.00-  59.01    30.09
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.904   1.911 (0.345)    54    417421 45.8789   45.879  80.00- 120.00   100.00
  1.904   1.911 (0.345)    39    381206                   63.95- 123.95    91.32
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.262   2.269 (0.410)    94    368450 43.3904   43.390  80.00- 120.00   100.00
  2.262   2.269 (0.410)    96    340597                   64.81- 124.81    92.44
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.384   2.391 (0.432)    64    240397 47.5696   47.570  80.00- 120.00   100.00
  2.391   2.391 (0.433)    66     74132                    1.96-  61.96    30.84
  2.384   2.391 (0.432)    49     75983                    1.70-  61.70    31.61
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
31 Isopentane					CAS #: 78-78-4		
2.412	2.412 (0.437)	43	613178	46.6172	46.617	80.00- 120.00	100.00
2.412	2.412 (0.437)	57	418500			40.19- 100.19	68.25
35 Freon 11					CAS #: 75-69-4		
2.642	2.649 (0.478)	101	1149395	47.5680	47.568	80.00- 120.00	100.00
2.642	2.649 (0.478)	103	740241			34.98- 94.98	64.40
42 Ethanol					CAS #: 64-17-5		
2.986	2.978 (0.541)	45	216940	44.3783	44.378	80.00- 120.00	100.00
2.986	2.978 (0.541)	46	86038			9.25- 69.25	39.66
49 Freon 113					CAS #: 76-13-1		
3.293	3.301 (0.597)	151	859395	46.4194	46.419	80.00- 120.00	100.00
3.301	3.301 (0.598)	153	542472			34.55- 94.55	63.12
3.293	3.293 (0.597)	101	977204			83.34- 143.34	113.71
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.329	3.329 (0.603)	98	290609	46.1202	46.120	80.00- 120.00	100.00
3.329	3.329 (0.603)	96	447347			120.22- 180.22	153.93
3.322	3.329 (0.602)	61	822422			243.84- 303.84	283.00
52 Acetone					CAS #: 67-64-1		
3.480	3.487 (0.630)	58	274252	49.1476	49.148	80.00- 120.00	100.00
3.480	3.487 (0.630)	43	829718			267.70- 327.70	302.54
56 Carbon Disulfide					CAS #: 75-15-0		
3.559	3.566 (0.645)	76	1300927	48.3789	48.379	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.644	3.644 (0.660)	45	954107	46.3746	46.374	80.00- 120.00	100.00
3.644	3.644 (0.660)	43	160141			0.00- 46.48	16.78
3.644	3.644 (0.660)	59	37320			0.00- 33.95	3.91
58 3-Chloropropene					CAS #: 107-05-1		
3.802	3.809 (0.689)	76	211910	47.0417	47.042	80.00- 120.00	100.00
3.802	3.802 (0.689)	41	741927			307.27- 367.27	350.11
66 Methylene Chloride					CAS #: 75-09-2		
3.988	3.988 (0.722)	49	655915	46.8355	46.835	80.00- 120.00	100.00
3.988	3.988 (0.722)	84	410652			32.37- 92.37	62.61
3.988	3.988 (0.722)	51	207844			0.49- 60.49	31.69
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.760)	73	1246096	45.1395	45.139	80.00- 120.00	100.00
4.196	4.196 (0.760)	57	372177			0.00- 59.21	29.87

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether (continued)							
4.196	4.196 (0.760)	41	321721			0.00- 55.49	25.82
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.225	4.225 (0.765)	98	319146	51.2587	51.259	80.00- 120.00	100.00
4.225	4.225 (0.765)	61	806672			224.99- 284.99	252.76
4.225	4.225 (0.765)	96	490407			119.77- 179.77	153.66
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.803)	57	963287	47.2334	47.233	80.00- 120.00	100.00
4.432	4.432 (0.803)	43	613221			31.75- 91.75	63.66
4.440	4.439 (0.804)	86	119193			0.00- 42.75	12.37
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.712	4.712 (0.853)	63	965475	46.9165	46.916	80.00- 120.00	100.00
4.712	4.719 (0.853)	65	294925			1.80- 61.80	30.55
86 Vinyl Acetate					CAS #: 108-05-4		
4.755	4.755 (0.861)	86	132255	47.2232	47.223	80.00- 120.00	100.00
4.755	4.755 (0.861)	43	1651818			1309.99-1369.99	1248.96
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.292	5.292 (0.958)	98	357228	44.6445	44.644	80.00- 120.00	100.00
5.292	5.292 (0.958)	96	538171			123.57- 183.57	150.65
5.292	5.292 (0.958)	61	795949			194.30- 254.30	222.81
92 2-Butanone					CAS #: 78-93-3		
5.321	5.313 (0.964)	72	245455	47.1283	47.128	80.00- 120.00	100.00
5.313	5.313 (0.962)	43	1264519			492.83- 552.83	515.17
5.313	5.313 (0.962)	57	101004			11.22- 71.22	41.15
99 Tetrahydrofuran					CAS #: 109-99-9		
5.514	5.514 (0.999)	42	713644	48.0574	48.057	80.00- 120.00	100.00
5.514	5.514 (0.999)	71	222657			1.67- 61.67	31.20
5.514	5.514 (0.999)	72	227531			1.66- 61.66	31.88
100 Chloroform					CAS #: 67-66-3		
5.586	5.586 (1.012)	83	1032694	47.0861	47.086	80.00- 120.00	100.00
5.586	5.586 (1.012)	85	676590			35.62- 95.62	65.52
102 Cyclohexane					CAS #: 110-82-7		
5.686	5.686 (1.030)	84	706628	47.5306	47.530	80.00- 120.00	100.00
5.686	5.686 (1.030)	56	1069525			127.28- 187.28	151.36
5.686	5.686 (1.030)	41	536462			46.63- 106.63	75.92
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.034)	97	1087808	45.0754	45.075	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane (continued)							
5.707	5.707 (1.034)	99	704505			33.98- 93.98	64.76
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.054)	119	1152616	45.8996	45.900	80.00- 120.00	100.00
5.822	5.822 (1.054)	117	1154436			70.95- 130.95	100.16
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.090)	57	3437999	47.7823	47.782	80.00- 120.00	100.00
6.015	6.015 (1.090)	56	1083051			0.93- 60.93	31.50
6.015	6.015 (1.090)	41	798954			0.00- 52.07	23.24
116 Benzene					CAS #: 71-43-2		
6.037	6.037 (0.942)	78	1577821	46.6234	46.623	80.00- 120.00	100.00
6.037	6.037 (0.942)	77	367667			0.00- 52.91	23.30
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.130 (0.956)	62	722042	49.0838	49.084	80.00- 120.00	100.00
6.130	6.130 (0.956)	64	230197			2.36- 62.36	31.88
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.965)	71	579728	48.0084	48.008	80.00- 120.00	100.00
6.187	6.187 (0.965)	43	1296161			192.75- 252.75	223.58
6.187	6.187 (0.965)	57	713380			92.77- 152.77	123.05
125 Trichloroethene					CAS #: 79-01-6		
6.603	6.603 (1.030)	95	774282	47.2784	47.278	80.00- 120.00	100.00
6.603	6.603 (1.030)	130	855181			78.45- 138.45	110.45
6.603	6.603 (1.030)	97	497026			35.78- 95.78	64.19
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.214)	83	1054166	45.6628	45.663	80.00- 120.00	100.00
6.703	6.703 (1.214)	98	486595			16.08- 76.08	46.16
6.703	6.703 (1.214)	55	1057245			69.75- 129.75	100.29
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.839	6.839 (1.067)	63	719887	46.2475	46.248	80.00- 120.00	100.00
6.839	6.839 (1.067)	62	508484			40.72- 100.72	70.63
6.839	6.839 (1.067)	41	360418			20.11- 80.11	50.07
136 1,4-Dioxane					CAS #: 123-91-1		
6.925	6.925 (1.080)	88	413367	48.0067	48.007	80.00- 120.00	100.00
6.925	6.925 (1.080)	58	363267			57.35- 117.35	87.88
6.925	6.925 (1.080)	57	116257			0.00- 56.09	28.12
138 Bromodichloromethane					CAS #: 75-27-4		
7.068	7.068 (1.103)	83	1224641	48.9105	48.910	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane (continued)							
7.068	7.068 (1.103)	85	782903			34.91- 94.91	63.93
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.441	7.441 (1.161)	75	1074695	53.1069	53.107	80.00- 120.00	100.00
7.441	7.441 (1.161)	77	359052			3.24- 63.24	33.41
7.441	7.441 (1.161)	39	570841			23.84- 83.84	53.12
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.178)	58	680986	46.1121	46.112	80.00- 120.00	100.00
7.548	7.548 (1.178)	43	1775742			220.90- 280.90	260.76
7.548	7.548 (1.178)	85	254652			5.60- 65.60	37.39
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.198)	91	2215204	48.0333	48.033	80.00- 120.00	100.00
7.677	7.677 (1.198)	92	1287399			28.71- 88.71	58.12
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.894)	75	964925	47.2995	47.300	80.00- 120.00	100.00
7.921	7.921 (0.894)	77	320990			2.84- 62.84	33.27
7.921	7.921 (0.894)	39	493909			22.14- 82.14	51.19
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.912)	97	780609	43.9899	43.990	80.00- 120.00	100.00
8.078	8.078 (0.912)	99	494847			33.31- 93.31	63.39
8.078	8.078 (0.912)	83	693741			55.94- 115.94	88.87
156 Tetrachloroethene					CAS #: 127-18-4		
8.114	8.114 (0.916)	166	1107554	44.9346	44.935	80.00- 120.00	100.00
8.114	8.114 (0.916)	129	862030			46.29- 106.29	77.83
8.114	8.114 (0.916)	131	828806			44.37- 104.37	74.83
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	937610	44.7603	44.760	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	1717769			152.24- 212.24	183.21
8.243	8.243 (0.930)	100	157181			0.00- 47.15	16.76
160 Dibromochloromethane					CAS #: 124-48-1		
8.386	8.386 (0.947)	129	1546906	46.5406	46.540	80.00- 120.00	100.00
8.386	8.386 (0.947)	127	1194457			46.82- 106.82	77.22
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.501 (0.960)	107	1288597	45.8552	45.855	80.00- 120.00	100.00
8.508	8.501 (0.960)	109	1215876			64.56- 124.56	94.36
165 Chlorobenzene					CAS #: 108-90-7		
8.881	8.881 (1.002)	112	1950350	45.9279	45.928	80.00- 120.00	100.00

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

  165 Chlorobenzene (continued)
  8.881   8.881 (1.002)   114    620088                     2.04-  62.04    31.79
  8.881   8.881 (1.002)    77   1050507                    25.23-  85.23    53.86
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                 CAS #: 100-41-4
  8.931   8.931 (1.008)   106    981555 45.9732   45.973  80.00- 120.00   100.00
  8.931   8.931 (1.008)    91   3029450                   278.30- 338.30   308.64
-------------------------------------------------------------------------------
  169 m,p-Xylene                                    CAS #: 108-38-3
  9.031   9.031 (1.019)   106   1216341 46.3784   46.378  80.00- 120.00   100.00
  9.031   9.031 (1.019)    91   2390712                   162.42- 222.42   196.55
-------------------------------------------------------------------------------
  171 o-Xylene                                      CAS #: 95-47-6
  9.375   9.368 (1.058)   106   1170527 45.8812   45.881  80.00- 120.00   100.00
  9.368   9.368 (1.057)    91   2421707                   175.73- 235.73   206.89
-------------------------------------------------------------------------------
  172 Styrene                                       CAS #: 100-42-5
  9.389   9.389 (1.060)   104   1809609 43.4879   43.488  80.00- 120.00   100.00
  9.389   9.389 (1.060)    78    846978                    16.95-  76.95    46.80
-------------------------------------------------------------------------------
  174 Bromoform                                     CAS #: 75-25-2
  9.590   9.590 (1.082)   173   1554624 47.8898   47.890  80.00- 120.00   100.00
  9.590   9.590 (1.082)   171    802182                    21.43-  81.43    51.60
-------------------------------------------------------------------------------
  175 Cumene                                        CAS #: 98-82-8
  9.661   9.661 (1.091)   105   3520456 44.2530   44.253  80.00- 120.00   100.00
  9.661   9.661 (1.091)   120    975865                     0.00-  57.61    27.72
  9.661   9.661 (1.091)    51    382293                     0.00-  40.74    10.86
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
  9.969   9.977 (1.125)    83   1814415 45.9486   45.948  80.00- 120.00   100.00
  9.977   9.977 (1.126)    85   1176508                    34.51-  94.51    64.84
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
 10.005  10.005 (1.129)    91   4130985 45.6147   45.615  80.00- 120.00   100.00
 10.005  10.005 (1.129)   120   1020902                     0.00-  54.88    24.71
 10.005  10.005 (1.129)   105    161326                     0.00-  33.79     3.91
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 10.098  10.098 (1.140)   120   1176768 47.0375   47.038  80.00- 120.00   100.00
 10.098  10.098 (1.140)   105   3714752                   289.38- 349.38   315.67
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 10.149  10.148 (1.146)   120   1484505 42.7067   42.707  80.00- 120.00   100.00
 10.149  10.148 (1.146)   105   2955425                   171.33- 231.33   199.08
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                                        CONCENTRATIONS
                                        ON-COL    FINAL
   RT   EXP RT (REL RT)  MASS  RESPONSE ( PPBV)  ( PPBV)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 10.478  10.478 (1.183)   120   1407686 44.4595   44.459  80.00- 120.00   100.00
 10.478  10.478 (1.183)   105   2988001                  182.43- 242.43   212.26
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 10.765  10.764 (1.215)   146   2211109 46.1648   46.165  80.00- 120.00   100.00
 10.765  10.764 (1.215)   148   1403783                   33.68-  93.68    63.49
 10.757  10.757 (1.214)   111    877168                   10.08-  70.08    39.67
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 10.843  10.843 (1.224)   146   2273239 45.9771   45.977  80.00- 120.00   100.00
 10.843  10.843 (1.224)   148   1447835                   33.78-  93.78    63.69
 10.843  10.843 (1.224)   111    867505                    8.79-  68.79    38.16
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 10.958  10.958 (1.237)    91   2916021 47.2576   47.258  80.00- 120.00   100.00
 10.958  10.958 (1.237)   126    676185                    0.00-  53.35    23.19
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 11.173  11.173 (1.261)   146   2123456 45.4556   45.456  80.00- 120.00   100.00
 11.173  11.173 (1.261)   148   1341624                   32.96-  92.96    63.18
 11.173  11.173 (1.261)   111    875638                   10.66-  70.66    41.24
-------------------------------------------------------------------------------
  226 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 12.591  12.591 (1.421)   180   2095384 46.6415   46.641  80.00- 120.00   100.00
 12.591  12.591 (1.421)   182   1972207                   64.75- 124.75    94.12
-------------------------------------------------------------------------------
  227 Hexachlorobutadiene                           CAS #: 87-68-3
 12.677  12.677 (1.431)   225   1564540 46.9486   46.948  80.00- 120.00   100.00
 12.677  12.677 (1.431)   223    986890                   32.54-  92.54    63.08
-------------------------------------------------------------------------------
  228 Naphthalene                                   CAS #: 91-20-3
 12.863  12.863 (1.452)   128    465659 4.11505    4.115  80.00- 120.00   100.00
 12.863  12.863 (1.452)   127     60685                    0.00-  42.17    13.03
-------------------------------------------------------------------------------
M 239 Total Xylene                                  CAS #: 1330-20-7
                                2386868 92.2597   92.260
-------------------------------------------------------------------------------
```

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a011613.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msda.i/16jan17.b/a17q0116a.m
Misc Info: 50ppbv(100ppbv)

Calibration Date: 16-JAN-2017
Calibration Time: 17:59
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	238300	142980	333620	245905	3.19
123 1,4-Difluorobenze	1061216	636730	1485702	1061556	0.03
163 Chlorobenzene-d5	912832	547699	1277965	957360	4.88

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	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: 17-Jan-2017 10:12

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 16jan17
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: gd
Data Type: MS DATA
SampleType: ICV
SpikeList File: AT12ethanol.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msda.i/16jan17.b/a17q0116a.m
Misc Info: 50ppbv(100ppbv)

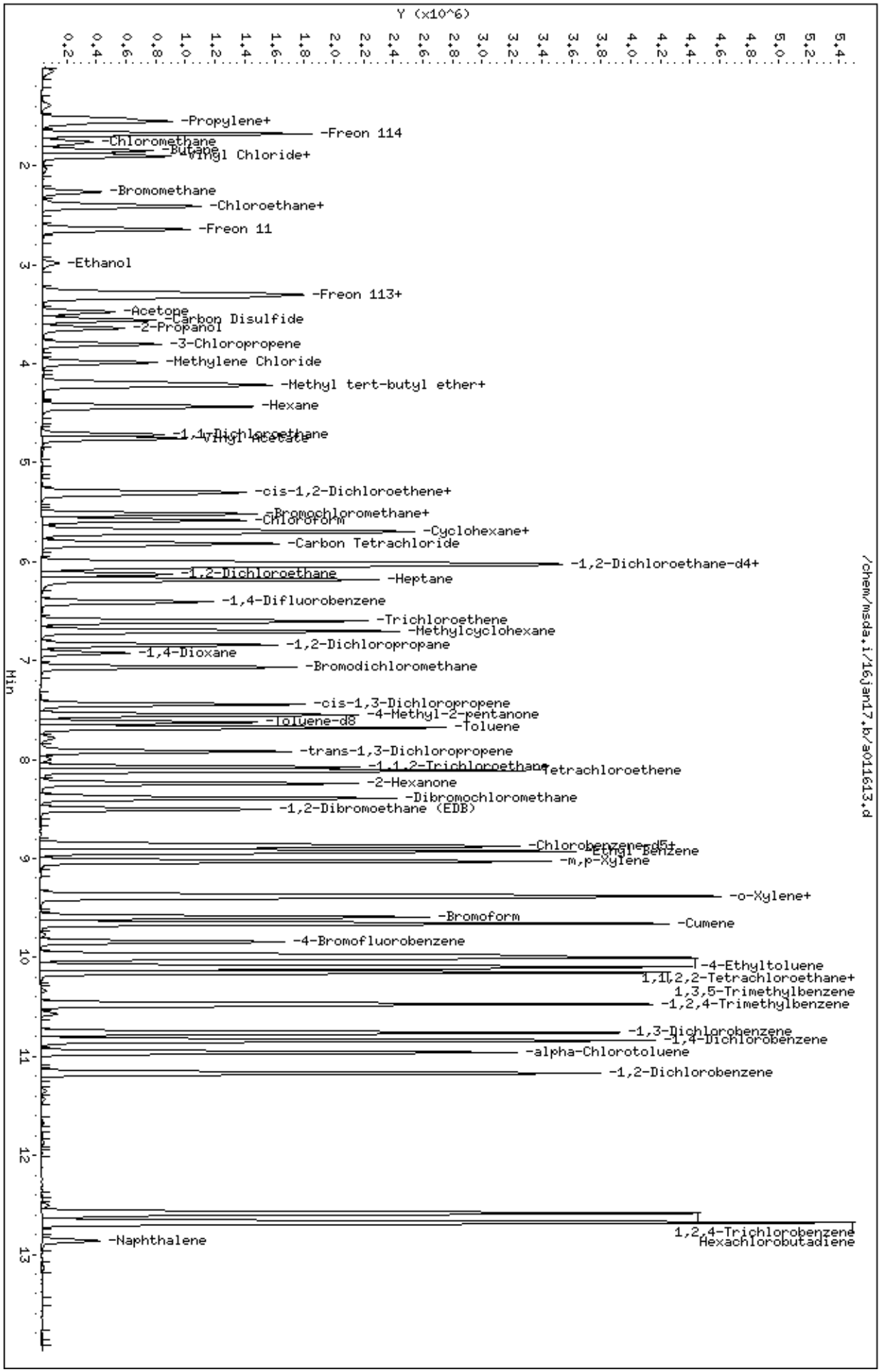
SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	42.629	85.26	60-140
11 Freon 12	50.000	48.875	97.75	70-130
15 Freon 114	50.000	48.147	96.29	70-130
17 Chloromethane	50.000	48.723	97.45	70-130
23 Butane	50.000	42.005	84.01	60-140
25 Vinyl Chloride	50.000	48.349	96.70	70-130
26 1,3-Butadiene	50.000	45.879	91.76	70-130
29 Bromomethane	50.000	43.390	86.78	70-130
30 Chloroethane	50.000	47.570	95.14	70-130
31 Isopentane	50.000	46.617	93.23	60-140
35 Freon 11	50.000	47.568	95.14	70-130
42 Ethanol	57.500	44.378	77.18	70-130
49 Freon 113	50.000	46.419	92.84	70-130
50 1,1-Dichloroethene	50.000	46.120	92.24	70-130
52 Acetone	50.000	49.148	98.30	70-130
56 Carbon Disulfide	50.000	48.379	96.76	70-130
57 2-Propanol	50.000	46.374	92.75	70-130
58 3-Chloropropene	50.000	47.042	94.08	70-130
66 Methylene Chloride	50.000	46.835	93.67	70-130
72 Methyl tert-butyl	50.000	45.139	90.28	70-130
73 trans-1,2-Dichloro	50.000	51.259	102.52	70-130
78 Hexane	50.000	47.233	94.47	70-130
82 1,1-Dichloroethane	50.000	46.916	93.83	70-130
86 Vinyl Acetate	50.000	47.223	94.45	70-130
91 cis-1,2-Dichloroet	50.000	44.644	89.29	70-130
92 2-Butanone	50.000	47.128	94.26	70-130
99 Tetrahydrofuran	50.000	48.057	96.11	70-130
100 Chloroform	50.000	47.086	94.17	70-130
103 1,1,1-Trichloroeth	50.000	45.075	90.15	70-130
106 Carbon Tetrachlori	50.000	45.900	91.80	70-130
102 Cyclohexane	50.000	47.530	95.06	70-130
113 2,2,4-Trimethylpen	50.000	47.782	95.56	70-130
116 Benzene	50.000	46.623	93.25	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	49.084	98.17	70-130
121 Heptane	50.000	48.008	96.02	70-130
125 Trichloroethene	50.000	47.278	94.56	70-130
127 Methylcyclohexane	50.000	45.663	91.33	60-140
132 1,2-Dichloropropan	50.000	46.248	92.50	70-130
136 1,4-Dioxane	50.000	48.007	96.01	70-130
138 Bromodichlorometha	50.000	48.910	97.82	70-130
144 cis-1,3-Dichloropr	50.000	53.107	106.21	70-130
145 4-Methyl-2-pentano	50.000	46.112	92.22	70-130
147 Toluene	50.000	48.033	96.07	70-130
150 trans-1,3-Dichloro	50.000	47.300	94.60	70-130
155 1,1,2-Trichloroeth	50.000	43.990	87.98	70-130
156 Tetrachloroethene	50.000	44.935	89.87	70-130
158 2-Hexanone	50.000	44.760	89.52	70-130
160 Dibromochlorometha	50.000	46.540	93.08	70-130
161 1,2-Dibromoethane	50.000	45.855	91.71	70-130
165 Chlorobenzene	50.000	45.928	91.86	70-130
167 Ethyl Benzene	50.000	45.973	91.95	70-130
169 m,p-Xylene	50.000	46.378	92.76	70-130
171 o-Xylene	50.000	45.881	91.76	70-130
172 Styrene	50.000	43.488	86.98	70-130
174 Bromoform	50.000	47.890	95.78	70-130
175 Cumene	50.000	44.253	88.51	70-130
181 1,1,2,2-Tetrachlor	50.000	45.948	91.90	70-130
182 Propylbenzene	50.000	45.615	91.23	70-130
188 4-Ethyltoluene	50.000	47.038	94.08	70-130
190 1,3,5-Trimethylben	50.000	42.707	85.41	70-130
196 1,2,4-Trimethylben	50.000	44.459	88.92	70-130
208 1,3-Dichlorobenzen	50.000	46.165	92.33	70-130
209 1,4-Dichlorobenzen	50.000	45.977	91.95	70-130
212 alpha-Chlorotoluen	50.000	47.258	94.52	70-130
214 1,2-Dichlorobenzen	50.000	45.456	90.91	70-130
226 1,2,4-Trichloroben	50.000	46.641	93.28	70-130
227 Hexachlorobutadien	50.000	46.948	93.90	70-130
228 Naphthalene	5.000	4.115	82.30	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.194	96.78	70-130
$ 146 Toluene-d8	25.000	25.428	101.71	70-130
$ 177 4-Bromofluorobenze	25.000	25.267	101.07	70-130

Data File: /chem/msda.i/16jan17.b/a011613.d
Date : 16-JAN-2017 20:32
Client ID: ICV
Sample Info: 100mL 2819-114A
Column phase: RTX-624

Instrument: msda.i
Operator: gd
Column diameter: 0.25



Page 1

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/16jan17.b/a011603.d
Lab Smp Id: ICAL Level #2
Inj Date : 16-JAN-2017 14:09
Operator : gd Inst ID: msda.i
Smp Info : 20mL 2819-213
Misc Info : 0.5ppbv(5.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/16jan17.b/a17q0116a.m
Meth Date : 17-Jan-2017 10:09 L7EZ Quant Type: ISTD
Cal Date : 16-JAN-2017 14:09 Cal File: a011603.d
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12low.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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.514	5.514 (1.000)	130	219449	25.0000		80.00- 120.00	100.00
5.514	5.514 (1.000)	128	177567			50.57- 110.57	80.91
5.514	5.514 (1.000)	49	337842			118.90- 178.90	153.95
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.402	6.402 (1.000)	114	985942	25.0000		80.00- 120.00	100.00
6.402	6.402 (1.000)	88	146463			0.00- 45.14	14.86
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	839725	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	425841			21.31- 81.31	50.71
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.051	6.051 (1.097)	65	293706	25.0000	25.349	80.00- 120.00	100.00
6.051	6.051 (1.097)	67	155421			29.46- 89.46	52.92
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.620	7.620 (1.190)	98	1024245	25.0000	24.854	80.00- 120.00	100.00
7.620	7.620 (1.190)	70	103058			0.00- 39.82	10.06

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

$ 146 Toluene-d8 (continued)
  7.620   7.620 (1.190)   100    659314                    36.19-  96.19    64.37
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
  9.847   9.847 (1.112)   174    502624 25.0000   24.770  80.00- 120.00   100.00
  9.847   9.847 (1.112)    95    622386                   92.19- 152.19   123.83
  9.847   9.847 (1.112)   176    506975                   71.02- 131.02   100.87
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.545   1.545 (0.280)    85      9449 0.50000   0.4745  80.00- 120.00   100.00(a)
  1.545   1.545 (0.280)    87      3710                     2.19-  62.19    39.26
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.667   1.667 (0.302)   135      8938 0.50000   0.5316  80.00- 120.00   100.00
  1.667   1.667 (0.302)   137      2551                     1.62-  61.62    28.54
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.868   1.868 (0.339)    62      4737 0.50000   0.5139  80.00- 120.00   100.00
  1.868   1.868 (0.339)    64      2532                     0.00-  59.01    53.45
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.896   1.896 (0.344)    54      4278 0.50000   0.5269  80.00- 120.00   100.00
  1.896   1.896 (0.344)    39      5806                    63.95- 123.95   135.72
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.255   2.255 (0.409)    94      5233 0.50000   0.6906  80.00- 120.00   100.00(a)
  2.255   2.255 (0.409)    96      3117                    64.81- 124.81    59.56
-------------------------------------------------------------------------------
   35 Freon 11                                      CAS #: 75-69-4
  2.634   2.634 (0.478)   101     10612 0.50000   0.4921  80.00- 120.00   100.00(a)
  2.627   2.627 (0.476)   103      6840                    34.98-  94.98    64.46
-------------------------------------------------------------------------------
   49 Freon 113                                     CAS #: 76-13-1
  3.279   3.279 (0.595)   151      8417 0.50000   0.5094  80.00- 120.00   100.00
  3.286   3.286 (0.596)   153      6489                    34.55-  94.55    77.09
  3.286   3.286 (0.596)   101      9863                    83.34- 143.34   117.18
-------------------------------------------------------------------------------
   50 1,1-Dichloroethene                            CAS #: 75-35-4
  3.322   3.322 (0.602)    98      2387 0.50000   0.4245  80.00- 120.00   100.00(a)
  3.315   3.315 (0.601)    96      4851                   120.22- 180.22   203.23
  3.315   3.315 (0.601)    61      7337                   243.84- 303.84   307.37
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                       CAS #: 1634-04-4
  4.196   4.196 (0.761)    73     13241 0.50000   0.5375  80.00- 120.00   100.00
  4.189   4.189 (0.760)    57      4483                     0.00-  59.21    33.86
  4.189   4.189 (0.760)    41      4536                     0.00-  55.49    34.26
-------------------------------------------------------------------------------
```

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

   73 trans-1,2-Dichloroethene                        CAS #: 156-60-5
  4.217   4.217 (0.765)    98      2630 0.50000   0.4733  80.00- 120.00   100.00(a)
  4.217   4.217 (0.765)    61      6220                  224.99- 284.99   236.50
  4.210   4.210 (0.764)    96      4522                  119.77- 179.77   171.94
-------------------------------------------------------------------------------
   78 Hexane                                          CAS #: 110-54-3
  4.425   4.425 (0.803)    57      8582 0.50000   0.4715  80.00- 120.00   100.00(a)
  4.425   4.425 (0.803)    43      7396                   31.75-  91.75    86.18
  4.439   4.439 (0.805)    86      1381                    0.00-  42.75    16.09
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                              CAS #: 75-34-3
  4.712   4.712 (0.854)    63     10281 0.50000   0.5598  80.00- 120.00   100.00
  4.704   4.704 (0.853)    65      2810                    1.80-  61.80    27.33
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                          CAS #: 156-59-2
  5.285   5.285 (0.958)    98      3271 0.50000   0.4581  80.00- 120.00   100.00(a)
  5.285   5.285 (0.958)    96      6410                  123.57- 183.57   195.96
  5.285   5.285 (0.958)    61      7333                  194.30- 254.30   224.18
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                                 CAS #: 109-99-9
  5.514   5.514 (1.000)    42      6538 0.50000   0.4934  80.00- 120.00   100.00(a)
  5.514   5.514 (1.000)    71      3917                    1.67-  61.67    59.91
  5.514   5.514 (1.000)    72      1706                    1.66-  61.66    26.09
-------------------------------------------------------------------------------
  100 Chloroform                                      CAS #: 67-66-3
  5.578   5.578 (1.012)    83      9372 0.50000   0.4788  80.00- 120.00   100.00(a)
  5.578   5.578 (1.012)    85      5997                   35.62-  95.62    63.99
-------------------------------------------------------------------------------
  102 Cyclohexane                                     CAS #: 110-82-7
  5.686   5.686 (1.031)    84      6315 0.50000   0.4760  80.00- 120.00   100.00(a)
  5.679   5.679 (1.030)    56     12630                  127.28- 187.28   200.00
  5.679   5.679 (1.030)    41      6955                   46.63- 106.63   110.13
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                           CAS #: 71-55-6
  5.700   5.700 (1.034)    97     12852 0.50000   0.5967  80.00- 120.00   100.00
  5.700   5.700 (1.034)    99      7707                   33.98-  93.98    59.97
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                            CAS #: 56-23-5
  5.815   5.815 (1.055)   119     12152 0.50000   0.5422  80.00- 120.00   100.00
  5.815   5.815 (1.055)   117     10809                   70.95- 130.95    88.95
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                          CAS #: 540-84-1
  6.008   6.008 (1.090)    57     31680 0.50000   0.4934  80.00- 120.00   100.00(a)
  6.008   6.008 (1.090)    56     10320                    0.93-  60.93    32.58
  6.008   6.008 (1.090)    41      6926                    0.00-  52.07    21.86
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
116 Benzene					CAS #: 71-43-2		
6.030	6.030 (0.942)	78	17494	0.50000	0.5566	80.00- 120.00	100.00
6.037	6.037 (0.943)	77	3726			0.00- 52.91	21.30
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.123	6.123 (0.956)	62	6016	0.50000	0.4403	80.00- 120.00	100.00(a)
6.123	6.123 (0.956)	64	3140			2.36- 62.36	52.19
121 Heptane					CAS #: 142-82-5		
6.180	6.180 (0.965)	71	6372	0.50000	0.5681	80.00- 120.00	100.00
6.173	6.173 (0.964)	43	12525			192.75- 252.75	196.56
6.180	6.180 (0.965)	57	6643			92.77- 152.77	104.25
125 Trichloroethene					CAS #: 79-01-6		
6.595	6.595 (1.030)	95	8544	0.50000	0.5617	80.00- 120.00	100.00
6.595	6.595 (1.030)	130	8309			78.45- 138.45	97.25
6.595	6.595 (1.030)	97	5389			35.78- 95.78	63.07
127 Methylcyclohexane					CAS #: 108-87-2		
6.696	6.696 (1.214)	83	11862	0.50000	0.5758	80.00- 120.00	100.00(a)
6.696	6.696 (1.214)	98	5393			16.08- 76.08	45.46
6.696	6.696 (1.214)	55	13168			69.75- 129.75	111.01
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.839	6.839 (1.068)	63	8378	0.50000	0.5795	80.00- 120.00	100.00
6.832	6.832 (1.067)	62	4486			40.72- 100.72	53.54
6.832	6.832 (1.067)	41	5212			20.11- 80.11	62.21
138 Bromodichloromethane					CAS #: 75-27-4		
7.061	7.061 (1.103)	83	11900	0.50000	0.5117	80.00- 120.00	100.00
7.061	7.061 (1.103)	85	8921			34.91- 94.91	74.97
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.441	7.441 (1.162)	75	7975	0.50000	0.4243	80.00- 120.00	100.00(a)
7.441	7.441 (1.162)	77	3249			3.24- 63.24	40.74
7.441	7.441 (1.162)	39	6704			23.84- 83.84	84.06
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.179)	58	7802	0.50000	0.5688	80.00- 120.00	100.00
7.548	7.548 (1.179)	43	18609			220.90- 280.90	238.52
7.548	7.548 (1.179)	85	3643			5.60- 65.60	46.69
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.199)	91	21717	0.50000	0.5070	80.00- 120.00	100.00
7.677	7.677 (1.199)	92	11993			28.71- 88.71	55.22

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

  150 trans-1,3-Dichloropropene                     CAS #: 10061-02-6
  7.921   7.921 (0.894)    75      8130 0.50000   0.4544  80.00- 120.00   100.00(a)
  7.921   7.921 (0.894)    77      5351                    2.84-  62.84    65.82
  7.921   7.921 (0.894)    39      4219                   22.14-  82.14    51.89
-------------------------------------------------------------------------------
  155 1,1,2-Trichloroethane                         CAS #: 79-00-5
  8.078   8.078 (0.912)    97      8796 0.50000   0.5651  80.00- 120.00   100.00
  8.071   8.071 (0.911)    99      5773                   33.31-  93.31    65.63
  8.078   8.078 (0.912)    83      6659                   55.94- 115.94    75.70
-------------------------------------------------------------------------------
  156 Tetrachloroethene                             CAS #: 127-18-4
  8.114   8.114 (0.916)   166     11225 0.50000   0.5192  80.00- 120.00   100.00
  8.107   8.107 (0.915)   129      8940                   46.29- 106.29    79.64
  8.114   8.114 (0.916)   131      8979                   44.37- 104.37    79.99
-------------------------------------------------------------------------------
  160 Dibromochloromethane                          CAS #: 124-48-1
  8.386   8.386 (0.947)   129     14960 0.50000   0.5131  80.00- 120.00   100.00
  8.386   8.386 (0.947)   127     11734                   46.82- 106.82    78.44
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                       CAS #: 106-93-4
  8.501   8.501 (0.960)   107     12707 0.50000   0.5155  80.00- 120.00   100.00
  8.508   8.508 (0.960)   109     10776                   64.56- 124.56    84.80
-------------------------------------------------------------------------------
  165 Chlorobenzene                                 CAS #: 108-90-7
  8.880   8.880 (1.002)   112     18750 0.50000   0.5034  80.00- 120.00   100.00
  8.880   8.880 (1.002)   114      5459                    2.04-  62.04    29.11
  8.873   8.873 (1.002)    77     17288                   25.23-  85.23    92.20
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                 CAS #: 100-41-4
  8.931   8.931 (1.008)   106      9823 0.50000   0.5245  80.00- 120.00   100.00
  8.931   8.931 (1.008)    91     28949                  278.30- 338.30   294.71
-------------------------------------------------------------------------------
  169 m,p-Xylene                                    CAS #: 108-38-3
  9.031   9.031 (1.019)   106     10339 0.50000   0.4494  80.00- 120.00   100.00(a)
  9.031   9.031 (1.019)    91     23410                  162.42- 222.42   226.42
-------------------------------------------------------------------------------
  171 o-Xylene                                      CAS #: 95-47-6
  9.368   9.368 (1.057)   106     11055 0.50000   0.4940  80.00- 120.00   100.00(a)
  9.368   9.368 (1.057)    91     24217                  175.73- 235.73   219.06
-------------------------------------------------------------------------------
  172 Styrene                                       CAS #: 100-42-5
  9.389   9.389 (1.060)   104     18562 0.50000   0.5086  80.00- 120.00   100.00
  9.389   9.389 (1.060)    78     10133                   16.95-  76.95    54.59
-------------------------------------------------------------------------------
  174 Bromoform                                     CAS #: 75-25-2
  9.590   9.590 (1.082)   173     13202 0.50000   0.4636  80.00- 120.00   100.00(a)
```

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

  174 Bromoform (continued)
  9.590   9.590 (1.082)   171      6498                    21.43-  81.43    49.22
-------------------------------------------------------------------------------
  175 Cumene                                        CAS #: 98-82-8
  9.661   9.661 (1.091)   105     38746 0.50000   0.5553  80.00- 120.00   100.00
  9.661   9.661 (1.091)   120     10184                    0.00-  57.61    26.28
  9.661   9.661 (1.091)    51      4301                    0.00-  40.74    11.10
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
  9.976   9.976 (1.126)    83     16833 0.50000   0.4860  80.00- 120.00   100.00(a)
  9.976   9.976 (1.126)    85     11933                   34.51-  94.51    70.89
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
 10.012  10.012 (1.130)    91     40526 0.50000   0.5102  80.00- 120.00   100.00
 10.012  10.012 (1.130)   120     10858                    0.00-  54.88    26.79
 10.005  10.005 (1.129)   105      1968                    0.00-  33.79     4.86
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 10.105  10.105 (1.141)   120     11017 0.50000   0.5020  80.00- 120.00   100.00
 10.105  10.105 (1.141)   105     40159                  289.38- 349.38   364.52
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 10.155  10.155 (1.146)   120     16263 0.50000   0.5334  80.00- 120.00   100.00
 10.155  10.155 (1.146)   105     29078                  171.33- 231.33   178.80
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 10.485  10.485 (1.184)   120     14203 0.50000   0.5114  80.00- 120.00   100.00
 10.485  10.485 (1.184)   105     32530                  182.43- 242.43   229.04
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 10.771  10.771 (1.216)   146     20231 0.50000   0.4816  80.00- 120.00   100.00(a)
 10.771  10.771 (1.216)   148     16032                   33.68-  93.68    79.24
 10.771  10.771 (1.216)   111     10171                   10.08-  70.08    50.27
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 10.850  10.850 (1.225)   146     23149 0.50000   0.5338  80.00- 120.00   100.00
 10.850  10.850 (1.225)   148     13181                   33.78-  93.78    56.94
 10.850  10.850 (1.225)   111      9665                    8.79-  68.79    41.75
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 10.972  10.972 (1.239)    91     27123 0.50000   0.5011  80.00- 120.00   100.00
 10.972  10.972 (1.239)   126      6447                    0.00-  53.35    23.77
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 11.180  11.180 (1.262)   146     20226 0.50000   0.4936  80.00- 120.00   100.00(a)
 11.180  11.180 (1.262)   148     14290                   32.96-  92.96    70.65
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.187	11.187 (1.263)	111	9082			10.66- 70.66	44.90

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: msda.i
Lab File ID: a011603.d
Lab Smp Id: ICAL Level #2
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msda.i/16jan17.b/a17q0116a.m
Misc Info: 0.5ppbv(5.0ppbv)

Calibration Date: 16-JAN-2017
Calibration Time: 17:59

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	238300	142980	333620	219449	-7.91
123 1,4-Difluorobenze	1061216	636730	1485702	985942	-7.09
163 Chlorobenzene-d5	912832	547699	1277965	839725	-8.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.51	-0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.40	-0.12
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	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/msda.i/16jan17.b/a011603.d

Date : 16-JAN-2017 14:09

Client ID:

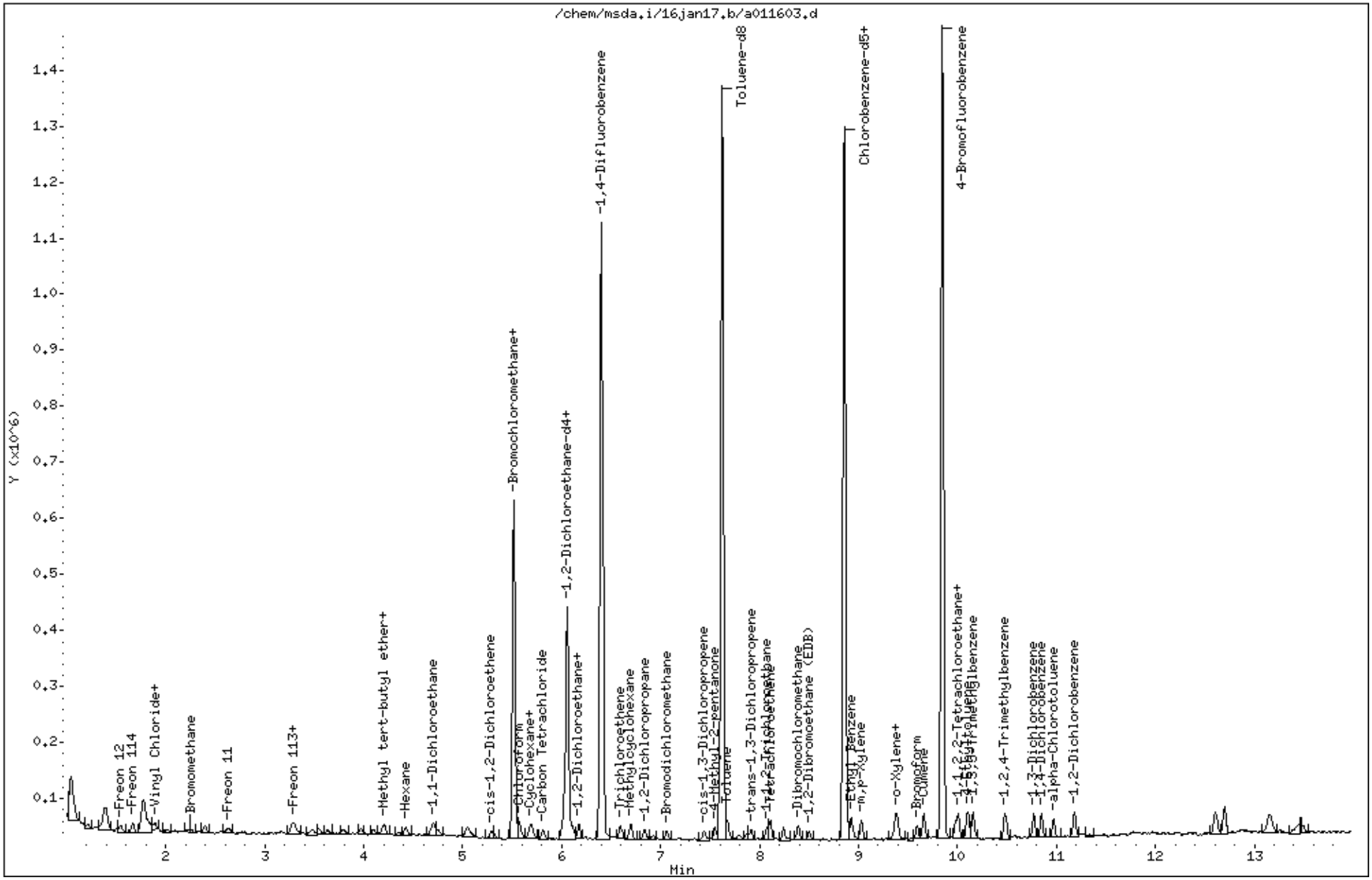
Sample Info: 20mL 2819-213

Column phase: RTX-624

Instrument: msda.i

Operator: gd

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/16jan17.b/a011604.d
Lab Smp Id: ICAL Level #3
Inj Date : 16-JAN-2017 16:39
Operator : gd Inst ID: msda.i
Smp Info : 80mL 2819-213
Misc Info : 2.0ppbv(5.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/16jan17.b/a17q0116a.m
Meth Date : 17-Jan-2017 10:09 L7EZ Quant Type: ISTD
Cal Date : 16-JAN-2017 16:39 Cal File: a011604.d
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12mdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.514	5.514 (1.000)	130	208597	25.0000		80.00- 120.00	100.00
5.514	5.514 (1.000)	128	160109			50.57- 110.57	76.76
5.514	5.514 (1.000)	49	309247			118.90- 178.90	148.25
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.402	6.402 (1.000)	114	944867	25.0000		80.00- 120.00	100.00
6.402	6.402 (1.000)	88	141465			0.00- 45.14	14.97
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.852	8.852 (1.000)	117	767675	25.0000		80.00- 120.00	100.00
8.852	8.852 (1.000)	82	391668			21.31- 81.31	51.02
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.051	6.051 (1.097)	65	272815	25.0000	24.771	80.00- 120.00	100.00
6.051	6.051 (1.097)	67	139369			29.46- 89.46	51.09
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.620	7.620 (1.190)	98	968012	25.0000	24.511	80.00- 120.00	100.00
7.620	7.620 (1.190)	70	96501			0.00- 39.82	9.97

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8 (continued)							
7.620	7.620 (1.190)	100	636359			36.19- 96.19	65.74
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.847	9.847 (1.112)	174	466771	25.0000	25.162	80.00- 120.00	100.00
9.847	9.847 (1.112)	95	568843			92.19- 152.19	121.87
9.847	9.847 (1.112)	176	463408			71.02- 131.02	99.28
9 Propylene					CAS #: 115-07-1		
1.517	1.517 (0.275)	41	20900	2.00000	2.631	80.00- 120.00	100.00
1.517	1.517 (0.275)	42	14046			37.76- 97.76	67.21
1.517	1.517 (0.275)	39	12189			38.24- 98.24	58.32
11 Freon 12					CAS #: 75-71-8		
1.546	1.546 (0.280)	85	38332	2.00000	2.025	80.00- 120.00	100.00
1.553	1.553 (0.282)	87	13512			2.19- 62.19	35.25
15 Freon 114					CAS #: 76-14-2		
1.674	1.674 (0.304)	135	32789	2.00000	2.051	80.00- 120.00	100.00
1.667	1.667 (0.302)	137	10347			1.62- 61.62	31.56
17 Chloromethane					CAS #: 74-87-3		
1.753	1.753 (0.318)	50	17225	2.00000	2.334	80.00- 120.00	100.00(a)
1.753	1.753 (0.318)	52	6225			4.04- 64.04	36.14
23 Butane					CAS #: 106-97-8		
1.839	1.839 (0.334)	58	6035	2.00000	3.013	80.00- 120.00	100.00
1.839	1.839 (0.334)	43	33839			761.67- 821.67	560.71
25 Vinyl Chloride					CAS #: 75-01-4		
1.875	1.875 (0.340)	62	18962	2.00000	2.164	80.00- 120.00	100.00
1.875	1.875 (0.340)	64	6334			0.00- 59.01	33.40
26 1,3-Butadiene					CAS #: 106-99-0		
1.904	1.904 (0.345)	54	16947	2.00000	2.196	80.00- 120.00	100.00
1.897	1.897 (0.344)	39	16158			63.95- 123.95	95.34
29 Bromomethane					CAS #: 74-83-9		
2.255	2.255 (0.409)	94	15838	2.00000	2.199	80.00- 120.00	100.00(a)
2.262	2.262 (0.410)	96	13188			64.81- 124.81	83.27
30 Chloroethane					CAS #: 75-00-3		
2.376	2.376 (0.431)	64	9092	2.00000	2.121	80.00- 120.00	100.00
2.369	2.369 (0.430)	66	4041			1.96- 61.96	44.45
2.384	2.384 (0.432)	49	2669			1.70- 61.70	29.36

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.436)	43	22343	2.00000	2.002	80.00- 120.00	100.00
2.405	2.405 (0.436)	57	18617			40.19- 100.19	83.32
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.478)	101	42775	2.00000	2.087	80.00- 120.00	100.00
2.634	2.634 (0.478)	103	28738			34.98- 94.98	67.18
42 Ethanol					CAS #: 64-17-5		
2.971	2.971 (0.539)	45	9153	2.00000	2.207	80.00- 120.00	100.00
2.978	2.978 (0.540)	46	3690			9.25- 69.25	40.31
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.596)	151	32119	2.00000	2.045	80.00- 120.00	100.00
3.286	3.286 (0.596)	153	21657			34.55- 94.55	67.43
3.279	3.279 (0.595)	101	37002			83.34- 143.34	115.20
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.315	3.315 (0.601)	98	12917	2.00000	2.416	80.00- 120.00	100.00
3.315	3.315 (0.601)	96	17740			120.22- 180.22	137.34
3.315	3.315 (0.601)	61	30233			243.84- 303.84	234.06
52 Acetone					CAS #: 67-64-1		
3.472	3.472 (0.630)	58	9682	2.00000	2.045	80.00- 120.00	100.00(a)
3.472	3.472 (0.630)	43	32697			267.70- 327.70	337.71
56 Carbon Disulfide					CAS #: 75-15-0		
3.544	3.544 (0.643)	76	50562	2.00000	2.216	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.637	3.637 (0.660)	45	36741	2.00000	2.105	80.00- 120.00	100.00
3.637	3.637 (0.660)	43	6734			0.00- 46.48	18.33
3.644	3.644 (0.661)	59	2016			0.00- 33.95	5.49
58 3-Chloropropene					CAS #: 107-05-1		
3.795	3.795 (0.688)	76	8414	2.00000	2.202	80.00- 120.00	100.00
3.795	3.795 (0.688)	41	27495			307.27- 367.27	326.78
66 Methylene Chloride					CAS #: 75-09-2		
3.974	3.974 (0.721)	49	25242	2.00000	2.125	80.00- 120.00	100.00(a)
3.974	3.974 (0.721)	84	16958			32.37- 92.37	67.18
3.974	3.974 (0.721)	51	7745			0.49- 60.49	30.68
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.096	4.096 (0.743)	59	45718	2.00000	2.179	80.00- 120.00	100.00
4.088	4.088 (0.741)	41	9306			0.00- 49.68	20.36

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

   71 tert-Butyl alcohol (continued)
  4.096   4.096 (0.743)    57      6315                     0.00-  40.06    13.81
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                      CAS #: 1634-04-4
  4.189   4.189 (0.760)    73     48261 2.00000    2.061  80.00- 120.00   100.00
  4.196   4.196 (0.761)    57     14742                     0.00-  59.21    30.55
  4.189   4.189 (0.760)    41     14684                     0.00-  55.49    30.43
-------------------------------------------------------------------------------
   73 trans-1,2-Dichloroethene                     CAS #: 156-60-5
  4.217   4.217 (0.765)    98     12247 2.00000    2.319  80.00- 120.00   100.00
  4.217   4.217 (0.765)    61     29596                   224.99- 284.99   241.66
  4.217   4.217 (0.765)    96     19385                   119.77- 179.77   158.28
-------------------------------------------------------------------------------
   78 Hexane                                       CAS #: 110-54-3
  4.425   4.425 (0.803)    57     37503 2.00000    2.168  80.00- 120.00   100.00
  4.425   4.425 (0.803)    43     26386                    31.75-  91.75    70.36
  4.432   4.432 (0.804)    86      5579                     0.00-  42.75    14.88
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                           CAS #: 75-34-3
  4.704   4.704 (0.853)    63     35880 2.00000    2.055  80.00- 120.00   100.00
  4.704   4.704 (0.853)    65     12198                     1.80-  61.80    34.00
-------------------------------------------------------------------------------
   83 Isopropyl ether                              CAS #: 108-20-3
  4.697   4.697 (0.852)    45     81932 2.00000    2.134  80.00- 120.00   100.00
  4.697   4.697 (0.852)    87     17803                     0.00-  51.16    21.73
  4.697   4.697 (0.852)    59      8516                     0.00-  40.60    10.39
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                CAS #: 108-05-4
  4.755   4.755 (0.862)    86      5366 2.00000    2.259  80.00- 120.00   100.00
  4.747   4.747 (0.861)    43     65005                  1309.99-1369.99  1211.42
-------------------------------------------------------------------------------
   88 Ethyl-tert-butyl ether                       CAS #: 637-92-3
  5.048   5.048 (0.916)    59     72563 2.00000    2.102  80.00- 120.00   100.00
  5.048   5.048 (0.916)    87     26372                     4.12-  64.12    36.34
  5.048   5.048 (0.916)    41     15196                     0.00-  46.98    20.94
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                       CAS #: 156-59-2
  5.285   5.285 (0.958)    98     15130 2.00000    2.229  80.00- 120.00   100.00
  5.285   5.285 (0.958)    96     23759                   123.57- 183.57   157.03
  5.285   5.285 (0.958)    61     33786                   194.30- 254.30   223.30
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
  5.313   5.313 (0.964)    72      9588 2.00000    2.170  80.00- 120.00   100.00
  5.313   5.313 (0.964)    43     48853                   492.83- 552.83   509.52
  5.313   5.313 (0.964)    57      3858                    11.22-  71.22    40.24
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Tetrahydrofuran					CAS #: 109-99-9		
5.514	5.514 (1.000)	42	25544	2.00000	2.028	80.00- 120.00	100.00
5.507	5.507 (0.999)	71	9835			1.67- 61.67	38.50
5.514	5.514 (1.000)	72	8892			1.66- 61.66	34.81
100 Chloroform					CAS #: 67-66-3		
5.578	5.578 (1.012)	83	40394	2.00000	2.171	80.00- 120.00	100.00
5.578	5.578 (1.012)	85	26529			35.62- 95.62	65.68
102 Cyclohexane					CAS #: 110-82-7		
5.679	5.679 (1.030)	84	28500	2.00000	2.260	80.00- 120.00	100.00
5.679	5.679 (1.030)	56	41593			127.28- 187.28	145.94
5.679	5.679 (1.030)	41	23718			46.63- 106.63	83.22
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.700	5.700 (1.034)	97	40804	2.00000	1.993	80.00- 120.00	100.00
5.700	5.700 (1.034)	99	27533			33.98- 93.98	67.48
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.815	5.815 (1.055)	119	43709	2.00000	2.052	80.00- 120.00	100.00
5.815	5.815 (1.055)	117	44386			70.95- 130.95	101.55
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.091)	57	127418	2.00000	2.088	80.00- 120.00	100.00
6.015	6.015 (1.091)	56	38636			0.93- 60.93	30.32
6.015	6.015 (1.091)	41	28999			0.00- 52.07	22.76
116 Benzene					CAS #: 71-43-2		
6.030	6.030 (0.942)	78	65361	2.00000	2.170	80.00- 120.00	100.00
6.030	6.030 (0.942)	77	13163			0.00- 52.91	20.14
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.101	6.101 (1.107)	87	14242	2.00000	2.084	80.00- 120.00	100.00
6.101	6.101 (1.107)	73	54586			372.87- 432.87	383.27
6.094	6.094 (1.105)	55	21155			97.70- 157.70	148.54
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.123	6.123 (0.956)	62	27655	2.00000	2.112	80.00- 120.00	100.00
6.123	6.123 (0.956)	64	8900			2.36- 62.36	32.18
121 Heptane					CAS #: 142-82-5		
6.180	6.180 (0.965)	71	21668	2.00000	2.016	80.00- 120.00	100.00
6.180	6.180 (0.965)	43	46628			192.75- 252.75	215.19
6.180	6.180 (0.965)	57	29101			92.77- 152.77	134.30
125 Trichloroethene					CAS #: 79-01-6		
6.595	6.595 (1.030)	95	30971	2.00000	2.125	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.595	6.595 (1.030)	130	32793			78.45- 138.45	105.88
6.595	6.595 (1.030)	97	21150			35.78- 95.78	68.29
127 Methylcyclohexane					CAS #: 108-87-2		
6.696	6.696 (1.214)	83	42887	2.00000	2.190	80.00- 120.00	100.00
6.696	6.696 (1.214)	98	17880			16.08- 76.08	41.69
6.696	6.696 (1.214)	55	43188			69.75- 129.75	100.70
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.832	6.832 (1.067)	63	28750	2.00000	2.075	80.00- 120.00	100.00
6.832	6.832 (1.067)	62	19890			40.72- 100.72	69.18
6.839	6.839 (1.068)	41	13934			20.11- 80.11	48.47
136 1,4-Dioxane					CAS #: 123-91-1		
6.925	6.925 (1.082)	88	15462	2.00000	2.017	80.00- 120.00	100.00
6.925	6.925 (1.082)	58	16407			57.35- 117.35	106.11
6.925	6.925 (1.082)	57	6094			0.00- 56.09	39.41
138 Bromodichloromethane					CAS #: 75-27-4		
7.061	7.061 (1.103)	83	45064	2.00000	2.022	80.00- 120.00	100.00
7.061	7.061 (1.103)	85	30431			34.91- 94.91	67.53
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.441	7.441 (1.162)	75	37342	2.00000	2.073	80.00- 120.00	100.00
7.441	7.441 (1.162)	77	12714			3.24- 63.24	34.05
7.434	7.434 (1.161)	39	21244			23.84- 83.84	56.89
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.179)	58	26453	2.00000	2.012	80.00- 120.00	100.00
7.548	7.548 (1.179)	43	69705			220.90- 280.90	263.51
7.548	7.548 (1.179)	85	10508			5.60- 65.60	39.72
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.199)	91	85527	2.00000	2.084	80.00- 120.00	100.00
7.677	7.677 (1.199)	92	50962			28.71- 88.71	59.59
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.895)	75	37082	2.00000	2.267	80.00- 120.00	100.00
7.921	7.921 (0.895)	77	14137			2.84- 62.84	38.12
7.913	7.913 (0.894)	39	20373			22.14- 82.14	54.94
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.071	8.071 (0.912)	97	33391	2.00000	2.347	80.00- 120.00	100.00
8.071	8.071 (0.912)	99	19389			33.31- 93.31	58.07
8.071	8.071 (0.912)	83	25578			55.94- 115.94	76.60

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

  156 Tetrachloroethene                            CAS #: 127-18-4
  8.114   8.114 (0.917)   166     43890 2.00000    2.221  80.00- 120.00   100.00
  8.114   8.114 (0.917)   129     32889                   46.29- 106.29    74.94
  8.114   8.114 (0.917)   131     30738                   44.37- 104.37    70.03
-------------------------------------------------------------------------------
  158 2-Hexanone                                   CAS #: 591-78-6
  8.243   8.243 (0.931)    58     35118 2.00000    2.091  80.00- 120.00   100.00
  8.243   8.243 (0.931)    43     62829                  152.24- 212.24   178.91
  8.243   8.243 (0.931)   100      6038                    0.00-  47.15    17.19
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
  8.386   8.386 (0.947)   129     58408 2.00000    2.191  80.00- 120.00   100.00(a)
  8.386   8.386 (0.947)   127     43163                   46.82- 106.82    73.90
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
  8.501   8.501 (0.960)   107     49746 2.00000    2.208  80.00- 120.00   100.00
  8.501   8.501 (0.960)   109     43129                   64.56- 124.56    86.70
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
  8.880   8.880 (1.003)   112     75655 2.00000    2.222  80.00- 120.00   100.00
  8.880   8.880 (1.003)   114     22561                    2.04-  62.04    29.82
  8.880   8.880 (1.003)    77     47364                   25.23-  85.23    62.61
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.931   8.931 (1.009)   106     33901 2.00000    1.980  80.00- 120.00   100.00
  8.931   8.931 (1.009)    91    115841                  278.30- 338.30   341.70
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  9.024   9.024 (1.019)   106     46559 2.00000    2.214  80.00- 120.00   100.00
  9.024   9.024 (1.019)    91     92657                  162.42- 222.42   199.01
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.368   9.368 (1.058)   106     43535 2.00000    2.128  80.00- 120.00   100.00
  9.368   9.368 (1.058)    91     91538                  175.73- 235.73   210.26
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.389   9.389 (1.061)   104     70895 2.00000    2.125  80.00- 120.00   100.00
  9.389   9.389 (1.061)    78     35123                   16.95-  76.95    49.54
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.590   9.590 (1.083)   173     56605 2.00000    2.174  80.00- 120.00   100.00
  9.590   9.590 (1.083)   171     29933                   21.43-  81.43    52.88
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
  9.661   9.661 (1.091)   105    137352 2.00000    2.153  80.00- 120.00   100.00
  9.661   9.661 (1.091)   120     39362                    0.00-  57.61    28.66
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
175 Cumene (continued)							
9.661	9.661 (1.091)	51	16955			0.00- 40.74	12.34
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.127)	83	68145	2.00000	2.152	80.00- 120.00	100.00
9.976	9.976 (1.127)	85	44049			34.51- 94.51	64.64
182 Propylbenzene					CAS #: 103-65-1		
10.012	10.012 (1.131)	91	160496	2.00000	2.210	80.00- 120.00	100.00
10.012	10.012 (1.131)	120	40258			0.00- 54.88	25.08
10.012	10.012 (1.131)	105	5573			0.00- 33.79	3.47
188 4-Ethyltoluene					CAS #: 622-96-8		
10.105	10.105 (1.142)	120	42540	2.00000	2.120	80.00- 120.00	100.00
10.105	10.105 (1.142)	105	151644			289.38- 349.38	356.47
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.155	10.155 (1.147)	120	63287	2.00000	2.270	80.00- 120.00	100.00
10.155	10.155 (1.147)	105	122861			171.33- 231.33	194.13
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.485	10.485 (1.185)	120	56999	2.00000	2.245	80.00- 120.00	100.00
10.485	10.485 (1.185)	105	119922			182.43- 242.43	210.39
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.772	10.772 (1.217)	146	85397	2.00000	2.224	80.00- 120.00	100.00
10.772	10.772 (1.217)	148	56898			33.68- 93.68	66.63
10.772	10.772 (1.217)	111	37649			10.08- 70.08	44.09
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.226)	146	87791	2.00000	2.214	80.00- 120.00	100.00
10.850	10.850 (1.226)	148	56166			33.78- 93.78	63.98
10.850	10.850 (1.226)	111	34852			8.79- 68.79	39.70
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.972	10.972 (1.240)	91	102911	2.00000	2.080	80.00- 120.00	100.00
10.972	10.972 (1.240)	126	21598			0.00- 53.35	20.99
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.187	11.187 (1.264)	146	87853	2.00000	2.345	80.00- 120.00	100.00
11.187	11.187 (1.264)	148	49909			32.96- 92.96	56.81
11.180	11.180 (1.263)	111	38214			10.66- 70.66	43.50
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.612	12.612 (1.425)	180	80332	2.00000	2.230	80.00- 120.00	100.00
12.612	12.612 (1.425)	182	74387			64.75- 124.75	92.60

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
227 Hexachlorobutadiene						CAS #: 87-68-3		
12.698	12.698	(1.435)	225	58062	2.00000	2.173	80.00- 120.00	100.00
12.698	12.698	(1.435)	223	37663			32.54- 92.54	64.87
228 Naphthalene						CAS #: 91-20-3		
12.885	12.885	(1.456)	128	22282	0.20000	0.2456	80.00- 120.00	100.00(a)
12.885	12.885	(1.456)	127	4037			0.00- 42.17	18.12

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: msda.i
Lab File ID: a011604.d
Lab Smp Id: ICAL Level #3
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msda.i/16jan17.b/a17q0116a.m
Misc Info: 2.0ppbv(5.0ppbv)

Calibration Date: 16-JAN-2017
Calibration Time: 17:59

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	238300	142980	333620	208597	-12.46
123 1,4-Difluorobenze	1061216	636730	1485702	944867	-10.96
163 Chlorobenzene-d5	912832	547699	1277965	767675	-15.90

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.51	-0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.40	-0.11
163 Chlorobenzene-d5	8.86	8.53	9.19	8.85	-0.08

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/msda.i/16jan17.b/a011604.d

Date : 16-JAN-2017 16:39

Client ID:

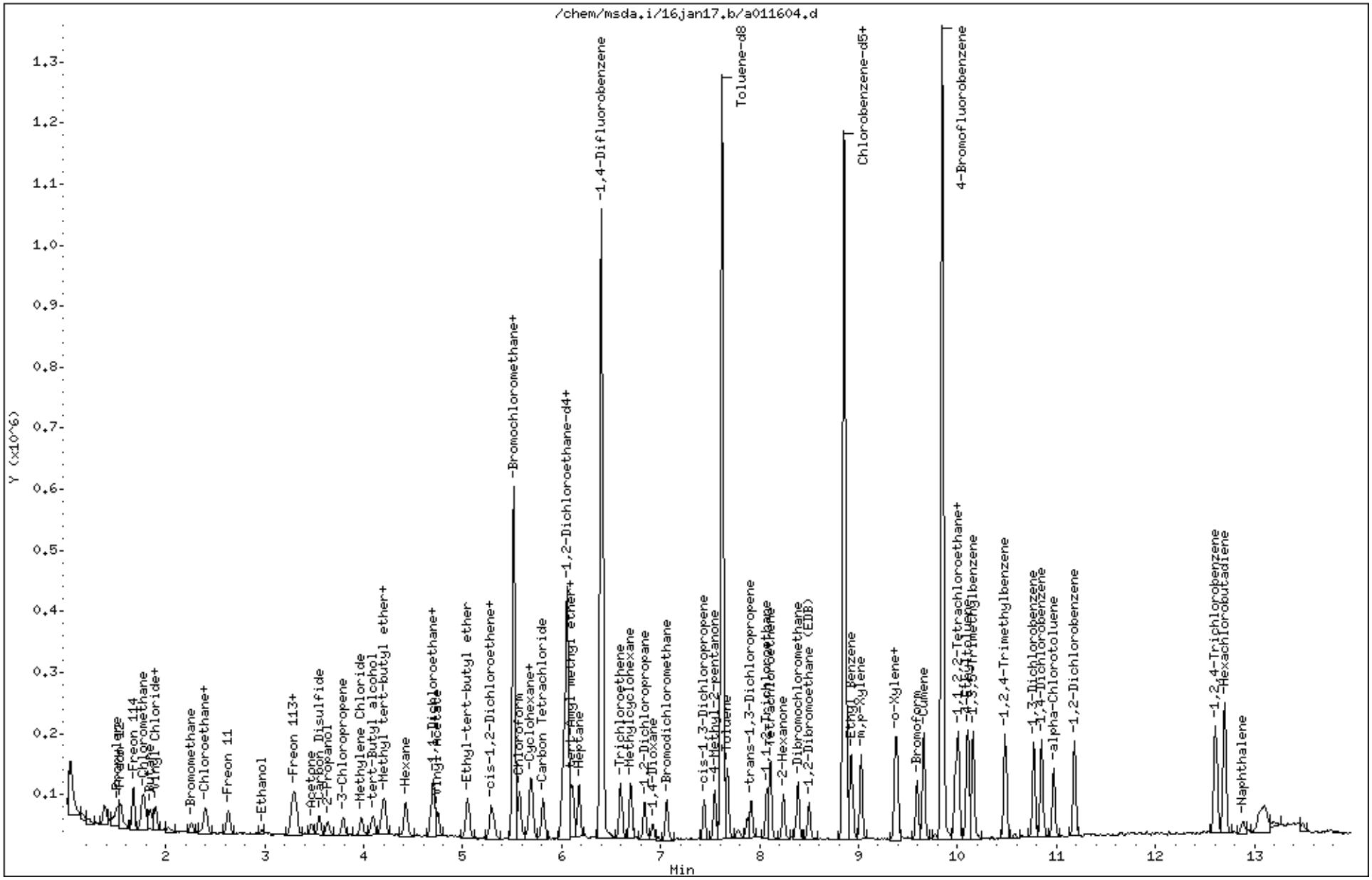
Sample Info: 80mL 2819-213

Column phase: RTX-624

Instrument: msda.i

Operator: gd

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/16jan17.b/a011605.d
Lab Smp Id: ICAL Level #4
Inj Date : 16-JAN-2017 17:10
Operator : gd Inst ID: msda.i
Smp Info : 200mL 2819-213
Misc Info : 5.0ppbv(5.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/16jan17.b/a17q0116a.m
Meth Date : 17-Jan-2017 10:09 L7EZ Quant Type: ISTD
Cal Date : 16-JAN-2017 17:10 Cal File: a011605.d
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12mdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.521	5.521 (1.000)	130	250531	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	196795			50.57- 110.57	78.55
5.521	5.521 (1.000)	49	372605			118.90- 178.90	148.73
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	1129600	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	173422			0.00- 45.14	15.35
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	969196	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	499257			21.31- 81.31	51.51
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.058	6.058 (1.097)	65	326356	25.0000	24.673	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	174542			29.46- 89.46	53.48
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.620	7.620 (1.189)	98	1194311	25.0000	25.295	80.00- 120.00	100.00
7.620	7.620 (1.189)	70	119272			0.00- 39.82	9.99

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

$ 146 Toluene-d8 (continued)
  7.620   7.620 (1.189)   100    785677                    36.19-  96.19    65.78
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
  9.847   9.847 (1.112)   174    578594 25.0000   24.704  80.00- 120.00   100.00
  9.840   9.840 (1.111)    95    711447                   92.19- 152.19   122.96
  9.847   9.847 (1.112)   176    585076                   71.02- 131.02   101.12
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.524   1.524 (0.276)    41     51903 5.00000    5.440  80.00- 120.00   100.00
  1.524   1.524 (0.276)    42     33018                   37.76-  97.76    63.61
  1.524   1.524 (0.276)    39     31823                   38.24-  98.24    61.31
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.553   1.553 (0.281)    85    120079 5.00000    5.282  80.00- 120.00   100.00
  1.560   1.560 (0.283)    87     38892                    2.19-  62.19    32.39
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.674   1.674 (0.303)   135    100398 5.00000    5.230  80.00- 120.00   100.00
  1.674   1.674 (0.303)   137     34039                    1.62-  61.62    33.90
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.760   1.760 (0.319)    50     43109 5.00000    4.863  80.00- 120.00   100.00(a)
  1.768   1.768 (0.320)    52     16898                    4.04-  64.04    39.20
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.846   1.846 (0.334)    58     12286 5.00000    5.107  80.00- 120.00   100.00
  1.846   1.846 (0.334)    43     91302                  761.67- 821.67   743.14
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.882   1.882 (0.341)    62     54686 5.00000    5.196  80.00- 120.00   100.00
  1.882   1.882 (0.341)    64     15985                    0.00-  59.01    29.23
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.904   1.904 (0.345)    54     49369 5.00000    5.326  80.00- 120.00   100.00
  1.904   1.904 (0.345)    39     47752                   63.95- 123.95    96.72
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.262   2.262 (0.410)    94     39812 5.00000    4.602  80.00- 120.00   100.00(a)
  2.262   2.262 (0.410)    96     36612                   64.81- 124.81    91.96
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.384   2.384 (0.432)    64     28322 5.00000    5.501  80.00- 120.00   100.00
  2.384   2.384 (0.432)    66      8928                    1.96-  61.96    31.52
  2.384   2.384 (0.432)    49      9304                    1.70-  61.70    32.85
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.436)	43	74418	5.00000	5.553	80.00- 120.00	100.00
2.405	2.405 (0.436)	57	49937			40.19- 100.19	67.10
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.477)	101	130807	5.00000	5.314	80.00- 120.00	100.00
2.641	2.641 (0.478)	103	81966			34.98- 94.98	62.66
42 Ethanol					CAS #: 64-17-5		
2.985	2.985 (0.541)	45	25487	5.00000	5.117	80.00- 120.00	100.00
2.985	2.985 (0.541)	46	11689			9.25- 69.25	45.86
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.595)	151	97647	5.00000	5.177	80.00- 120.00	100.00
3.293	3.293 (0.596)	153	62072			34.55- 94.55	63.57
3.293	3.293 (0.596)	101	116763			83.34- 143.34	119.58
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.322	3.322 (0.602)	98	34460	5.00000	5.368	80.00- 120.00	100.00
3.322	3.322 (0.602)	96	47438			120.22- 180.22	137.66
3.322	3.322 (0.602)	61	93117			243.84- 303.84	270.22
52 Acetone					CAS #: 67-64-1		
3.480	3.480 (0.630)	58	29992	5.00000	5.276	80.00- 120.00	100.00
3.480	3.480 (0.630)	43	95925			267.70- 327.70	319.84
56 Carbon Disulfide					CAS #: 75-15-0		
3.558	3.558 (0.644)	76	141325	5.00000	5.158	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.644	3.644 (0.660)	45	106560	5.00000	5.084	80.00- 120.00	100.00
3.644	3.644 (0.660)	43	18905			0.00- 46.48	17.74
3.651	3.651 (0.661)	59	5869			0.00- 33.95	5.51
58 3-Chloropropene					CAS #: 107-05-1		
3.802	3.802 (0.689)	76	23749	5.00000	5.175	80.00- 120.00	100.00
3.795	3.795 (0.687)	41	80914			307.27- 367.27	340.70
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.721)	49	76467	5.00000	5.359	80.00- 120.00	100.00
3.981	3.981 (0.721)	84	46392			32.37- 92.37	60.67
3.981	3.981 (0.721)	51	24210			0.49- 60.49	31.66
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.096	4.096 (0.742)	59	130279	5.00000	5.169	80.00- 120.00	100.00
4.096	4.096 (0.742)	41	26049			0.00- 49.68	19.99

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

   71 tert-Butyl alcohol (continued)
  4.096   4.096 (0.742)    57     13689                     0.00-  40.06    10.51
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                       CAS #: 1634-04-4
  4.196   4.196 (0.760)    73    146448 5.00000    5.207  80.00- 120.00   100.00
  4.196   4.196 (0.760)    57     43181                     0.00-  59.21    29.49
  4.196   4.196 (0.760)    41     36581                     0.00-  55.49    24.98
-------------------------------------------------------------------------------
   73 trans-1,2-Dichloroethene                      CAS #: 156-60-5
  4.217   4.217 (0.764)    98     33494 5.00000    5.280  80.00- 120.00   100.00
  4.217   4.217 (0.764)    61     89056                   224.99- 284.99   265.89
  4.217   4.217 (0.764)    96     52775                   119.77- 179.77   157.57
-------------------------------------------------------------------------------
   78 Hexane                                        CAS #: 110-54-3
  4.432   4.432 (0.803)    57    115254 5.00000    5.547  80.00- 120.00   100.00
  4.432   4.432 (0.803)    43     67120                    31.75-  91.75    58.24
  4.432   4.432 (0.803)    86     14847                     0.00-  42.75    12.88
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                            CAS #: 75-34-3
  4.712   4.712 (0.853)    63    109798 5.00000    5.237  80.00- 120.00   100.00
  4.712   4.712 (0.853)    65     33868                     1.80-  61.80    30.85
-------------------------------------------------------------------------------
   83 Isopropyl ether                               CAS #: 108-20-3
  4.697   4.697 (0.851)    45    238380 5.00000    5.170  80.00- 120.00   100.00
  4.697   4.697 (0.851)    87     53034                     0.00-  51.16    22.25
  4.697   4.697 (0.851)    59     27106                     0.00-  40.60    11.37
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                 CAS #: 108-05-4
  4.755   4.755 (0.861)    86     15181 5.00000    5.320  80.00- 120.00   100.00
  4.755   4.755 (0.861)    43    200099                  1309.99-1369.99  1318.09
-------------------------------------------------------------------------------
   88 Ethyl-tert-butyl ether                        CAS #: 637-92-3
  5.055   5.055 (0.916)    59    214645 5.00000    5.178  80.00- 120.00   100.00
  5.055   5.055 (0.916)    87     73372                     4.12-  64.12    34.18
  5.048   5.048 (0.914)    41     35857                     0.00-  46.98    16.71
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                        CAS #: 156-59-2
  5.292   5.292 (0.958)    98     43958 5.00000    5.392  80.00- 120.00   100.00
  5.285   5.285 (0.957)    96     65065                   123.57- 183.57   148.02
  5.285   5.285 (0.957)    61     97193                   194.30- 254.30   221.10
-------------------------------------------------------------------------------
   92 2-Butanone                                    CAS #: 78-93-3
  5.313   5.313 (0.962)    72     29365 5.00000    5.534  80.00- 120.00   100.00
  5.313   5.313 (0.962)    43    146074                   492.83- 552.83   497.44
  5.313   5.313 (0.962)    57     10207                    11.22-  71.22    34.76
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Tetrahydrofuran					CAS #: 109-99-9		
5.514	5.514 (0.999)	42	81805	5.00000	5.407	80.00- 120.00	100.00
5.514	5.514 (0.999)	71	23087			1.67- 61.67	28.22
5.514	5.514 (0.999)	72	28231			1.66- 61.66	34.51
100 Chloroform					CAS #: 67-66-3		
5.578	5.578 (1.010)	83	120495	5.00000	5.392	80.00- 120.00	100.00
5.578	5.578 (1.010)	85	80792			35.62- 95.62	67.05
102 Cyclohexane					CAS #: 110-82-7		
5.686	5.686 (1.030)	84	80209	5.00000	5.296	80.00- 120.00	100.00
5.686	5.686 (1.030)	56	122707			127.28- 187.28	152.98
5.679	5.679 (1.029)	41	61691			46.63- 106.63	76.91
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.700	5.700 (1.032)	97	127390	5.00000	5.181	80.00- 120.00	100.00
5.707	5.707 (1.034)	99	79805			33.98- 93.98	62.65
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.815	5.815 (1.053)	119	131478	5.00000	5.139	80.00- 120.00	100.00
5.815	5.815 (1.053)	117	128969			70.95- 130.95	98.09
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.090)	57	385671	5.00000	5.261	80.00- 120.00	100.00
6.015	6.015 (1.090)	56	122440			0.93- 60.93	31.75
6.015	6.015 (1.090)	41	86007			0.00- 52.07	22.30
116 Benzene					CAS #: 71-43-2		
6.037	6.037 (0.942)	78	186480	5.00000	5.178	80.00- 120.00	100.00
6.037	6.037 (0.942)	77	42085			0.00- 52.91	22.57
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.101	6.101 (1.105)	87	42112	5.00000	5.132	80.00- 120.00	100.00
6.101	6.101 (1.105)	73	171724			372.87- 432.87	407.78
6.101	6.101 (1.105)	55	55448			97.70- 157.70	131.67
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.123	6.123 (0.955)	62	83796	5.00000	5.353	80.00- 120.00	100.00
6.123	6.123 (0.955)	64	26011			2.36- 62.36	31.04
121 Heptane					CAS #: 142-82-5		
6.180	6.180 (0.964)	71	63887	5.00000	4.972	80.00- 120.00	100.00
6.180	6.180 (0.964)	43	145798			192.75- 252.75	228.21
6.180	6.180 (0.964)	57	74487			92.77- 152.77	116.59
125 Trichloroethene					CAS #: 79-01-6		
6.603	6.603 (1.030)	95	92316	5.00000	5.297	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.603	6.603 (1.030)	130	101275			78.45- 138.45	109.70
6.603	6.603 (1.030)	97	63781			35.78- 95.78	69.09
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.214)	83	118421	5.00000	5.035	80.00- 120.00	100.00
6.703	6.703 (1.214)	98	56437			16.08- 76.08	47.66
6.703	6.703 (1.214)	55	114576			69.75- 129.75	96.75
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.839	6.839 (1.067)	63	82941	5.00000	5.007	80.00- 120.00	100.00
6.839	6.839 (1.067)	62	56662			40.72- 100.72	68.32
6.839	6.839 (1.067)	41	44342			20.11- 80.11	53.46
136 1,4-Dioxane					CAS #: 123-91-1		
6.925	6.925 (1.080)	88	47531	5.00000	5.188	80.00- 120.00	100.00
6.925	6.925 (1.080)	58	42152			57.35- 117.35	88.68
6.925	6.925 (1.080)	57	13283			0.00- 56.09	27.95
138 Bromodichloromethane					CAS #: 75-27-4		
7.061	7.061 (1.102)	83	138499	5.00000	5.198	80.00- 120.00	100.00
7.061	7.061 (1.102)	85	85232			34.91- 94.91	61.54
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.441	7.441 (1.161)	75	111262	5.00000	5.167	80.00- 120.00	100.00
7.441	7.441 (1.161)	77	39307			3.24- 63.24	35.33
7.441	7.441 (1.161)	39	61904			23.84- 83.84	55.64
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.178)	58	76831	5.00000	4.889	80.00- 120.00	100.00
7.548	7.548 (1.178)	43	202045			220.90- 280.90	262.97
7.548	7.548 (1.178)	85	29785			5.60- 65.60	38.77
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.198)	91	249919	5.00000	5.093	80.00- 120.00	100.00
7.677	7.677 (1.198)	92	152584			28.71- 88.71	61.05
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.894)	75	107935	5.00000	5.226	80.00- 120.00	100.00
7.921	7.921 (0.894)	77	37980			2.84- 62.84	35.19
7.921	7.921 (0.894)	39	57957			22.14- 82.14	53.70
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.912)	97	90261	5.00000	5.024	80.00- 120.00	100.00
8.071	8.071 (0.911)	99	55078			33.31- 93.31	61.02
8.078	8.078 (0.912)	83	79649			55.94- 115.94	88.24

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
156 Tetrachloroethene					CAS #: 127-18-4		
8.114	8.114 (0.916)	166	125944	5.00000	5.047	80.00- 120.00	100.00
8.114	8.114 (0.916)	129	96787			46.29- 106.29	76.85
8.114	8.114 (0.916)	131	94265			44.37- 104.37	74.85
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	109570	5.00000	5.167	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	199587			152.24- 212.24	182.15
8.243	8.243 (0.930)	100	17556			0.00- 47.15	16.02
160 Dibromochloromethane					CAS #: 124-48-1		
8.386	8.386 (0.947)	129	171547	5.00000	5.098	80.00- 120.00	100.00
8.386	8.386 (0.947)	127	134555			46.82- 106.82	78.44
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.501	8.501 (0.960)	107	146671	5.00000	5.156	80.00- 120.00	100.00
8.501	8.501 (0.960)	109	142155			64.56- 124.56	96.92
165 Chlorobenzene					CAS #: 108-90-7		
8.880	8.880 (1.002)	112	222718	5.00000	5.181	80.00- 120.00	100.00
8.880	8.880 (1.002)	114	68308			2.04- 62.04	30.67
8.880	8.880 (1.002)	77	127441			25.23- 85.23	57.22
167 Ethyl Benzene					CAS #: 100-41-4		
8.931	8.931 (1.008)	106	115886	5.00000	5.361	80.00- 120.00	100.00
8.931	8.931 (1.008)	91	347709			278.30- 338.30	300.04
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	141102	5.00000	5.314	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	267519			162.42- 222.42	189.59
171 o-Xylene					CAS #: 95-47-6		
9.368	9.368 (1.057)	106	134436	5.00000	5.205	80.00- 120.00	100.00
9.368	9.368 (1.057)	91	271772			175.73- 235.73	202.16
172 Styrene					CAS #: 100-42-5		
9.389	9.389 (1.060)	104	217952	5.00000	5.174	80.00- 120.00	100.00
9.389	9.389 (1.060)	78	101980			16.95- 76.95	46.79
174 Bromoform					CAS #: 75-25-2		
9.590	9.590 (1.082)	173	170996	5.00000	5.203	80.00- 120.00	100.00
9.590	9.590 (1.082)	171	82585			21.43- 81.43	48.30
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.091)	105	414335	5.00000	5.145	80.00- 120.00	100.00
9.661	9.661 (1.091)	120	114456			0.00- 57.61	27.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
175 Cumene (continued)							
9.654	9.654 (1.090)	51	47550			0.00- 40.74	11.48
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.969	9.969 (1.125)	83	205497	5.00000	5.140	80.00- 120.00	100.00
9.976	9.976 (1.126)	85	125659			34.51- 94.51	61.15
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.129)	91	482637	5.00000	5.264	80.00- 120.00	100.00
10.005	10.005 (1.129)	120	116329			0.00- 54.88	24.10
10.005	10.005 (1.129)	105	19331			0.00- 33.79	4.01
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.140)	120	126413	5.00000	4.991	80.00- 120.00	100.00
10.098	10.098 (1.140)	105	432095			289.38- 349.38	341.81
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.148	10.148 (1.146)	120	189255	5.00000	5.378	80.00- 120.00	100.00
10.148	10.148 (1.146)	105	355173			171.33- 231.33	187.67
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.183)	120	165921	5.00000	5.176	80.00- 120.00	100.00
10.478	10.478 (1.183)	105	350340			182.43- 242.43	211.15
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.764	10.764 (1.215)	146	258150	5.00000	5.324	80.00- 120.00	100.00
10.764	10.764 (1.215)	148	164369			33.68- 93.68	63.67
10.764	10.764 (1.215)	111	102541			10.08- 70.08	39.72
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.843	10.843 (1.224)	146	267177	5.00000	5.338	80.00- 120.00	100.00
10.843	10.843 (1.224)	148	165978			33.78- 93.78	62.12
10.843	10.843 (1.224)	111	101218			8.79- 68.79	37.88
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.958	10.958 (1.237)	91	321484	5.00000	5.146	80.00- 120.00	100.00
10.958	10.958 (1.237)	126	71461			0.00- 53.35	22.23
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.173	11.173 (1.261)	146	243200	5.00000	5.142	80.00- 120.00	100.00
11.173	11.173 (1.261)	148	161873			32.96- 92.96	66.56
11.173	11.173 (1.261)	111	101570			10.66- 70.66	41.76
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.591	12.591 (1.421)	180	246182	5.00000	5.413	80.00- 120.00	100.00
12.591	12.591 (1.421)	182	245114			64.75- 124.75	99.57

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
227 Hexachlorobutadiene							CAS #: 87-68-3	
12.677	12.677	(1.431)	225	186972	5.00000	5.542	80.00- 120.00	100.00
12.677	12.677	(1.431)	223	119619			32.54- 92.54	63.98
228 Naphthalene							CAS #: 91-20-3	
12.863	12.863	(1.452)	128	63583	0.50000	0.5550	80.00- 120.00	100.00(a)
12.863	12.863	(1.452)	127	8767			0.00- 42.17	13.79

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: msda.i
Lab File ID: a011605.d
Lab Smp Id: ICAL Level #4
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msda.i/16jan17.b/a17q0116a.m
Misc Info: 5.0ppbv(5.0ppbv)

Calibration Date: 16-JAN-2017
Calibration Time: 17:59

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	238300	142980	333620	250531	5.13
123 1,4-Difluorobenze	1061216	636730	1485702	1129600	6.44
163 Chlorobenzene-d5	912832	547699	1277965	969196	6.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	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/msda.i/16jan17.b/a011605.d

Date : 16-JAN-2017 17:10

Client ID:

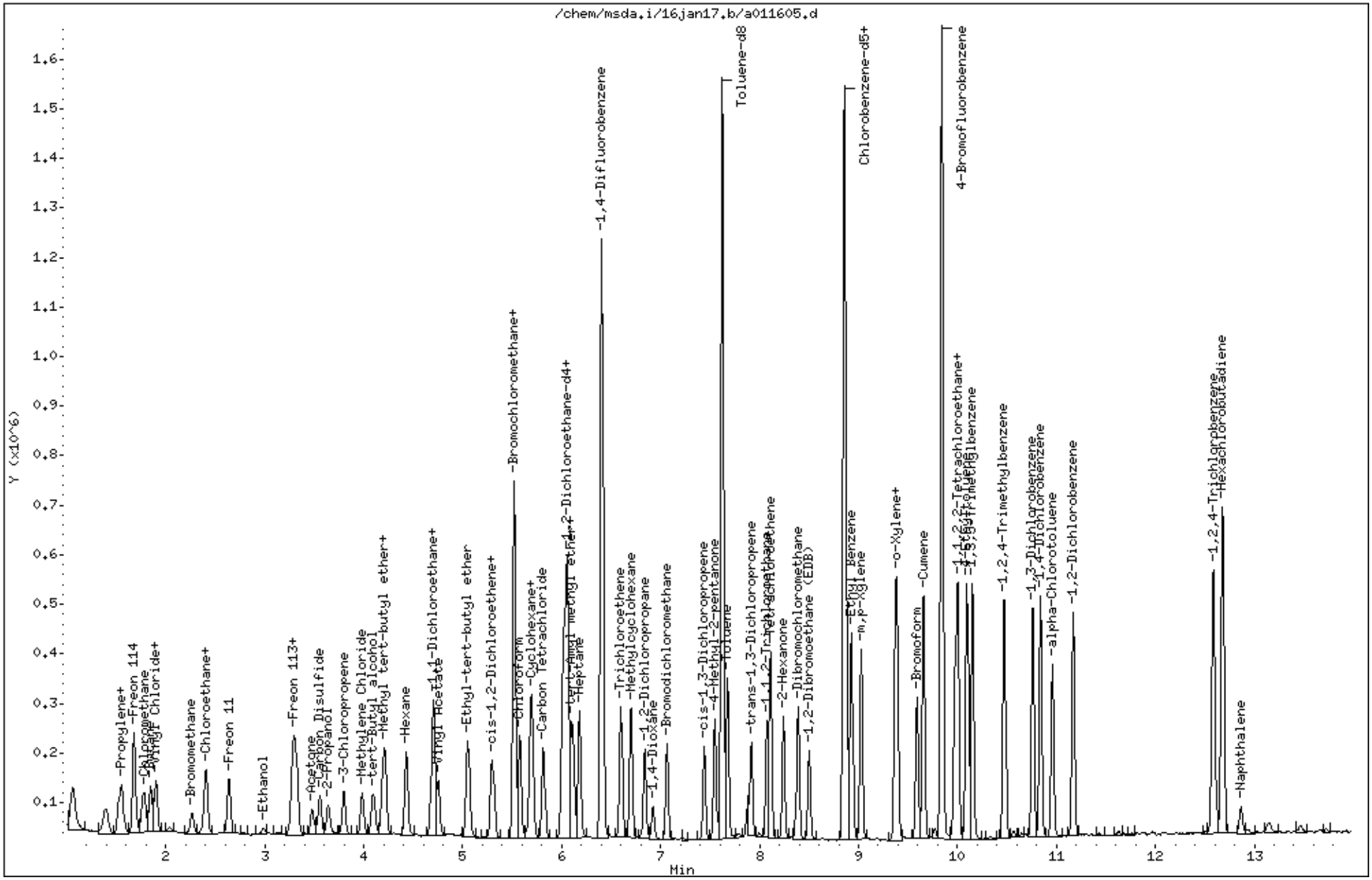
Sample Info: 200mL 2819-213

Column phase: RTX-624

Instrument: msda.i

Operator: gd

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/16jan17.b/a011606.d
Lab Smp Id: ICAL Level #5
Inj Date : 16-JAN-2017 17:34
Operator : gd Inst ID: msda.i
Smp Info : 20mL 2819-200
Misc Info : 20ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/16jan17.b/a17q0116a.m
Meth Date : 17-Jan-2017 10:09 L7EZ Quant Type: ISTD
Cal Date : 16-JAN-2017 17:34 Cal File: a011606.d
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12crv.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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.521	5.521 (1.000)	130	236549	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	188012			50.57- 110.57	79.48
5.521	5.521 (1.000)	49	347624			118.90- 178.90	146.96
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	1061041	25.0000		80.00- 120.00	100.00
6.402	6.402 (1.000)	88	159186			0.00- 45.14	15.00
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	897141	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	460376			21.31- 81.31	51.32
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.058	6.058 (1.097)	65	300778	25.0000	24.083	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	170971			29.46- 89.46	56.84
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.620	7.620 (1.189)	98	1092762	25.0000	24.640	80.00- 120.00	100.00
7.620	7.620 (1.189)	70	107298			0.00- 39.82	9.82

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

$ 146 Toluene-d8 (continued)
  7.620   7.620 (1.189)   100    721618                    36.19-  96.19    66.04
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
  9.847   9.847 (1.112)   174    543715 25.0000   25.080  80.00- 120.00   100.00
  9.847   9.847 (1.112)    95    666287                   92.19- 152.19   122.54
  9.847   9.847 (1.112)   176    538065                   71.02- 131.02    98.96
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.517   1.517 (0.275)    41    151434 20.0000   16.809  80.00- 120.00   100.00
  1.517   1.517 (0.275)    42     99434                   37.76-  97.76    65.66
  1.517   1.517 (0.275)    39    104971                   38.24-  98.24    69.32
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.553   1.553 (0.281)    85    392152 20.0000   18.269  80.00- 120.00   100.00
  1.553   1.553 (0.281)    87    125872                    2.19-  62.19    32.10
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.674   1.674 (0.303)   135    333968 20.0000   18.426  80.00- 120.00   100.00
  1.674   1.674 (0.303)   137    109897                    1.62-  61.62    32.91
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.753   1.753 (0.318)    50    169135 20.0000   20.206  80.00- 120.00   100.00
  1.753   1.753 (0.318)    52     53687                    4.04-  64.04    31.74
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.839   1.839 (0.333)    58     40274 20.0000   17.730  80.00- 120.00   100.00
  1.839   1.839 (0.333)    43    301852                  761.67- 821.67   749.50
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.875   1.875 (0.340)    62    180364 20.0000   18.152  80.00- 120.00   100.00
  1.875   1.875 (0.340)    64     53144                    0.00-  59.01    29.46
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.904   1.904 (0.345)    54    159179 20.0000   18.187  80.00- 120.00   100.00
  1.904   1.904 (0.345)    39    147186                   63.95- 123.95    92.47
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.262   2.262 (0.410)    94    139901 20.0000   17.127  80.00- 120.00   100.00
  2.262   2.262 (0.410)    96    126270                   64.81- 124.81    90.26
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.384   2.384 (0.432)    64     89446 20.0000   18.400  80.00- 120.00   100.00
  2.384   2.384 (0.432)    66     29453                    1.96-  61.96    32.93
  2.384   2.384 (0.432)    49     29122                    1.70-  61.70    32.56
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.436)	43	247746	20.0000	19.580	80.00- 120.00	100.00
2.405	2.405 (0.436)	57	171971			40.19- 100.19	69.41
35 Freon 11					CAS #: 75-69-4		
2.641	2.641 (0.478)	101	435000	20.0000	18.715	80.00- 120.00	100.00
2.641	2.641 (0.478)	103	278802			34.98- 94.98	64.09
42 Ethanol					CAS #: 64-17-5		
2.971	2.971 (0.538)	45	87890	20.0000	18.690	80.00- 120.00	100.00
2.971	2.971 (0.538)	46	35449			9.25- 69.25	40.33
49 Freon 113					CAS #: 76-13-1		
3.293	3.293 (0.596)	151	346291	20.0000	19.444	80.00- 120.00	100.00
3.293	3.293 (0.596)	153	222091			34.55- 94.55	64.13
3.293	3.293 (0.596)	101	400053			83.34- 143.34	115.53
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.322	3.322 (0.602)	98	108471	20.0000	17.895	80.00- 120.00	100.00
3.322	3.322 (0.602)	96	163265			120.22- 180.22	150.51
3.322	3.322 (0.602)	61	304809			243.84- 303.84	281.01
52 Acetone					CAS #: 67-64-1		
3.472	3.472 (0.629)	58	99917	20.0000	18.614	80.00- 120.00	100.00
3.472	3.472 (0.629)	43	306307			267.70- 327.70	306.56
56 Carbon Disulfide					CAS #: 75-15-0		
3.551	3.551 (0.643)	76	459450	20.0000	17.762	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.637	3.637 (0.659)	45	365604	20.0000	18.473	80.00- 120.00	100.00
3.637	3.637 (0.659)	43	69341			0.00- 46.48	18.97
3.637	3.637 (0.659)	59	14600			0.00- 33.95	3.99
58 3-Chloropropene					CAS #: 107-05-1		
3.802	3.802 (0.689)	76	76102	20.0000	17.562	80.00- 120.00	100.00
3.802	3.802 (0.689)	41	265981			307.27- 367.27	349.51
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.721)	49	242764	20.0000	18.020	80.00- 120.00	100.00
3.981	3.981 (0.721)	84	152761			32.37- 92.37	62.93
3.981	3.981 (0.721)	51	76252			0.49- 60.49	31.41
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.095	4.095 (0.742)	59	455833	20.0000	19.155	80.00- 120.00	100.00
4.095	4.095 (0.742)	41	88697			0.00- 49.68	19.46

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol (continued)							
4.095	4.095 (0.742)	57	49135			0.00- 40.06	10.78
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.760)	73	510185	20.0000	19.212	80.00- 120.00	100.00
4.196	4.196 (0.760)	57	147885			0.00- 59.21	28.99
4.196	4.196 (0.760)	41	131124			0.00- 55.49	25.70
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.224	4.224 (0.765)	98	107120	20.0000	17.885	80.00- 120.00	100.00
4.224	4.224 (0.765)	61	272637			224.99- 284.99	254.52
4.224	4.224 (0.765)	96	164731			119.77- 179.77	153.78
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.803)	57	365770	20.0000	18.644	80.00- 120.00	100.00
4.432	4.432 (0.803)	43	227499			31.75- 91.75	62.20
4.432	4.432 (0.803)	86	44757			0.00- 42.75	12.24
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.853)	63	354720	20.0000	17.919	80.00- 120.00	100.00
4.711	4.711 (0.853)	65	108718			1.80- 61.80	30.65
83 Isopropyl ether					CAS #: 108-20-3		
4.697	4.697 (0.851)	45	839437	20.0000	19.281	80.00- 120.00	100.00
4.697	4.697 (0.851)	87	176390			0.00- 51.16	21.01
4.697	4.697 (0.851)	59	93156			0.00- 40.60	11.10
86 Vinyl Acetate					CAS #: 108-05-4		
4.754	4.754 (0.861)	86	46768	20.0000	17.360	80.00- 120.00	100.00
4.754	4.754 (0.861)	43	623622			1309.99-1369.99	1333.44
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.055	5.055 (0.916)	59	744917	20.0000	19.031	80.00- 120.00	100.00
5.055	5.055 (0.916)	87	259525			4.12- 64.12	34.84
5.055	5.055 (0.916)	41	127972			0.00- 46.98	17.18
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.292	5.292 (0.958)	98	140280	20.0000	18.225	80.00- 120.00	100.00
5.292	5.292 (0.958)	96	211199			123.57- 183.57	150.56
5.292	5.292 (0.958)	61	313711			194.30- 254.30	223.63
92 2-Butanone					CAS #: 78-93-3		
5.313	5.313 (0.962)	72	88675	20.0000	17.699	80.00- 120.00	100.00
5.313	5.313 (0.962)	43	462262			492.83- 552.83	521.30
5.313	5.313 (0.962)	57	39839			11.22- 71.22	44.93

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Tetrahydrofuran					CAS #: 109-99-9		
5.514	5.514 (0.999)	42	259379	20.0000	18.158	80.00- 120.00	100.00
5.514	5.514 (0.999)	71	83625			1.67- 61.67	32.24
5.514	5.514 (0.999)	72	83891			1.66- 61.66	32.34
100 Chloroform					CAS #: 67-66-3		
5.585	5.585 (1.012)	83	377450	20.0000	17.891	80.00- 120.00	100.00
5.585	5.585 (1.012)	85	253103			35.62- 95.62	67.06
102 Cyclohexane					CAS #: 110-82-7		
5.686	5.686 (1.030)	84	276489	20.0000	19.333	80.00- 120.00	100.00
5.686	5.686 (1.030)	56	425004			127.28- 187.28	153.71
5.686	5.686 (1.030)	41	215319			46.63- 106.63	77.88
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.034)	97	440941	20.0000	18.994	80.00- 120.00	100.00
5.707	5.707 (1.034)	99	282767			33.98- 93.98	64.13
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.054)	119	461913	20.0000	19.122	80.00- 120.00	100.00
5.822	5.822 (1.054)	117	469801			70.95- 130.95	101.71
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.090)	57	1291494	20.0000	18.659	80.00- 120.00	100.00
6.015	6.015 (1.090)	56	406176			0.93- 60.93	31.45
6.015	6.015 (1.090)	41	293179			0.00- 52.07	22.70
116 Benzene					CAS #: 71-43-2		
6.037	6.037 (0.942)	78	600848	20.0000	17.763	80.00- 120.00	100.00
6.037	6.037 (0.942)	77	139336			0.00- 52.91	23.19
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.101	6.101 (1.105)	87	151619	20.0000	19.568	80.00- 120.00	100.00
6.101	6.101 (1.105)	73	598665			372.87- 432.87	394.85
6.101	6.101 (1.105)	55	184533			97.70- 157.70	121.71
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.123	6.123 (0.955)	62	270698	20.0000	18.411	80.00- 120.00	100.00
6.123	6.123 (0.955)	64	91254			2.36- 62.36	33.71
121 Heptane					CAS #: 142-82-5		
6.180	6.180 (0.964)	71	230891	20.0000	19.130	80.00- 120.00	100.00
6.180	6.180 (0.964)	43	521978			192.75- 252.75	226.07
6.180	6.180 (0.964)	57	272471			92.77- 152.77	118.01
125 Trichloroethene					CAS #: 79-01-6		
6.603	6.603 (1.030)	95	283211	20.0000	17.302	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.603	6.603 (1.030)	130	309072			78.45- 138.45	109.13
6.603	6.603 (1.030)	97	184744			35.78- 95.78	65.23
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.214)	83	409645	20.0000	18.446	80.00- 120.00	100.00
6.703	6.703 (1.214)	98	184839			16.08- 76.08	45.12
6.703	6.703 (1.214)	55	406493			69.75- 129.75	99.23
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.839	6.839 (1.067)	63	283780	20.0000	18.240	80.00- 120.00	100.00
6.839	6.839 (1.067)	62	199536			40.72- 100.72	70.31
6.839	6.839 (1.067)	41	137806			20.11- 80.11	48.56
136 1,4-Dioxane					CAS #: 123-91-1		
6.925	6.925 (1.080)	88	161841	20.0000	18.805	80.00- 120.00	100.00
6.925	6.925 (1.080)	58	139460			57.35- 117.35	86.17
6.925	6.925 (1.080)	57	41725			0.00- 56.09	25.78
138 Bromodichloromethane					CAS #: 75-27-4		
7.061	7.061 (1.102)	83	456891	20.0000	18.256	80.00- 120.00	100.00
7.061	7.061 (1.102)	85	297370			34.91- 94.91	65.09
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.441	7.441 (1.161)	75	381985	20.0000	18.885	80.00- 120.00	100.00
7.441	7.441 (1.161)	77	124573			3.24- 63.24	32.61
7.441	7.441 (1.161)	39	209701			23.84- 83.84	54.90
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.178)	58	282660	20.0000	19.149	80.00- 120.00	100.00
7.548	7.548 (1.178)	43	714568			220.90- 280.90	252.80
7.548	7.548 (1.178)	85	103693			5.60- 65.60	36.68
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.198)	91	884713	20.0000	19.193	80.00- 120.00	100.00
7.677	7.677 (1.198)	92	514840			28.71- 88.71	58.19
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.894)	75	362547	20.0000	18.964	80.00- 120.00	100.00
7.921	7.921 (0.894)	77	116479			2.84- 62.84	32.13
7.921	7.921 (0.894)	39	193377			22.14- 82.14	53.34
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.912)	97	305483	20.0000	18.370	80.00- 120.00	100.00
8.078	8.078 (0.912)	99	190135			33.31- 93.31	62.24
8.078	8.078 (0.912)	83	264922			55.94- 115.94	86.72

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
156 Tetrachloroethene					CAS #: 127-18-4		
8.114	8.114 (0.916)	166	454175	20.0000	19.663	80.00- 120.00	100.00
8.114	8.114 (0.916)	129	352194			46.29- 106.29	77.55
8.114	8.114 (0.916)	131	333152			44.37- 104.37	73.35
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	392281	20.0000	19.984	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	710979			152.24- 212.24	181.24
8.243	8.243 (0.930)	100	63196			0.00- 47.15	16.11
160 Dibromochloromethane					CAS #: 124-48-1		
8.386	8.386 (0.947)	129	597208	20.0000	19.174	80.00- 120.00	100.00
8.386	8.386 (0.947)	127	460239			46.82- 106.82	77.07
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.501	8.501 (0.960)	107	510130	20.0000	19.372	80.00- 120.00	100.00
8.501	8.501 (0.960)	109	469833			64.56- 124.56	92.10
165 Chlorobenzene					CAS #: 108-90-7		
8.880	8.880 (1.002)	112	768833	20.0000	19.320	80.00- 120.00	100.00
8.880	8.880 (1.002)	114	246321			2.04- 62.04	32.04
8.880	8.880 (1.002)	77	421513			25.23- 85.23	54.83
167 Ethyl Benzene					CAS #: 100-41-4		
8.931	8.931 (1.008)	106	405230	20.0000	20.254	80.00- 120.00	100.00
8.931	8.931 (1.008)	91	1244741			278.30- 338.30	307.17
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	495833	20.0000	20.175	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	989069			162.42- 222.42	199.48
171 o-Xylene					CAS #: 95-47-6		
9.367	9.367 (1.057)	106	488361	20.0000	20.427	80.00- 120.00	100.00
9.367	9.367 (1.057)	91	989782			175.73- 235.73	202.67
172 Styrene					CAS #: 100-42-5		
9.389	9.389 (1.060)	104	778829	20.0000	19.973	80.00- 120.00	100.00
9.389	9.389 (1.060)	78	371733			16.95- 76.95	47.73
174 Bromoform					CAS #: 75-25-2		
9.590	9.590 (1.082)	173	607429	20.0000	19.968	80.00- 120.00	100.00
9.590	9.590 (1.082)	171	309521			21.43- 81.43	50.96
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.091)	105	1472460	20.0000	19.752	80.00- 120.00	100.00
9.661	9.661 (1.091)	120	413548			0.00- 57.61	28.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
175 Cumene (continued)							
9.654	9.654 (1.090)	51	160413			0.00- 40.74	10.89
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.126)	83	747367	20.0000	20.197	80.00- 120.00	100.00
9.976	9.976 (1.126)	85	482752			34.51- 94.51	64.59
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.129)	91	1696273	20.0000	19.988	80.00- 120.00	100.00
10.005	10.005 (1.129)	120	413633			0.00- 54.88	24.38
10.005	10.005 (1.129)	105	65264			0.00- 33.79	3.85
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.140)	120	481642	20.0000	20.544	80.00- 120.00	100.00
10.098	10.098 (1.140)	105	1505776			289.38- 349.38	312.63
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.148	10.148 (1.146)	120	639662	20.0000	19.637	80.00- 120.00	100.00
10.148	10.148 (1.146)	105	1274501			171.33- 231.33	199.25
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.183)	120	586616	20.0000	19.771	80.00- 120.00	100.00
10.478	10.478 (1.183)	105	1239453			182.43- 242.43	211.29
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.764	10.764 (1.215)	146	873972	20.0000	19.472	80.00- 120.00	100.00
10.764	10.764 (1.215)	148	566446			33.68- 93.68	64.81
10.764	10.764 (1.215)	111	346457			10.08- 70.08	39.64
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.843	10.843 (1.224)	146	875925	20.0000	18.905	80.00- 120.00	100.00
10.843	10.843 (1.224)	148	566930			33.78- 93.78	64.72
10.843	10.843 (1.224)	111	335985			8.79- 68.79	38.36
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.958	10.958 (1.237)	91	1125020	20.0000	19.456	80.00- 120.00	100.00
10.965	10.965 (1.238)	126	256148			0.00- 53.35	22.77
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.173	11.173 (1.261)	146	857705	20.0000	19.593	80.00- 120.00	100.00
11.173	11.173 (1.261)	148	540546			32.96- 92.96	63.02
11.173	11.173 (1.261)	111	354034			10.66- 70.66	41.28
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.591	12.591 (1.421)	180	770992	20.0000	18.314	80.00- 120.00	100.00
12.591	12.591 (1.421)	182	721613			64.75- 124.75	93.60

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
227 Hexachlorobutadiene						CAS #: 87-68-3		
12.684	12.684	(1.432)	225	579275	20.0000	18.550	80.00- 120.00	100.00
12.684	12.684	(1.432)	223	361115			32.54- 92.54	62.34
228 Naphthalene						CAS #: 91-20-3		
12.863	12.863	(1.452)	128	191239	2.00000	1.803	80.00- 120.00	100.00
12.863	12.863	(1.452)	127	25973			0.00- 42.17	13.58

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a011606.d
Lab Smp Id: ICAL Level #5
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msda.i/16jan17.b/a17q0116a.m
Misc Info: 20ppbv(200ppbv)

Calibration Date: 16-JAN-2017
Calibration Time: 17:59

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	238300	142980	333620	236549	-0.73
123 1,4-Difluorobenze	1061216	636730	1485702	1061041	-0.02
163 Chlorobenzene-d5	912832	547699	1277965	897141	-1.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	-0.01
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	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/msda.i/16jan17.b/a011606.d

Date : 16-JAN-2017 17:34

Client ID:

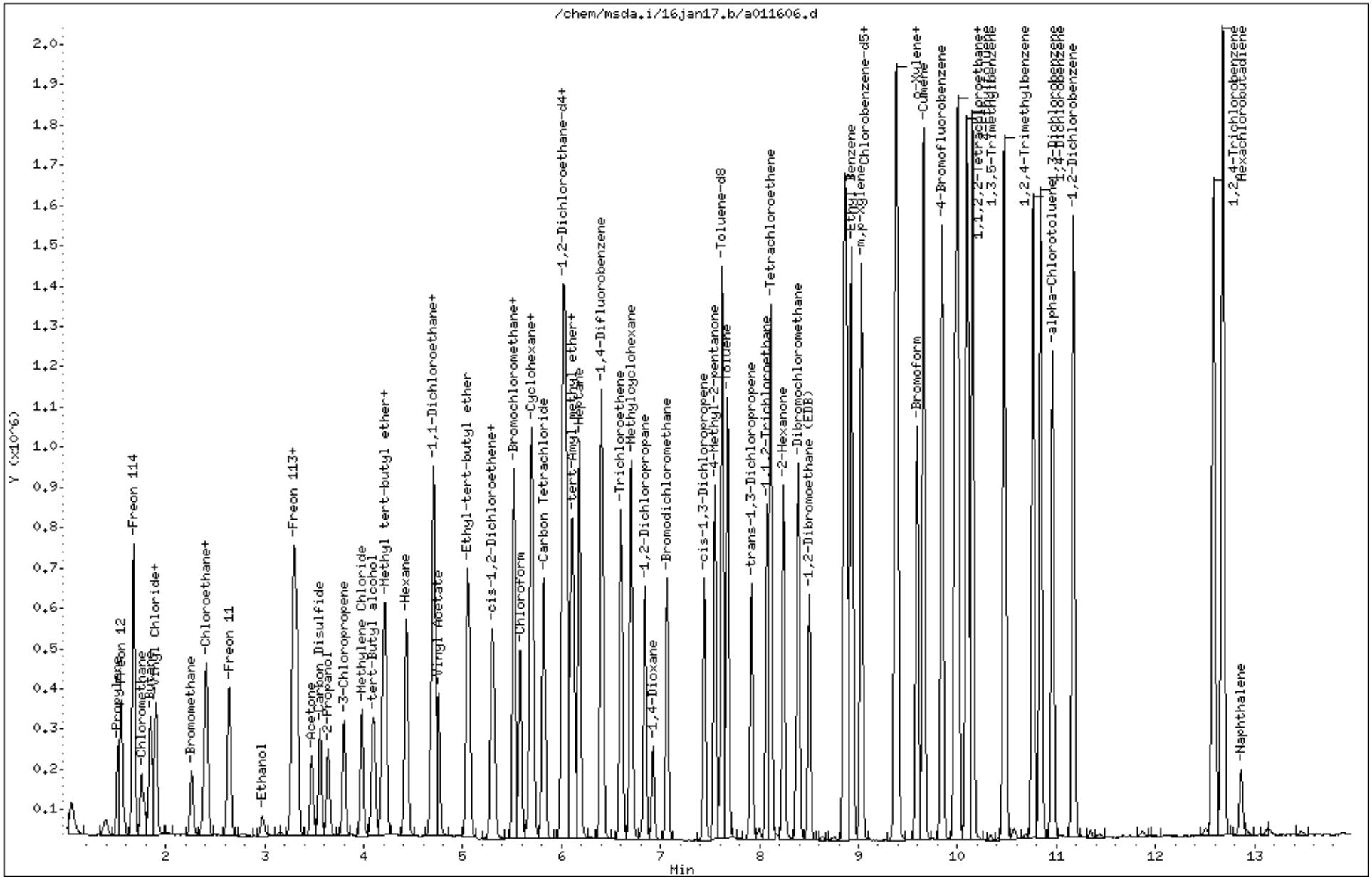
Sample Info: 20mL 2819-200

Column phase: RTX-624

Instrument: msda.i

Operator: gd

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/16jan17.b/a011607.d
Lab Smp Id: ICAL Level #6
Inj Date : 16-JAN-2017 17:59
Operator : gd Inst ID: msda.i
Smp Info : 50mL 2819-200
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/16jan17.b/a17q0116a.m
Meth Date : 17-Jan-2017 10:06 L7EZ Quant Type: ISTD
Cal Date : 16-JAN-2017 17:59 Cal File: a011607.d
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12crv.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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.521	5.521 (1.000)	130	238300	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	192009			50.57- 110.57	80.57
5.521	5.521 (1.000)	49	354830			118.90- 178.90	148.90
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	1061216	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	160660			0.00- 45.14	15.14
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	912832	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	468386			21.31- 81.31	51.31
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.058	6.058 (1.097)	65	308315	25.0000	24.505	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	183311			29.46- 89.46	59.46
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.627	7.627 (1.190)	98	1102793	25.0000	24.862	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	108241			0.00- 39.82	9.82

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

$ 146 Toluene-d8 (continued)
  7.627   7.627 (1.190)   100    729892                    36.19-  96.19    66.19
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
  9.848   9.848 (1.112)   174    557080 25.0000   25.254  80.00- 120.00   100.00
  9.848   9.848 (1.112)    95    680697                   92.19- 152.19   122.19
  9.848   9.848 (1.112)   176    562744                   71.02- 131.02   101.02
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.517   1.517 (0.275)    41    414080 50.0000   45.624  80.00- 120.00   100.00
  1.517   1.517 (0.275)    42    280571                   37.76-  97.76    67.76
  1.517   1.517 (0.275)    39    282580                   38.24-  98.24    68.24
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.553   1.553 (0.281)    85   1095607 50.0000   50.666  80.00- 120.00   100.00
  1.553   1.553 (0.281)    87    352625                    2.19-  62.19    32.19
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.675   1.675 (0.303)   135    897521 50.0000   49.154  80.00- 120.00   100.00
  1.675   1.675 (0.303)   137    283779                    1.62-  61.62    31.62
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.761   1.761 (0.319)    50    420383 50.0000   49.853  80.00- 120.00   100.00
  1.761   1.761 (0.319)    52    143114                    4.04-  64.04    34.04
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.847   1.847 (0.334)    58     97622 50.0000   42.660  80.00- 120.00   100.00
  1.847   1.847 (0.334)    43    772843                  761.67- 821.67   791.67
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.875   1.875 (0.340)    62    480510 50.0000   48.005  80.00- 120.00   100.00
  1.875   1.875 (0.340)    64    139417                    0.00-  59.01    29.01
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.904   1.904 (0.345)    54    422948 50.0000   47.970  80.00- 120.00   100.00
  1.904   1.904 (0.345)    39    397374                   63.95- 123.95    93.95
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.262   2.262 (0.410)    94    388089 50.0000   47.162  80.00- 120.00   100.00
  2.262   2.262 (0.410)    96    367953                   64.81- 124.81    94.81
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.384   2.384 (0.432)    64    233506 50.0000   47.681  80.00- 120.00   100.00
  2.384   2.384 (0.432)    66     74629                    1.96-  61.96    31.96
  2.384   2.384 (0.432)    49     74023                    1.70-  61.70    31.70
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
31 Isopentane					CAS #: 78-78-4		
2.412	2.412 (0.437)	43	622329	50.0000	48.823	80.00- 120.00	100.00
2.412	2.412 (0.437)	57	436811			40.19- 100.19	70.19
35 Freon 11					CAS #: 75-69-4		
2.642	2.642 (0.478)	101	1155742	50.0000	49.357	80.00- 120.00	100.00
2.642	2.642 (0.478)	103	750983			34.98- 94.98	64.98
42 Ethanol					CAS #: 64-17-5		
2.978	2.978 (0.539)	45	222089	50.0000	46.881	80.00- 120.00	100.00
2.978	2.978 (0.539)	46	87165			9.25- 69.25	39.25
49 Freon 113					CAS #: 76-13-1		
3.293	3.293 (0.597)	151	887212	50.0000	49.451	80.00- 120.00	100.00
3.301	3.301 (0.598)	153	572706			34.55- 94.55	64.55
3.293	3.293 (0.597)	101	1005536			83.34- 143.34	113.34
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.322	3.322 (0.602)	98	304027	50.0000	49.789	80.00- 120.00	100.00
3.322	3.322 (0.602)	96	456702			120.22- 180.22	150.22
3.322	3.322 (0.602)	61	832554			243.84- 303.84	273.84
52 Acetone					CAS #: 67-64-1		
3.480	3.480 (0.630)	58	273219	50.0000	50.525	80.00- 120.00	100.00
3.480	3.480 (0.630)	43	813375			267.70- 327.70	297.70
56 Carbon Disulfide					CAS #: 75-15-0		
3.559	3.559 (0.645)	76	1275133	50.0000	48.933	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.644	3.644 (0.660)	45	1014173	50.0000	50.867	80.00- 120.00	100.00
3.644	3.644 (0.660)	43	167165			0.00- 46.48	16.48
3.644	3.644 (0.660)	59	40013			0.00- 33.95	3.95
58 3-Chloropropene					CAS #: 107-05-1		
3.802	3.802 (0.689)	76	217521	50.0000	49.828	80.00- 120.00	100.00
3.802	3.802 (0.689)	41	733635			307.27- 367.27	337.27
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.721)	49	670963	50.0000	49.439	80.00- 120.00	100.00
3.988	3.988 (0.722)	84	418504			32.37- 92.37	62.37
3.981	3.981 (0.721)	51	204590			0.49- 60.49	30.49
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.096	4.096 (0.742)	59	1167151	50.0000	48.687	80.00- 120.00	100.00
4.096	4.096 (0.742)	41	229690			0.00- 49.68	19.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol (continued)							
4.096	4.096 (0.742)	57	117429			0.00- 40.06	10.06
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.760)	73	1307366	50.0000	48.870	80.00- 120.00	100.00
4.196	4.196 (0.760)	57	381826			0.00- 59.21	29.21
4.196	4.196 (0.760)	41	333246			0.00- 55.49	25.49
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.225	4.225 (0.765)	98	299183	50.0000	49.586	80.00- 120.00	100.00
4.225	4.225 (0.765)	61	762883			224.99- 284.99	254.99
4.225	4.225 (0.765)	96	448080			119.77- 179.77	149.77
78 Hexane					CAS #: 110-54-3		
4.440	4.440 (0.804)	57	971376	50.0000	49.150	80.00- 120.00	100.00
4.432	4.432 (0.803)	43	599840			31.75- 91.75	61.75
4.440	4.440 (0.804)	86	123837			0.00- 42.75	12.75
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.712	4.712 (0.853)	63	965085	50.0000	48.394	80.00- 120.00	100.00
4.712	4.712 (0.853)	65	306919			1.80- 61.80	31.80
83 Isopropyl ether					CAS #: 108-20-3		
4.705	4.705 (0.852)	45	2180647	50.0000	49.719	80.00- 120.00	100.00
4.705	4.705 (0.852)	87	461326			0.00- 51.16	21.16
4.705	4.705 (0.852)	59	231168			0.00- 40.60	10.60
86 Vinyl Acetate					CAS #: 108-05-4		
4.755	4.755 (0.861)	86	134510	50.0000	49.561	80.00- 120.00	100.00
4.755	4.755 (0.861)	43	1802417			1309.99-1369.99	1339.99
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.056	5.056 (0.916)	59	1947945	50.0000	49.400	80.00- 120.00	100.00
5.056	5.056 (0.916)	87	664679			4.12- 64.12	34.12
5.056	5.056 (0.916)	41	330854			0.00- 46.98	16.98
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.292	5.292 (0.958)	98	387190	50.0000	49.933	80.00- 120.00	100.00
5.292	5.292 (0.958)	96	594608			123.57- 183.57	153.57
5.292	5.292 (0.958)	61	868464			194.30- 254.30	224.30
92 2-Butanone					CAS #: 78-93-3		
5.321	5.321 (0.964)	72	245376	50.0000	48.617	80.00- 120.00	100.00
5.321	5.321 (0.964)	43	1282901			492.83- 552.83	522.83
5.321	5.321 (0.964)	57	101146			11.22- 71.22	41.22

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Tetrahydrofuran					CAS #: 109-99-9		
5.514	5.514 (0.999)	42	717723	50.0000	49.874	80.00- 120.00	100.00
5.514	5.514 (0.999)	71	227286			1.67- 61.67	31.67
5.514	5.514 (0.999)	72	227227			1.66- 61.66	31.66
100 Chloroform					CAS #: 67-66-3		
5.586	5.586 (1.012)	83	1058934	50.0000	49.823	80.00- 120.00	100.00
5.586	5.586 (1.012)	85	694918			35.62- 95.62	65.62
102 Cyclohexane					CAS #: 110-82-7		
5.686	5.686 (1.030)	84	704508	50.0000	48.900	80.00- 120.00	100.00
5.686	5.686 (1.030)	56	1108033			127.28- 187.28	157.28
5.686	5.686 (1.030)	41	539882			46.63- 106.63	76.63
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.034)	97	1122770	50.0000	48.009	80.00- 120.00	100.00
5.707	5.707 (1.034)	99	718384			33.98- 93.98	63.98
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.054)	119	1184499	50.0000	48.675	80.00- 120.00	100.00
5.822	5.822 (1.054)	117	1195750			70.95- 130.95	100.95
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.090)	57	3510944	50.0000	50.353	80.00- 120.00	100.00
6.015	6.015 (1.090)	56	1085887			0.93- 60.93	30.93
6.015	6.015 (1.090)	41	774995			0.00- 52.07	22.07
116 Benzene					CAS #: 71-43-2		
6.037	6.037 (0.942)	78	1610244	50.0000	47.597	80.00- 120.00	100.00
6.037	6.037 (0.942)	77	368935			0.00- 52.91	22.91
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.101	6.101 (1.105)	87	383122	50.0000	49.082	80.00- 120.00	100.00
6.101	6.101 (1.105)	73	1543482			372.87- 432.87	402.87
6.101	6.101 (1.105)	55	489260			97.70- 157.70	127.70
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.130 (0.956)	62	745085	50.0000	50.666	80.00- 120.00	100.00
6.130	6.130 (0.956)	64	241079			2.36- 62.36	32.36
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.965)	71	584951	50.0000	48.456	80.00- 120.00	100.00
6.187	6.187 (0.965)	43	1302981			192.75- 252.75	222.75
6.187	6.187 (0.965)	57	718121			92.77- 152.77	122.77
125 Trichloroethene					CAS #: 79-01-6		
6.603	6.603 (1.030)	95	785201	50.0000	47.960	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.603	6.603 (1.030)	130	851522			78.45- 138.45	108.45
6.603	6.603 (1.030)	97	516515			35.78- 95.78	65.78
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.214)	83	1069604	50.0000	47.810	80.00- 120.00	100.00
6.703	6.703 (1.214)	98	492914			16.08- 76.08	46.08
6.703	6.703 (1.214)	55	1066922			69.75- 129.75	99.75
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.839	6.839 (1.067)	63	742266	50.0000	47.700	80.00- 120.00	100.00
6.839	6.839 (1.067)	62	524967			40.72- 100.72	70.72
6.839	6.839 (1.067)	41	371980			20.11- 80.11	50.11
136 1,4-Dioxane					CAS #: 123-91-1		
6.925	6.925 (1.080)	88	428834	50.0000	49.819	80.00- 120.00	100.00
6.925	6.925 (1.080)	58	374575			57.35- 117.35	87.35
6.925	6.925 (1.080)	57	111896			0.00- 56.09	26.09
138 Bromodichloromethane					CAS #: 75-27-4		
7.068	7.068 (1.103)	83	1234783	50.0000	49.331	80.00- 120.00	100.00
7.068	7.068 (1.103)	85	801555			34.91- 94.91	64.91
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.441	7.441 (1.161)	75	1047487	50.0000	51.779	80.00- 120.00	100.00
7.441	7.441 (1.161)	77	348213			3.24- 63.24	33.24
7.441	7.441 (1.161)	39	563940			23.84- 83.84	53.84
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.556	7.556 (1.179)	58	721341	50.0000	48.860	80.00- 120.00	100.00
7.556	7.556 (1.179)	43	1809824			220.90- 280.90	250.90
7.556	7.556 (1.179)	85	256832			5.60- 65.60	35.60
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.198)	91	2269096	50.0000	49.218	80.00- 120.00	100.00
7.677	7.677 (1.198)	92	1332138			28.71- 88.71	58.71
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.894)	75	975582	50.0000	50.155	80.00- 120.00	100.00
7.921	7.921 (0.894)	77	320425			2.84- 62.84	32.84
7.921	7.921 (0.894)	39	508703			22.14- 82.14	52.14
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.912)	97	800751	50.0000	47.326	80.00- 120.00	100.00
8.078	8.078 (0.912)	99	506920			33.31- 93.31	63.31
8.078	8.078 (0.912)	83	688182			55.94- 115.94	85.94

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
156 Tetrachloroethene						CAS #: 127-18-4	
8.114	8.114 (0.916)	166	1148301	50.0000	48.860	80.00- 120.00	100.00
8.114	8.114 (0.916)	129	876081			46.29- 106.29	76.29
8.114	8.114 (0.916)	131	854013			44.37- 104.37	74.37
158 2-Hexanone						CAS #: 591-78-6	
8.243	8.243 (0.930)	58	992773	50.0000	49.706	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	1809212			152.24- 212.24	182.24
8.243	8.243 (0.930)	100	170240			0.00- 47.15	17.15
160 Dibromochloromethane						CAS #: 124-48-1	
8.394	8.394 (0.947)	129	1567099	50.0000	49.448	80.00- 120.00	100.00
8.394	8.394 (0.947)	127	1203782			46.82- 106.82	76.82
161 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.508	8.508 (0.960)	107	1317214	50.0000	49.160	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	1245533			64.56- 124.56	94.56
165 Chlorobenzene						CAS #: 108-90-7	
8.881	8.881 (1.002)	112	2002352	50.0000	49.452	80.00- 120.00	100.00
8.881	8.881 (1.002)	114	641467			2.04- 62.04	32.04
8.881	8.881 (1.002)	77	1105874			25.23- 85.23	55.23
167 Ethyl Benzene						CAS #: 100-41-4	
8.931	8.931 (1.008)	106	1010483	50.0000	49.637	80.00- 120.00	100.00
8.931	8.931 (1.008)	91	3115354			278.30- 338.30	308.30
169 m,p-Xylene						CAS #: 108-38-3	
9.031	9.031 (1.019)	106	1268157	50.0000	50.713	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	2440216			162.42- 222.42	192.42
171 o-Xylene						CAS #: 95-47-6	
9.375	9.375 (1.058)	106	1207043	50.0000	49.620	80.00- 120.00	100.00
9.375	9.375 (1.058)	91	2483227			175.73- 235.73	205.73
172 Styrene						CAS #: 100-42-5	
9.396	9.396 (1.061)	104	1978634	50.0000	49.869	80.00- 120.00	100.00
9.389	9.389 (1.060)	78	928955			16.95- 76.95	46.95
174 Bromoform						CAS #: 75-25-2	
9.590	9.590 (1.082)	173	1568676	50.0000	50.680	80.00- 120.00	100.00
9.590	9.590 (1.082)	171	806700			21.43- 81.43	51.43
175 Cumene						CAS #: 98-82-8	
9.661	9.661 (1.091)	105	3692922	50.0000	48.685	80.00- 120.00	100.00
9.661	9.661 (1.091)	120	1019568			0.00- 57.61	27.61

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
175 Cumene (continued)							
9.661	9.661 (1.091)	51	396546			0.00- 40.74	10.74
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.977	9.977 (1.126)	83	1898942	50.0000	50.435	80.00- 120.00	100.00
9.977	9.977 (1.126)	85	1224989			34.51- 94.51	64.51
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.129)	91	4258699	50.0000	49.319	80.00- 120.00	100.00
10.005	10.005 (1.129)	120	1059657			0.00- 54.88	24.88
10.005	10.005 (1.129)	105	161306			0.00- 33.79	3.79
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.140)	120	1189209	50.0000	49.854	80.00- 120.00	100.00
10.098	10.098 (1.140)	105	3798092			289.38- 349.38	319.38
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.149	10.149 (1.146)	120	1579577	50.0000	47.658	80.00- 120.00	100.00
10.149	10.149 (1.146)	105	3180148			171.33- 231.33	201.33
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.183)	120	1470851	50.0000	48.720	80.00- 120.00	100.00
10.478	10.478 (1.183)	105	3124598			182.43- 242.43	212.43
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.765	10.765 (1.215)	146	2267232	50.0000	49.646	80.00- 120.00	100.00
10.765	10.765 (1.215)	148	1443684			33.68- 93.68	63.68
10.765	10.765 (1.215)	111	908637			10.08- 70.08	40.08
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.843	10.843 (1.224)	146	2291110	50.0000	48.599	80.00- 120.00	100.00
10.843	10.843 (1.224)	148	1461374			33.78- 93.78	63.78
10.843	10.843 (1.224)	111	888707			8.79- 68.79	38.79
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.958	10.958 (1.237)	91	2977839	50.0000	50.614	80.00- 120.00	100.00
10.958	10.958 (1.237)	126	695423			0.00- 53.35	23.35
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.173	11.173 (1.261)	146	2185126	50.0000	49.057	80.00- 120.00	100.00
11.173	11.173 (1.261)	148	1375805			32.96- 92.96	62.96
11.173	11.173 (1.261)	111	888371			10.66- 70.66	40.66
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.591	12.591 (1.421)	180	2106649	50.0000	49.180	80.00- 120.00	100.00
12.591	12.591 (1.421)	182	1996123			64.75- 124.75	94.75

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
227 Hexachlorobutadiene						CAS #: 87-68-3		
12.677	12.677	(1.431)	225	1568992	50.0000	49.379	80.00- 120.00	100.00
12.677	12.677	(1.431)	223	981236			32.54- 92.54	62.54
228 Naphthalene						CAS #: 91-20-3		
12.863	12.863	(1.452)	128	545305	5.00000	5.054	80.00- 120.00	100.00
12.863	12.863	(1.452)	127	66371			0.00- 42.17	12.17

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a011607.d
Lab Smp Id: ICAL Level #6
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msda.i/16jan17.b/a17q0116a.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 16-JAN-2017
Calibration Time: 17:59

Level: LOW
Sample Type: AIR

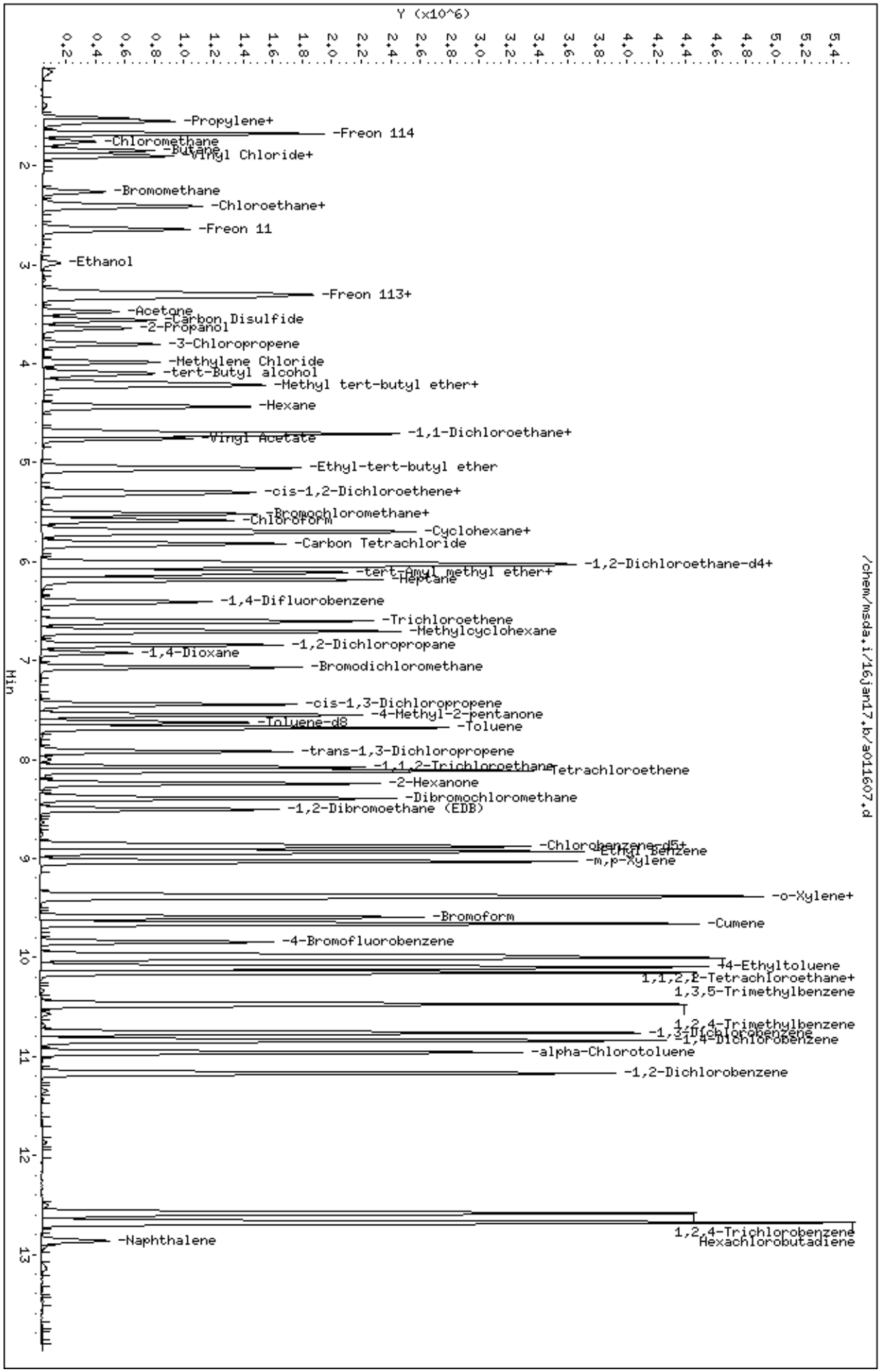
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	238300	142980	333620	238300	0.00
123 1,4-Difluorobenze	1061216	636730	1485702	1061216	0.00
163 Chlorobenzene-d5	912832	547699	1277965	912832	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	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/msda.i/16jan17.b/a011607.d
Date : 16-JAN-2017 17:59
Client ID:
Sample Info: 50mL 2819-200
Column phase: RTX-624

Instrument: msda.i
Operator: gd
Column diameter: 0.25



Page 1

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/16jan17.b/a011608.d
Lab Smp Id: ICAL Level #7
Inj Date : 16-JAN-2017 18:24
Operator : gd Inst ID: msda.i
Smp Info : 100mL 2819-200
Misc Info : 100ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/16jan17.b/a17q0116a.m
Meth Date : 17-Jan-2017 10:09 L7EZ Quant Type: ISTD
Cal Date : 16-JAN-2017 18:24 Cal File: a011608.d
Als bottle: 13 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12crv.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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.521	5.521 (1.000)	130	222910	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	174017			50.57- 110.57	78.07
5.521	5.521 (1.000)	49	331750			118.90- 178.90	148.83
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	982514	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	152314			0.00- 45.14	15.50
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	875448	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	445133			21.31- 81.31	50.85
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.058	6.058 (1.097)	65	298592	25.0000	25.371	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	168732			29.46- 89.46	56.51
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.620	7.620 (1.189)	98	1033283	25.0000	25.161	80.00- 120.00	100.00
7.620	7.620 (1.189)	70	102725			0.00- 39.82	9.94

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

$ 146 Toluene-d8 (continued)
  7.620   7.620 (1.189)   100    690893                    36.19-  96.19    66.86
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
  9.847   9.847 (1.112)   174    532676 25.0000   25.179  80.00- 120.00   100.00
  9.840   9.840 (1.111)    95    636737                    92.19- 152.19   119.54
  9.847   9.847 (1.112)   176    513715                    71.02- 131.02    96.44
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.524   1.524 (0.276)    41    787091 100.000   92.710  80.00- 120.00   100.00
  1.524   1.524 (0.276)    42    523255                    37.76-  97.76    66.48
  1.524   1.524 (0.276)    39    536234                    38.24-  98.24    68.13
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.553   1.553 (0.281)    85   2086379 100.000   103.15  80.00- 120.00   100.00
  1.553   1.553 (0.281)    87    679387                     2.19-  62.19    32.56
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.682   1.682 (0.305)   135   1677701 100.000   98.226  80.00- 120.00   100.00
  1.682   1.682 (0.305)   137    538322                     1.62-  61.62    32.09
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.760   1.760 (0.319)    50    768405 100.000   97.416  80.00- 120.00   100.00
  1.760   1.760 (0.319)    52    254908                     4.04-  64.04    33.17
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.846   1.846 (0.334)    58    185636 100.000   86.721  80.00- 120.00   100.00
  1.846   1.846 (0.334)    43   1444659                   761.67- 821.67   778.22
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.882   1.882 (0.341)    62    934891 100.000   99.847  80.00- 120.00   100.00
  1.882   1.882 (0.341)    64    286692                     0.00-  59.01    30.67
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.911   1.911 (0.346)    54    796200 100.000   96.538  80.00- 120.00   100.00
  1.911   1.911 (0.346)    39    735756                    63.95- 123.95    92.41
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.269   2.269 (0.411)    94    686925 100.000   89.241  80.00- 120.00   100.00
  2.269   2.269 (0.411)    96    640241                    64.81- 124.81    93.20
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.391   2.391 (0.433)    64    445207 100.000   97.185  80.00- 120.00   100.00
  2.391   2.391 (0.433)    66    142631                     1.96-  61.96    32.04
  2.391   2.391 (0.433)    49    133921                     1.70-  61.70    30.08
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
31 Isopentane					CAS #: 78-78-4		
2.412	2.412 (0.437)	43	1162696	100.000	97.513	80.00- 120.00	100.00
2.412	2.412 (0.437)	57	816695			40.19- 100.19	70.24
35 Freon 11					CAS #: 75-69-4		
2.649	2.649 (0.480)	101	2192980	100.000	100.12	80.00- 120.00	100.00
2.649	2.649 (0.480)	103	1409993			34.98- 94.98	64.30
42 Ethanol					CAS #: 64-17-5		
2.985	2.985 (0.541)	45	441233	100.000	99.572	80.00- 120.00	100.00
2.985	2.985 (0.541)	46	164897			9.25- 69.25	37.37
49 Freon 113					CAS #: 76-13-1		
3.300	3.300 (0.598)	151	1660120	100.000	98.920	80.00- 120.00	100.00
3.300	3.300 (0.598)	153	1056084			34.55- 94.55	63.61
3.300	3.300 (0.598)	101	1888503			83.34- 143.34	113.76
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.329	3.329 (0.603)	98	575854	100.000	100.82	80.00- 120.00	100.00
3.329	3.329 (0.603)	96	850253			120.22- 180.22	147.65
3.329	3.329 (0.603)	61	1593323			243.84- 303.84	276.69
52 Acetone					CAS #: 67-64-1		
3.480	3.480 (0.630)	58	508464	100.000	100.52	80.00- 120.00	100.00
3.480	3.480 (0.630)	43	1512062			267.70- 327.70	297.38
56 Carbon Disulfide					CAS #: 75-15-0		
3.558	3.558 (0.644)	76	2437242	100.000	99.986	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.644	3.644 (0.660)	45	1897930	100.000	101.76	80.00- 120.00	100.00
3.644	3.644 (0.660)	43	335384			0.00- 46.48	17.67
3.644	3.644 (0.660)	59	70966			0.00- 33.95	3.74
58 3-Chloropropene					CAS #: 107-05-1		
3.809	3.809 (0.690)	76	407178	100.000	99.713	80.00- 120.00	100.00
3.809	3.809 (0.690)	41	1366188			307.27- 367.27	335.53
66 Methylene Chloride					CAS #: 75-09-2		
3.988	3.988 (0.722)	49	1261906	100.000	99.401	80.00- 120.00	100.00
3.988	3.988 (0.722)	84	798641			32.37- 92.37	63.29
3.988	3.988 (0.722)	51	384422			0.49- 60.49	30.46
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.096	4.096 (0.742)	59	2217597	100.000	98.892	80.00- 120.00	100.00
4.096	4.096 (0.742)	41	441498			0.00- 49.68	19.91

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol (continued)							
4.103	4.103 (0.743)	57	219195			0.00- 40.06	9.88
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.760)	73	2409147	100.000	96.273	80.00- 120.00	100.00
4.196	4.196 (0.760)	57	696766			0.00- 59.21	28.92
4.196	4.196 (0.760)	41	627452			0.00- 55.49	26.04
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.224	4.224 (0.765)	98	554622	100.000	98.268	80.00- 120.00	100.00
4.224	4.224 (0.765)	61	1403330			224.99- 284.99	253.02
4.224	4.224 (0.765)	96	855913			119.77- 179.77	154.32
78 Hexane					CAS #: 110-54-3		
4.439	4.439 (0.804)	57	1824105	100.000	98.669	80.00- 120.00	100.00
4.439	4.439 (0.804)	43	1140199			31.75- 91.75	62.51
4.439	4.439 (0.804)	86	228505			0.00- 42.75	12.53
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.719	4.719 (0.855)	63	1839063	100.000	98.587	80.00- 120.00	100.00
4.719	4.719 (0.855)	65	563924			1.80- 61.80	30.66
83 Isopropyl ether					CAS #: 108-20-3		
4.704	4.704 (0.852)	45	4032781	100.000	98.296	80.00- 120.00	100.00
4.704	4.704 (0.852)	87	868900			0.00- 51.16	21.55
4.704	4.704 (0.852)	59	432840			0.00- 40.60	10.73
86 Vinyl Acetate					CAS #: 108-05-4		
4.762	4.762 (0.862)	86	251176	100.000	98.937	80.00- 120.00	100.00
4.755	4.755 (0.861)	43	3397462			1309.99-1369.99	1352.62
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.055	5.055 (0.916)	59	3676172	100.000	99.665	80.00- 120.00	100.00
5.055	5.055 (0.916)	87	1239637			4.12- 64.12	33.72
5.055	5.055 (0.916)	41	626158			0.00- 46.98	17.03
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.292	5.292 (0.958)	98	732292	100.000	100.96	80.00- 120.00	100.00
5.292	5.292 (0.958)	96	1096339			123.57- 183.57	149.71
5.292	5.292 (0.958)	61	1654807			194.30- 254.30	225.98
92 2-Butanone					CAS #: 78-93-3		
5.320	5.320 (0.964)	72	467271	100.000	98.973	80.00- 120.00	100.00
5.320	5.320 (0.964)	43	2411486			492.83- 552.83	516.08
5.320	5.320 (0.964)	57	191460			11.22- 71.22	40.97

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Tetrahydrofuran					CAS #: 109-99-9		
5.514	5.514 (0.999)	42	1373990	100.000	102.07	80.00- 120.00	100.00
5.514	5.514 (0.999)	71	427276			1.67- 61.67	31.10
5.514	5.514 (0.999)	72	442951			1.66- 61.66	32.24
100 Chloroform					CAS #: 67-66-3		
5.585	5.585 (1.012)	83	2005760	100.000	100.89	80.00- 120.00	100.00
5.585	5.585 (1.012)	85	1309302			35.62- 95.62	65.28
102 Cyclohexane					CAS #: 110-82-7		
5.686	5.686 (1.030)	84	1315899	100.000	97.643	80.00- 120.00	100.00
5.686	5.686 (1.030)	56	2033031			127.28- 187.28	154.50
5.686	5.686 (1.030)	41	1010887			46.63- 106.63	76.82
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.034)	97	2068869	100.000	94.571	80.00- 120.00	100.00
5.707	5.707 (1.034)	99	1331841			33.98- 93.98	64.38
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.054)	119	2226884	100.000	97.827	80.00- 120.00	100.00
5.822	5.822 (1.054)	117	2239595			70.95- 130.95	100.57
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.090)	57	6590401	100.000	101.04	80.00- 120.00	100.00
6.015	6.015 (1.090)	56	2025811			0.93- 60.93	30.74
6.015	6.015 (1.090)	41	1482441			0.00- 52.07	22.49
116 Benzene					CAS #: 71-43-2		
6.037	6.037 (0.942)	78	3015652	100.000	96.279	80.00- 120.00	100.00
6.037	6.037 (0.942)	77	711855			0.00- 52.91	23.61
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.101	6.101 (1.105)	87	727489	100.000	99.634	80.00- 120.00	100.00
6.101	6.101 (1.105)	73	2884821			372.87- 432.87	396.54
6.101	6.101 (1.105)	55	902044			97.70- 157.70	123.99
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.130 (0.956)	62	1399043	100.000	102.76	80.00- 120.00	100.00
6.130	6.130 (0.956)	64	440566			2.36- 62.36	31.49
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.965)	71	1076648	100.000	96.332	80.00- 120.00	100.00
6.187	6.187 (0.965)	43	2371051			192.75- 252.75	220.23
6.187	6.187 (0.965)	57	1330079			92.77- 152.77	123.54
125 Trichloroethene					CAS #: 79-01-6		
6.603	6.603 (1.030)	95	1445371	100.000	95.356	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.603	6.603 (1.030)	130	1608281			78.45- 138.45	111.27
6.603	6.603 (1.030)	97	964382			35.78- 95.78	66.72
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.214)	83	1983920	100.000	94.802	80.00- 120.00	100.00
6.703	6.703 (1.214)	98	921851			16.08- 76.08	46.47
6.703	6.703 (1.214)	55	1970549			69.75- 129.75	99.33
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.839	6.839 (1.067)	63	1388791	100.000	96.397	80.00- 120.00	100.00
6.839	6.839 (1.067)	62	974085			40.72- 100.72	70.14
6.839	6.839 (1.067)	41	664614			20.11- 80.11	47.86
136 1,4-Dioxane					CAS #: 123-91-1		
6.925	6.925 (1.080)	88	797105	100.000	100.02	80.00- 120.00	100.00
6.925	6.925 (1.080)	58	702543			57.35- 117.35	88.14
6.925	6.925 (1.080)	57	217613			0.00- 56.09	27.30
138 Bromodichloromethane					CAS #: 75-27-4		
7.068	7.068 (1.103)	83	2336561	100.000	100.83	80.00- 120.00	100.00
7.068	7.068 (1.103)	85	1517320			34.91- 94.91	64.94
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.441	7.441 (1.161)	75	1956691	100.000	104.47	80.00- 120.00	100.00
7.441	7.441 (1.161)	77	654002			3.24- 63.24	33.42
7.441	7.441 (1.161)	39	1043502			23.84- 83.84	53.33
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.178)	58	1319621	100.000	96.545	80.00- 120.00	100.00
7.548	7.548 (1.178)	43	3359177			220.90- 280.90	254.56
7.548	7.548 (1.178)	85	485830			5.60- 65.60	36.82
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.198)	91	4228578	100.000	99.067	80.00- 120.00	100.00
7.677	7.677 (1.198)	92	2450581			28.71- 88.71	57.95
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.894)	75	1842193	100.000	98.751	80.00- 120.00	100.00
7.921	7.921 (0.894)	77	604607			2.84- 62.84	32.82
7.921	7.921 (0.894)	39	949900			22.14- 82.14	51.56
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.912)	97	1498028	100.000	92.318	80.00- 120.00	100.00
8.078	8.078 (0.912)	99	918965			33.31- 93.31	61.34
8.078	8.078 (0.912)	83	1278006			55.94- 115.94	85.31

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

  156 Tetrachloroethene                            CAS #: 127-18-4
  8.114   8.114 (0.916)   166   2151338 100.000   95.449  80.00- 120.00   100.00
  8.114   8.114 (0.916)   129   1636067                   46.29- 106.29    76.05
  8.114   8.114 (0.916)   131   1593049                   44.37- 104.37    74.05
-------------------------------------------------------------------------------
  158 2-Hexanone                                   CAS #: 591-78-6
  8.243   8.243 (0.930)    58   1869923 100.000   97.620  80.00- 120.00   100.00
  8.243   8.243 (0.930)    43   3367484                  152.24- 212.24   180.09
  8.243   8.243 (0.930)   100    306731                    0.00-  47.15    16.40
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
  8.386   8.386 (0.947)   129   2908508 100.000   95.694  80.00- 120.00   100.00
  8.386   8.386 (0.947)   127   2264201                   46.82- 106.82    77.85
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
  8.508   8.508 (0.960)   107   2448518 100.000   95.284  80.00- 120.00   100.00
  8.508   8.508 (0.960)   109   2318021                   64.56- 124.56    94.67
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
  8.880   8.880 (1.002)   112   3709071 100.000   95.515  80.00- 120.00   100.00
  8.880   8.880 (1.002)   114   1183985                    2.04-  62.04    31.92
  8.880   8.880 (1.002)    77   2060604                   25.23-  85.23    55.56
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.931   8.931 (1.008)   106   1870117 100.000   95.786  80.00- 120.00   100.00
  8.931   8.931 (1.008)    91   5727691                  278.30- 338.30   306.27
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  9.031   9.031 (1.019)   106   2315678 100.000   96.557  80.00- 120.00   100.00
  9.031   9.031 (1.019)    91   4524266                  162.42- 222.42   195.38
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.375   9.375 (1.058)   106   2229945 100.000   95.586  80.00- 120.00   100.00
  9.375   9.375 (1.058)    91   4587876                  175.73- 235.73   205.74
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.389   9.389 (1.060)   104   3657284 100.000   96.114  80.00- 120.00   100.00
  9.389   9.389 (1.060)    78   1695804                   16.95-  76.95    46.37
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.590   9.590 (1.082)   173   2899268 100.000   97.668  80.00- 120.00   100.00
  9.590   9.590 (1.082)   171   1512538                   21.43-  81.43    52.17
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
  9.661   9.661 (1.091)   105   6744956 100.000   92.719  80.00- 120.00   100.00
  9.661   9.661 (1.091)   120   1856833                    0.00-  57.61    27.53
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
175 Cumene (continued)							
9.661	9.661 (1.091)	51	743485			0.00- 40.74	11.02
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.126)	83	3492783	100.000	96.728	80.00- 120.00	100.00
9.976	9.976 (1.126)	85	2251421			34.51- 94.51	64.46
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.129)	91	7831154	100.000	94.563	80.00- 120.00	100.00
10.005	10.005 (1.129)	120	1941411			0.00- 54.88	24.79
10.005	10.005 (1.129)	105	294819			0.00- 33.79	3.76
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.140)	120	2229545	100.000	97.457	80.00- 120.00	100.00
10.098	10.098 (1.140)	105	6982941			289.38- 349.38	313.20
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.148	10.148 (1.146)	120	2876965	100.000	90.509	80.00- 120.00	100.00
10.148	10.148 (1.146)	105	5760067			171.33- 231.33	200.21
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.183)	120	2714779	100.000	93.764	80.00- 120.00	100.00
10.478	10.478 (1.183)	105	5817141			182.43- 242.43	214.28
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.764	10.764 (1.215)	146	4227228	100.000	96.516	80.00- 120.00	100.00
10.764	10.764 (1.215)	148	2659737			33.68- 93.68	62.92
10.764	10.764 (1.215)	111	1657933			10.08- 70.08	39.22
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.843	10.843 (1.224)	146	4237052	100.000	93.714	80.00- 120.00	100.00
10.843	10.843 (1.224)	148	2678225			33.78- 93.78	63.21
10.843	10.843 (1.224)	111	1599878			8.79- 68.79	37.76
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.958	10.958 (1.237)	91	5504281	100.000	97.550	80.00- 120.00	100.00
10.958	10.958 (1.237)	126	1272979			0.00- 53.35	23.13
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.173	11.173 (1.261)	146	3996026	100.000	93.544	80.00- 120.00	100.00
11.173	11.173 (1.261)	148	2573256			32.96- 92.96	64.40
11.173	11.173 (1.261)	111	1646683			10.66- 70.66	41.21
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.591	12.591 (1.421)	180	3940084	100.000	95.909	80.00- 120.00	100.00
12.591	12.591 (1.421)	182	3773024			64.75- 124.75	95.76

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
227 Hexachlorobutadiene						CAS #: 87-68-3		
12.677	12.677	(1.431)	225	2946043	100.000	96.676	80.00- 120.00	100.00
12.677	12.677	(1.431)	223	1830636			32.54- 92.54	62.14
228 Naphthalene						CAS #: 91-20-3		
12.863	12.863	(1.452)	128	1025413	10.0000	9.909	80.00- 120.00	100.00
12.863	12.863	(1.452)	127	128777			0.00- 42.17	12.56

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a011608.d
Lab Smp Id: ICAL Level #7
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msda.i/16jan17.b/a17q0116a.m
Misc Info: 100ppbv(200ppbv)

Calibration Date: 16-JAN-2017
Calibration Time: 17:59

Level: LOW
Sample Type: AIR

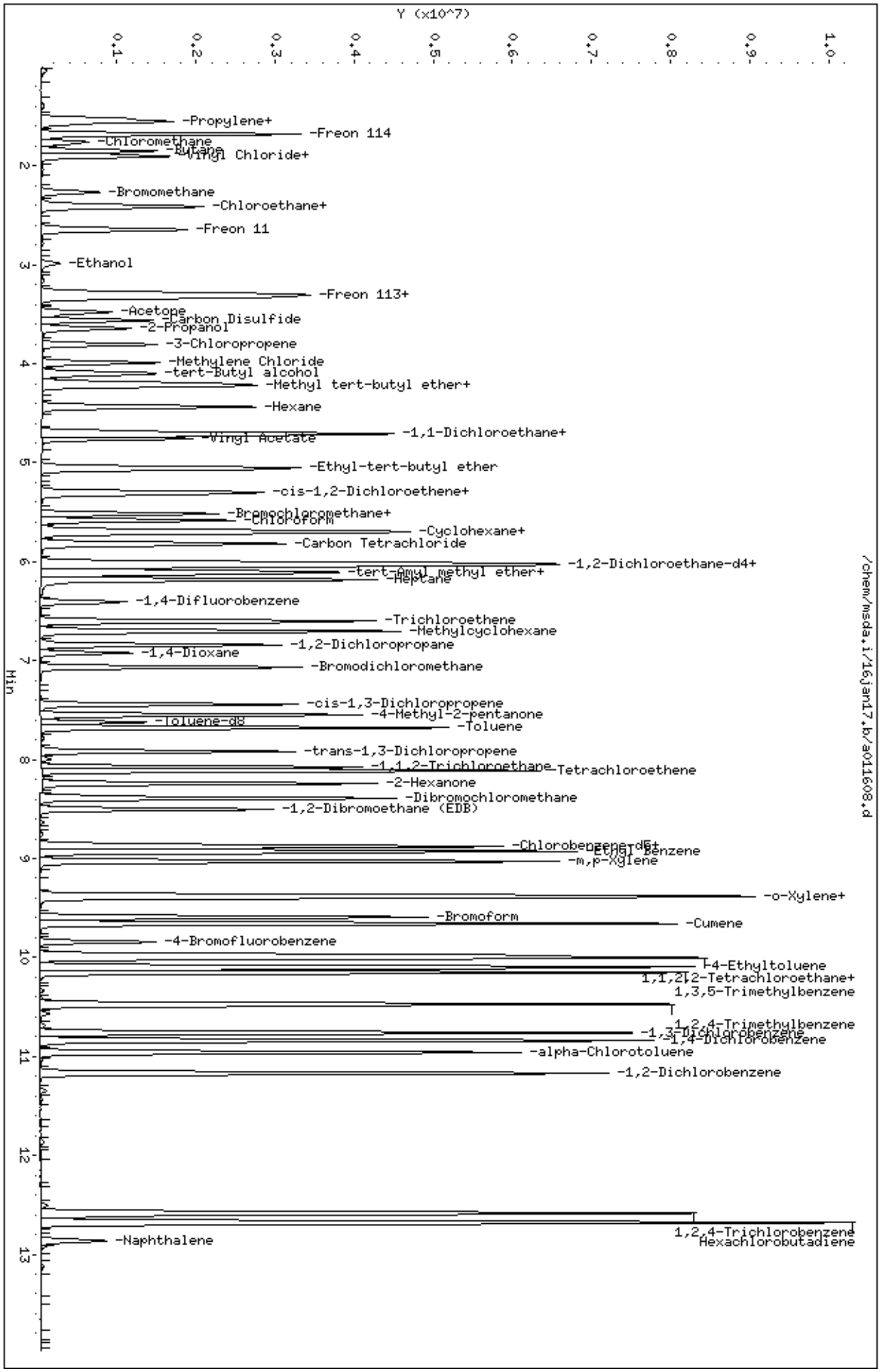
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	238300	142980	333620	222910	-6.46
123 1,4-Difluorobenze	1061216	636730	1485702	982514	-7.42
163 Chlorobenzene-d5	912832	547699	1277965	875448	-4.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	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/msda.i/16jan17.b/a011608.d
Date : 16-JAN-2017 18:24
Client ID:
Sample Info: 100mL 2819-200
Column phase: RTX-624

Instrument: msda.i
Operator: gd
Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/16jan17.b/a011609.d
Lab Smp Id: ICAL Level #8
Inj Date : 16-JAN-2017 18:50
Operator : gd Inst ID: msda.i
Smp Info : 200mL 2819-200
Misc Info : 200ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/16jan17.b/a17q0116a.m
Meth Date : 17-Jan-2017 10:09 L7EZ Quant Type: ISTD
Cal Date : 16-JAN-2017 18:50 Cal File: a011609.d
Als bottle: 13 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12crv.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
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	239320	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	178883			50.57- 110.57	74.75
5.521	5.521 (1.000)	49	360262			118.90- 178.90	150.54
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	1012329	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	156941			0.00- 45.14	15.50
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	926134	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	465908			21.31- 81.31	50.31
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.058	6.058 (1.096)	65	331660	25.0000	26.248	80.00- 120.00	100.00
6.058	6.058 (1.096)	67	183960			29.46- 89.46	55.47
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.620	7.620 (1.189)	98	1086477	25.0000	25.677	80.00- 120.00	100.00
7.620	7.620 (1.189)	70	110590			0.00- 39.82	10.18

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

$ 146 Toluene-d8 (continued)
  7.620   7.620 (1.189)   100    722981                   36.19-  96.19    66.54
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
  9.848   9.848 (1.112)   174    556158 25.0000   24.851  80.00- 120.00   100.00
  9.840   9.840 (1.111)    95    671283                   92.19- 152.19   120.70
  9.848   9.848 (1.112)   176    558870                   71.02- 131.02   100.49
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.524   1.524 (0.276)    41   1671179 200.000   183.35  80.00- 120.00   100.00
  1.524   1.524 (0.276)    42   1137913                   37.76-  97.76    68.09
  1.524   1.524 (0.276)    39   1175838                   38.24-  98.24    70.36
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.560   1.560 (0.282)    85   4446670 200.000   204.76  80.00- 120.00   100.00(A)
  1.560   1.560 (0.282)    87   1433645                    2.19-  62.19    32.24
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.682   1.682 (0.304)   135   3588688 200.000   195.70  80.00- 120.00   100.00
  1.682   1.682 (0.304)   137   1141389                    1.62-  61.62    31.81
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.768   1.768 (0.320)    50   1489030 200.000   175.83  80.00- 120.00   100.00
  1.768   1.768 (0.320)    52    521343                    4.04-  64.04    35.01
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.854   1.854 (0.335)    58    397769 200.000   173.08  80.00- 120.00   100.00
  1.854   1.854 (0.335)    43   3092806                  761.67- 821.67   777.54
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.882   1.882 (0.340)    62   1979638 200.000   196.93  80.00- 120.00   100.00
  1.882   1.882 (0.340)    64    575608                    0.00-  59.01    29.08
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.911   1.911 (0.346)    54   1680625 200.000   189.80  80.00- 120.00   100.00
  1.911   1.911 (0.346)    39   1576779                   63.95- 123.95    93.82
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.269   2.269 (0.410)    94   1499341 200.000   181.43  80.00- 120.00   100.00
  2.269   2.269 (0.410)    96   1405862                   64.81- 124.81    93.77
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.391   2.391 (0.432)    64    977689 200.000   198.79  80.00- 120.00   100.00
  2.391   2.391 (0.432)    66    296765                    1.96-  61.96    30.35
  2.391   2.391 (0.432)    49    300660                    1.70-  61.70    30.75
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
31 Isopentane					CAS #: 78-78-4		
2.412	2.412 (0.436)	43	2451551	200.000	191.51	80.00- 120.00	100.00
2.412	2.412 (0.436)	57	1698480			40.19- 100.19	69.28
35 Freon 11					CAS #: 75-69-4		
2.649	2.649 (0.479)	101	4635242	200.000	197.11	80.00- 120.00	100.00
2.649	2.649 (0.479)	103	3011662			34.98- 94.98	64.97
42 Ethanol					CAS #: 64-17-5		
2.978	2.978 (0.539)	45	956274	200.000	201.00	80.00- 120.00	100.00(A)
2.978	2.978 (0.539)	46	365479			9.25- 69.25	38.22
49 Freon 113					CAS #: 76-13-1		
3.301	3.301 (0.597)	151	3505216	200.000	194.54	80.00- 120.00	100.00
3.301	3.301 (0.597)	153	2218421			34.55- 94.55	63.29
3.293	3.293 (0.596)	101	3970765			83.34- 143.34	113.28
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.329	3.329 (0.602)	98	1190196	200.000	194.08	80.00- 120.00	100.00
3.329	3.329 (0.602)	96	1784430			120.22- 180.22	149.93
3.329	3.329 (0.602)	61	3293290			243.84- 303.84	276.70
52 Acetone					CAS #: 67-64-1		
3.487	3.487 (0.631)	58	1059875	200.000	195.16	80.00- 120.00	100.00
3.487	3.487 (0.631)	43	3192248			267.70- 327.70	301.19
56 Carbon Disulfide					CAS #: 75-15-0		
3.566	3.566 (0.645)	76	5199402	200.000	198.68	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.644	3.644 (0.659)	45	3892447	200.000	194.40	80.00- 120.00	100.00
3.644	3.644 (0.659)	43	665977			0.00- 46.48	17.11
3.644	3.644 (0.659)	59	149915			0.00- 33.95	3.85
58 3-Chloropropene					CAS #: 107-05-1		
3.809	3.809 (0.689)	76	870091	200.000	198.46	80.00- 120.00	100.00
3.802	3.802 (0.688)	41	2866057			307.27- 367.27	329.40
66 Methylene Chloride					CAS #: 75-09-2		
3.988	3.988 (0.721)	49	2676763	200.000	196.39	80.00- 120.00	100.00
3.988	3.988 (0.721)	84	1675896			32.37- 92.37	62.61
3.988	3.988 (0.721)	51	824512			0.49- 60.49	30.80
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.096	4.096 (0.741)	59	4605238	200.000	191.28	80.00- 120.00	100.00
4.096	4.096 (0.741)	41	899060			0.00- 49.68	19.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol (continued)							
4.096	4.096 (0.741)	57	461967			0.00- 40.06	10.03
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.759)	73	5117551	200.000	190.48	80.00- 120.00	100.00
4.196	4.196 (0.759)	57	1477505			0.00- 59.21	28.87
4.196	4.196 (0.759)	41	1303673			0.00- 55.49	25.47
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.225	4.225 (0.764)	98	1174583	200.000	193.84	80.00- 120.00	100.00
4.225	4.225 (0.764)	61	2960931			224.99- 284.99	252.08
4.225	4.225 (0.764)	96	1785809			119.77- 179.77	152.04
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.802)	57	3817664	200.000	192.34	80.00- 120.00	100.00
4.432	4.432 (0.802)	43	2400763			31.75- 91.75	62.89
4.439	4.439 (0.803)	86	477484			0.00- 42.75	12.51
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.712	4.712 (0.852)	63	3827370	200.000	191.10	80.00- 120.00	100.00
4.719	4.719 (0.854)	65	1173004			1.80- 61.80	30.65
83 Isopropyl ether					CAS #: 108-20-3		
4.697	4.697 (0.850)	45	8436101	200.000	191.52	80.00- 120.00	100.00
4.697	4.697 (0.850)	87	1781285			0.00- 51.16	21.12
4.697	4.697 (0.850)	59	918462			0.00- 40.60	10.89
86 Vinyl Acetate					CAS #: 108-05-4		
4.755	4.755 (0.860)	86	522232	200.000	191.60	80.00- 120.00	100.00
4.755	4.755 (0.860)	43	6945309			1309.99-1369.99	1329.93
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.056	5.056 (0.914)	59	7739031	200.000	195.43	80.00- 120.00	100.00
5.056	5.056 (0.914)	87	2622532			4.12- 64.12	33.89
5.056	5.056 (0.914)	41	1293101			0.00- 46.98	16.71
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.292	5.292 (0.957)	98	1512895	200.000	194.28	80.00- 120.00	100.00
5.292	5.292 (0.957)	96	2299818			123.57- 183.57	152.01
5.292	5.292 (0.957)	61	3457654			194.30- 254.30	228.55
92 2-Butanone					CAS #: 78-93-3		
5.313	5.313 (0.961)	72	974280	200.000	192.21	80.00- 120.00	100.00
5.313	5.313 (0.961)	43	5037220			492.83- 552.83	517.02
5.313	5.313 (0.961)	57	395241			11.22- 71.22	40.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Tetrahydrofuran					CAS #: 109-99-9		
5.514	5.514 (0.997)	42	2867022	200.000	198.38	80.00- 120.00	100.00
5.514	5.514 (0.997)	71	899151			1.67- 61.67	31.36
5.514	5.514 (0.997)	72	916288			1.66- 61.66	31.96
100 Chloroform					CAS #: 67-66-3		
5.586	5.586 (1.010)	83	4176473	200.000	195.67	80.00- 120.00	100.00
5.586	5.586 (1.010)	85	2747774			35.62- 95.62	65.79
102 Cyclohexane					CAS #: 110-82-7		
5.686	5.686 (1.028)	84	2713985	200.000	187.58	80.00- 120.00	100.00
5.686	5.686 (1.028)	56	4205538			127.28- 187.28	154.96
5.686	5.686 (1.028)	41	2062703			46.63- 106.63	76.00
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.032)	97	4312599	200.000	183.62	80.00- 120.00	100.00
5.707	5.707 (1.032)	99	2795422			33.98- 93.98	64.82
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.053)	119	4662352	200.000	190.77	80.00- 120.00	100.00
5.822	5.822 (1.053)	117	4665250			70.95- 130.95	100.06
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.088)	57	13538809	200.000	193.34	80.00- 120.00	100.00
6.015	6.015 (1.088)	56	4178314			0.93- 60.93	30.86
6.015	6.015 (1.088)	41	3013095			0.00- 52.07	22.26
116 Benzene					CAS #: 71-43-2		
6.037	6.037 (0.942)	78	6217843	200.000	192.67	80.00- 120.00	100.00
6.037	6.037 (0.942)	77	1435092			0.00- 52.91	23.08
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.101	6.101 (1.104)	87	1528786	200.000	195.02	80.00- 120.00	100.00
6.101	6.101 (1.104)	73	6053595			372.87- 432.87	395.97
6.101	6.101 (1.104)	55	1875942			97.70- 157.70	122.71
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.130 (0.956)	62	2893175	200.000	206.24	80.00- 120.00	100.00(A)
6.130	6.130 (0.956)	64	887685			2.36- 62.36	30.68
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.965)	71	2239559	200.000	194.48	80.00- 120.00	100.00
6.187	6.187 (0.965)	43	4902312			192.75- 252.75	218.90
6.187	6.187 (0.965)	57	2732558			92.77- 152.77	122.01
125 Trichloroethene					CAS #: 79-01-6		
6.603	6.603 (1.030)	95	3051446	200.000	195.38	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.603	6.603 (1.030)	130	3346946			78.45- 138.45	109.68
6.603	6.603 (1.030)	97	2036355			35.78- 95.78	66.73
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.212)	83	4133950	200.000	184.00	80.00- 120.00	100.00
6.703	6.703 (1.212)	98	1906456			16.08- 76.08	46.12
6.703	6.703 (1.212)	55	4126986			69.75- 129.75	99.83
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.839	6.839 (1.067)	63	2885715	200.000	194.40	80.00- 120.00	100.00
6.839	6.839 (1.067)	62	2025263			40.72- 100.72	70.18
6.839	6.839 (1.067)	41	1395790			20.11- 80.11	48.37
136 1,4-Dioxane					CAS #: 123-91-1		
6.925	6.925 (1.080)	88	1670102	200.000	203.39	80.00- 120.00	100.00(A)
6.925	6.925 (1.080)	58	1455151			57.35- 117.35	87.13
6.925	6.925 (1.080)	57	455419			0.00- 56.09	27.27
138 Bromodichloromethane					CAS #: 75-27-4		
7.068	7.068 (1.103)	83	4862201	200.000	203.63	80.00- 120.00	100.00(A)
7.068	7.068 (1.103)	85	3133972			34.91- 94.91	64.46
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.441	7.441 (1.161)	75	4079081	200.000	211.37	80.00- 120.00	100.00(A)
7.441	7.441 (1.161)	77	1361231			3.24- 63.24	33.37
7.441	7.441 (1.161)	39	2191375			23.84- 83.84	53.72
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.178)	58	2755219	200.000	195.64	80.00- 120.00	100.00
7.548	7.548 (1.178)	43	6858352			220.90- 280.90	248.92
7.548	7.548 (1.178)	85	996194			5.60- 65.60	36.16
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.198)	91	8716650	200.000	198.20	80.00- 120.00	100.00
7.677	7.677 (1.198)	92	5105297			28.71- 88.71	58.57
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.894)	75	3843511	200.000	194.76	80.00- 120.00	100.00
7.921	7.921 (0.894)	77	1272219			2.84- 62.84	33.10
7.921	7.921 (0.894)	39	2010428			22.14- 82.14	52.31
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.912)	97	3101396	200.000	180.67	80.00- 120.00	100.00
8.078	8.078 (0.912)	99	1919245			33.31- 93.31	61.88
8.078	8.078 (0.912)	83	2662362			55.94- 115.94	85.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
156 Tetrachloroethene					CAS #: 127-18-4		
8.114	8.114 (0.916)	166	4420481	200.000	185.39	80.00- 120.00	100.00
8.114	8.114 (0.916)	129	3347021			46.29- 106.29	75.72
8.114	8.114 (0.916)	131	3275796			44.37- 104.37	74.10
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	3857302	200.000	190.35	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	6940209			152.24- 212.24	179.92
8.243	8.243 (0.930)	100	648072			0.00- 47.15	16.80
160 Dibromochloromethane					CAS #: 124-48-1		
8.386	8.386 (0.947)	129	6133356	200.000	190.75	80.00- 120.00	100.00
8.386	8.386 (0.947)	127	4703791			46.82- 106.82	76.69
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.501	8.501 (0.960)	107	5053022	200.000	185.88	80.00- 120.00	100.00
8.501	8.501 (0.960)	109	4806073			64.56- 124.56	95.11
165 Chlorobenzene					CAS #: 108-90-7		
8.881	8.881 (1.002)	112	7690238	200.000	187.20	80.00- 120.00	100.00
8.881	8.881 (1.002)	114	2457354			2.04- 62.04	31.95
8.881	8.881 (1.002)	77	4295395			25.23- 85.23	55.86
167 Ethyl Benzene					CAS #: 100-41-4		
8.931	8.931 (1.008)	106	3822162	200.000	185.05	80.00- 120.00	100.00
8.931	8.931 (1.008)	91	11623852			278.30- 338.30	304.12
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	4783382	200.000	188.54	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	9290169			162.42- 222.42	194.22
171 o-Xylene					CAS #: 95-47-6		
9.368	9.368 (1.057)	106	4626251	200.000	187.45	80.00- 120.00	100.00
9.368	9.368 (1.057)	91	9425106			175.73- 235.73	203.73
172 Styrene					CAS #: 100-42-5		
9.389	9.389 (1.060)	104	7476057	200.000	185.72	80.00- 120.00	100.00
9.389	9.389 (1.060)	78	3445291			16.95- 76.95	46.08
174 Bromoform					CAS #: 75-25-2		
9.590	9.590 (1.082)	173	6005127	200.000	191.22	80.00- 120.00	100.00
9.590	9.590 (1.082)	171	3093611			21.43- 81.43	51.52
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.091)	105	13782450	200.000	179.09	80.00- 120.00	100.00
9.661	9.661 (1.091)	120	3853574			0.00- 57.61	27.96

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
175 Cumene (continued)							
9.661	9.661 (1.091)	51	1518174			0.00- 40.74	11.02
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.977	9.977 (1.126)	83	7166451	200.000	187.60	80.00- 120.00	100.00
9.977	9.977 (1.126)	85	4632681			34.51- 94.51	64.64
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.129)	91	15600480	200.000	178.07	80.00- 120.00	100.00
10.005	10.005 (1.129)	120	3942154			0.00- 54.88	25.27
10.005	10.005 (1.129)	105	599162			0.00- 33.79	3.84
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.140)	120	4542597	200.000	187.70	80.00- 120.00	100.00
10.098	10.098 (1.140)	105	14208869			289.38- 349.38	312.79
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.148	10.148 (1.146)	120	5933104	200.000	176.44	80.00- 120.00	100.00
10.148	10.148 (1.146)	105	11789971			171.33- 231.33	198.72
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.183)	120	5628332	200.000	183.76	80.00- 120.00	100.00
10.478	10.478 (1.183)	105	11801570			182.43- 242.43	209.68
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.764	10.764 (1.215)	146	8605312	200.000	185.72	80.00- 120.00	100.00
10.764	10.764 (1.215)	148	5515982			33.68- 93.68	64.10
10.757	10.757 (1.214)	111	3435655			10.08- 70.08	39.92
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.843	10.843 (1.224)	146	8641258	200.000	180.66	80.00- 120.00	100.00
10.843	10.843 (1.224)	148	5494609			33.78- 93.78	63.59
10.843	10.843 (1.224)	111	3288830			8.79- 68.79	38.06
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.958	10.958 (1.237)	91	11555480	200.000	193.58	80.00- 120.00	100.00
10.958	10.958 (1.237)	126	2701153			0.00- 53.35	23.38
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.173	11.173 (1.261)	146	8273533	200.000	183.08	80.00- 120.00	100.00
11.173	11.173 (1.261)	148	5271030			32.96- 92.96	63.71
11.173	11.173 (1.261)	111	3374361			10.66- 70.66	40.79
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.591	12.591 (1.421)	180	8206010	200.000	188.82	80.00- 120.00	100.00
12.591	12.591 (1.421)	182	7800371			64.75- 124.75	95.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.677	12.677 (1.431)	225	5953248	200.000	184.67	80.00- 120.00	100.00
12.677	12.677 (1.431)	223	3759794			32.54- 92.54	63.16
228 Naphthalene					CAS #: 91-20-3		
12.863	12.863 (1.452)	128	2159838	20.0000	19.730	80.00- 120.00	100.00
12.863	12.863 (1.452)	127	272366			0.00- 42.17	12.61

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: msda.i
Lab File ID: a011609.d
Lab Smp Id: ICAL Level #8
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msda.i/16jan17.b/a17q0116a.m
Misc Info: 200ppbv(200ppbv)

Calibration Date: 16-JAN-2017
Calibration Time: 17:59

Level: LOW
Sample Type: AIR

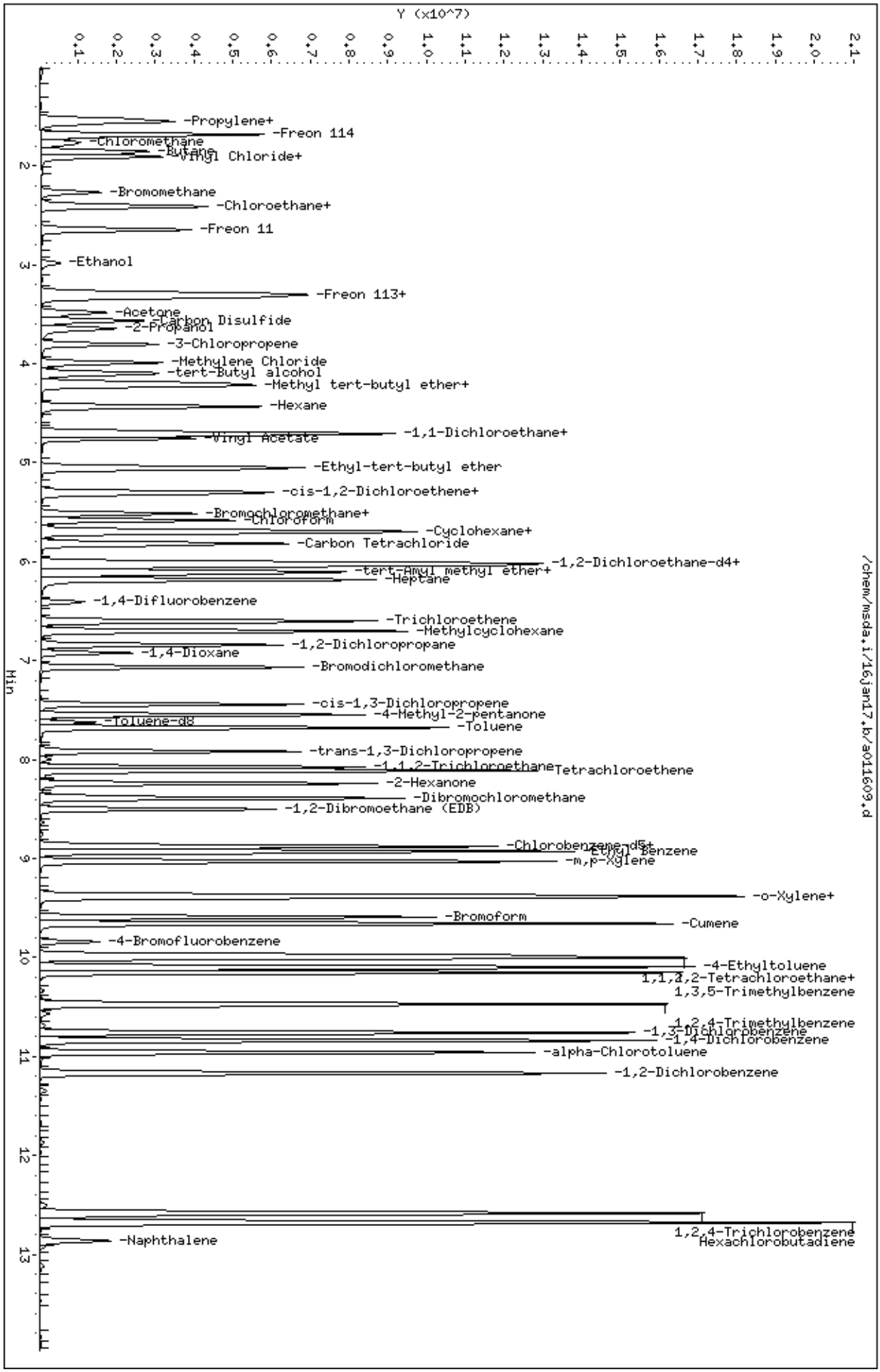
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	238300	142980	333620	239320	0.43
123 1,4-Difluorobenze	1061216	636730	1485702	1012329	-4.61
163 Chlorobenzene-d5	912832	547699	1277965	926134	1.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	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/msda.i/16jan17.b/a011609.d
Date : 16-JAN-2017 18:50
Client ID:
Sample Info: 200mL 2819-200
Column phase: RTX-624

Instrument: msda.i
Operator: gd
Column diameter: 0.25



To-15 4/4/16
MSD-A
0.5ppbv RL
#2789-15A (2.5ppbv)
40mL load.

Report Date : 05-Apr-2016 08:06

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/04apr16.b/a16q0315d.m
Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	a040405	a040406	a040407	a040408	a040409	a040410	a040411	a040412
INJ.DATE:	04-APR-2016	04-APR-2016	04-APR-2016	04-APR-2016	04-APR-2016	04-APR-2016	04-APR-2016	04-APR-2016
INJ.TIME:	12:24	12:55	13:26	13:57	14:28	15:00	15:31	16:02

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	ppbv RL
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	463.49	489.03	444.33	483.04	441.65	473.92	447.29	454.94	462.21	18.17	54.46	500
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
15 Freon 114	431.32	462.60	478.92	446.87	428.39	423.97	500.47	425.33	449.73	28.42	85.20	500
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
17 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Reviewer 1 _____ Date: 4/6/16
Reviewer 2 _____ Date: 4/7/16

$\bar{x}$ = 73.17 pptv = 0.07317 ppbv

MDL verification @ 0.19 ppbv
#2789-15A (2.5ppbv) 15mL load

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/04apr16.b/a16q0315d.m
Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	ppbv RL
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
19 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
20 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
21 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
22 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
23 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
25 Vinyl Chloride	458.79	494.69	432.39	413.54	431.42	427.88	445.44	509.51	451.71	33.99	101.90	500
26 1,3-Butadiene	477.78	424.49	407.06	427.52	429.36	469.27	445.09	348.32	428.61	40.13	120.31	↓
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
29 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
34 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
35 Freon 11	376.93	453.15	453.26	447.83	434.86	425.76	446.20	402.30	430.04	27.47	82.36	500
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
37 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/04apr16.b/a16q0315d.m
Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	ppbv RL
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	459.47	479.22	481.78	496.26	450.36	448.20	429.00	467.84	464.02	21.66	64.94	500
50 1,1-Dichloroethene	304.70	409.41	533.37	469.82	541.32	500.48	429.34	487.94	459.55	77.58	232.58	↓
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/msda.i/04apr16.b/a16q0315d.m
Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	PPTV RL
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
72 Methyl tert-butyl ethe	422.71	413.27	435.24	439.72	438.64	436.26	468.76	449.93	438.07	16.68	50.01	500
73 trans-1,2-Dichloroethe	449.17	434.06	416.37	339.05	320.60	362.30	445.34	385.32	394.03	49.67	148.92	
74 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
75 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
76 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
77 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
78 Hexane	484.45	380.62	432.68	428.11	425.60	441.31	443.44	422.36	432.32	28.68	85.98	500
79 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
80 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
81 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
82 1,1-Dichloroethane	389.35	452.40	398.71	407.42	450.15	449.57	463.92	415.08	428.33	28.74	86.17	500
83 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
84 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
86 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/04apr16.b/a16q0315d.m
Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	PPTV RL
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
88 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
90 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
91 cis-1,2-Dichloroethene	399.31	405.27	422.57	459.76	440.61	409.87	409.26	469.90	427.07	26.63	79.85	500
92 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
94 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 98 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
99 Tetrahydrofuran	405.79	393.93	364.89	367.32	376.45	405.55	380.21	367.88	382.75	16.90	50.68	500 ↓
100 Chloroform	397.99	403.95	430.45	464.15	419.96	440.05	426.56	393.78	422.11	23.60	70.74	
101 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
102 Cyclohexane	380.67	474.70	433.70	412.12	456.04	446.15	422.39	430.84	432.08	28.61	85.76	500 ↓
103 1,1,1-Trichloroethane	457.97	421.88	530.61	447.65	482.05	431.82	450.93	429.03	456.49	35.50	106.42	
104 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
105 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
106 Carbon Tetrachloride	450.06	393.34	433.96	446.57	421.42	400.08	445.13	412.53	425.39	21.94	65.77	500
107 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
108 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
109 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
110 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/04apr16.b/a16q0315d.m
Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	ppbv RL
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 112 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
113 2,2,4-Trimethylpentane	417.82	421.83	405.37	394.64	432.11	394.69	371.78	394.05	404.03	19.32	57.92	500
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
115 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
116 Benzene	443.38	476.95	473.27	462.70	466.36	413.09	428.10	473.80	454.71	23.82	71.41	500
$ 117 1,2-Dichloroethane-d4	23149.40	23303.45	24266.01	24400.04	24384.99	23738.03	24107.35	23675.49	23878.09	486.13	1457.42	
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
119 tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
120 1,2-Dichloroethane	497.12	433.69	394.37	420.91	431.85	419.37	379.94	441.27	427.31	34.97	104.85	500
121 Heptane	375.14	469.99	379.86	476.38	457.10	425.60	409.50	493.75	435.91	45.09	135.18	↓
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 123 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
124 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
125 Trichloroethene	446.11	453.29	459.76	518.90	428.03	459.75	509.90	465.27	467.63	31.13	93.32	500
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
128 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
129 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
130 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
131 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
132 1,2-Dichloropropane	417.90	414.33	431.64	438.00	401.17	443.48	390.74	442.23	422.44	19.66	58.93	500
133 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
134 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

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Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	PPTV pL
135 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
136 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
137 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
138 Bromodichloromethane	450.68	435.61	388.85	470.74	463.46	434.42	459.62	434.17	442.19	25.79	77.32	500
139 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
140 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
141 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
142 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
143 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
144 cis-1,3-Dichloropropen	408.34	375.98	399.27	413.11	404.49	405.06	427.02	386.35	402.45	15.74	47.17	500
145 4-Methyl-2-pentanone	423.08	433.61	402.69	375.54	389.81	335.57	401.13	369.84	391.41	31.27	93.74	↓
$ 146 Toluene-d8	24339.56	24421.95	24229.84	25167.78	24802.11	24076.47	24479.07	24519.29	24504.51	342.69	1027.38	
147 Toluene	448.95	450.74	417.37	442.99	467.49	425.98	436.15	441.13	441.35	15.45	46.31	500
148 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
149 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
150 trans-1,3-Dichloroprop	355.39	353.17	355.28	354.38	375.29	373.82	415.51	383.53	370.80	21.54	64.59	500
151 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
152 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
153 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
154 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
155 1,1,2-Trichloroethane	458.14	420.60	379.37	359.06	402.88	350.96	395.64	398.71	395.67	34.21	102.55	500
156 Tetrachloroethene	369.79	379.63	402.89	392.54	403.41	409.12	428.95	403.76	398.76	18.23	54.65	↓
157 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
158 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/04apr16.b/a16q0315d.m
Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
159 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
160 Dibromochloromethane	353.04	366.48	351.31	374.90	367.70	354.55	357.95	362.94	361.11	8.28	24.83	500
161 1,2-Dibromoethane (EDB	378.35	355.70	354.29	366.51	398.25	372.09	389.25	391.00	375.68	16.43	49.25	↓
162 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 163 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
164 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
165 Chlorobenzene	397.22	400.64	400.35	402.15	421.24	413.20	407.73	395.70	404.78	8.73	26.18	500
166 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
167 Ethyl Benzene	412.10	380.30	379.84	379.70	388.83	411.89	374.86	362.92	386.31	17.43	52.25	500
168 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
169 m,p-Xylene	388.60	379.99	368.91	366.41	382.37	375.27	312.78	384.76	369.89	24.30	72.85	500
170 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
171 o-Xylene	414.02	367.80	342 70	408.71	347.91	400.35	416.38	372.38	383.78	29.84	89.45	500
172 Styrene	246.72	221.14	250.50	247.68	261.66	222.43	218.81	219.60	236.07	17.28	51.79	↓
173 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
174 Bromoform	372.88	378.86	389.48	392.09	378.36	399.22	380.71	372.90	383.06	9.53	28.58	500
175 Cumene	392.07	387.79	400.47	388.30	396.26	374.01	381.19	395.05	389.39	8.59	25.76	↓
176 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 177 4-Bromofluorobenzene	27724.86	27792.25	27676.34	27880.66	27766.36	28018.85	28207.02	27358.01	27803.04	249.99	749.48	75-120%
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
179 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
180 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
181 1,1,2,2-Tetrachloroeth	365.75	367.86	371.75	383.83	363.71	388.28	378.32	365.15	373.08	9.31	27.93	500
182 Propylbenzene	355.95	382.61	383.27	406.37	398.97	397.41	376.77	394.95	387.04	16.00	47.97	↓

Report Date : 05-Apr-2016 08:06

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/04apr16.b/a16q0315d.m
Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	ppm RL
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	377.90	381.16	425.07	392.52	327.82	375.10	357.15	377.24	376.74	27.74	83.16	500
189 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
190 1,3,5-Trimethylbenzene	322.69	323.40	311.82	290.43	333.99	334.95	329.45	328.98	321.96	14.73	44.15	500
191 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
192 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
193 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
194 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
195 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
196 1,2,4-Trimethylbenzene	337.06	353.63	316.78	377.50	344.04	352.17	343.14	341.48	345.72	17.13	51.36	500
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/msda.i/04apr16.b/a16q0315d.m
Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	PQL RL
206 bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
207 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
208 1,3-Dichlorobenzene	400.03	381.48	378.72	418.77	456.96	415.44	393.99	406.61	406.50	25.00	74.94	500
209 1,4-Dichlorobenzene	377.04	408.76	414.20	400.18	425.07	420.75	394.86	426.94	408.47	17.08	51.21	500
210 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
211 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
212 alpha-Chlorotoluene	360.72	362.67	350.93	351.82	371.59	328.24	328.71	357.20	351.49	15.61	46.81	500
213 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
214 1,2-Dichlorobenzene	407.96	412.78	383.66	443.39	431.57	416.26	478.00	433.41	425.88	27.98	83.89	500
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

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Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.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	848.48	839.33	838.94	798.02	761.20	772.17	854.60	855.22	821.09	38.11	114.25
M 238 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 239 Total Xylene	802.62	747.79	711.62	775.12	730.28	775.62	729.16	757.14	753.67	30.00	89.95
M 240 3 and 4-Ethyltoluene	377.90	381.16	425.07	392.52	327.82	375.10	357.15	377.24	376.74	27.74	83.16
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

MA
9-48%

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/04apr16.b/a16q0315d.m
Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

TO-15 4/4/16
MSD-A
2.0 ppbv RL
#2789-15A (25ppbv)
160mL load.

Report Date : 04-Apr-2016 23:00

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/04apr16.b/a16q0315d.m
Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	a040413	a040414	a040415	a040416	a040417	a040418	a040419	a040420
INJ.DATE:	04-APR-2016	04-APR-2016	04-APR-2016	04-APR-2016	04-APR-2016	04-APR-2016	04-APR-2016	04-APR-2016
INJ.TIME:	16:33	17:04	17:36	18:07	18:38	19:09	19:40	20:11

PPTV RL

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	1880.70	1993.82	1851.19	1934.15	1857.73	1782.55	1834.96	1858.78	1874.23	64.28	197.71	2000
10 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
11 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
15 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
17 Chloromethane	2053.25	1833.91	1949.28	2062.52	2073.62	2195.63	1880.73	1727.52	1972.06	152.51	457.23	5000

Reviewer 1 _____ Date: 4/6/16
Reviewer 2 _____ Date: 4/7/16

$\bar{x}$ = 273.91 ppbv = 0.27 ppbv.

MDL verification @ 0.5 ppbv
2789-15A (2.5ppbv)
40 mL load.

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/04apr16.b/a16q0315d.m
Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.i

PPTV
RL

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	1771.96	1517.66	1724.88	2178.58	1842.61	1446.95	1306.56	1594.81	1673.00	270.57	811.18	200.0
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
25 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
26 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
29 Bromomethane	1756.51	1776.35	1706.64	1778.43	1816.59	1706.19	1773.63	1861.75	1772.01	52.03	155.98	500.0
30 Chloroethane	1923.44	1754.85	1811.54	1907.52	2013.15	1731.07	1780.73	1905.96	1853.53	98.43	295.11	200.0
31 Isopentane	1797.08	1705.85	1812.63	1601.04	1726.50	1981.00	1755.90	1922.93	1787.86	121.10	363.07	200.0
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
34 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
35 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
37 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

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Inst ID: msda.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	PPTV RL
40 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
41 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
42 Ethanol	1689.41	1490.39	1561.55	1696.49	2066.78	1426.22	1681.24	1572.98	1648.13	195.55	586.26	2000
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	3045.23	2994.15	2926.38	3003.67	3074.83	3365.92	2761.53	2984.43	3019.52	169.48	508.11	5000
53 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
54 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
55 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
56 Carbon Disulfide	1919.01	1939.46	1816.29	1805.65	1908.97	1885.12	1799.91	1906.63	1872.63	56.31	168.83	2000
57 2-Propanol	1554.23	1402.39	1395.35	1455.83	1433.06	1389.65	1394.69	1393.24	1427.31	56.37	168.99	2000
58 3-Chloropropene	1905.33	2006.56	1966.13	1914.07	1914.19	1882.74	1871.69	1829.16	1911.23	55.11	165.23	2000
59 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
60 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
61 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
62 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
63 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

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Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	ppbv RL
64 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
65 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
66 Methylene Chloride	1863.87	1820.11	1709.18	1784.18	1735.60	1928.46	1682.41	1786.66	1788.81	81.62	244.70	5000
67 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
68 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
69 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
70 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
71 tert-Butyl alcohol	1740.55	1757.52	1709.17	1664.68	1740.13	1685.58	1657.45	1721.37	1709.56	37.11	111.25	2000
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	1688.41	1663.99	1721.55	1757.90	1634.69	1710.49	1611.17	1689.05	1684.66	47.43	142.21	2000
84 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
86 Vinyl Acetate	1620.94	1724.62	1969.07	1492.50	1794.66	1718.36	1735.88	1448.43	1688.06	166.92	500.43	2000

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Inst ID: msda.i

ppbv RL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
88 Ethyl-tert-butyl ether	1741.46	1731.80	1768.62	1701.79	1719.25	1711.48	1665.09	1694.26	1716.84	31.30	93.84	2000
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
90 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
91 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
92 2-Butanone	1728.12	1735.24	1638.21	1985.14	1603.42	1606.95	1796.10	1600.16	1711.67	132.69	397.81	2000
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
94 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 98 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
99 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

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Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	ppbv RL
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 112 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
113 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
115 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
116 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 117 1,2-Dichloroethane-d4	23697.55	24154.09	23648.78	23822.96	23542.25	23508.94	23468.52	23779.70	23702.85	222.07	665.76	
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
119 tert-Amyl methyl ether	1726.66	1694.54	1615.27	1580.69	1699.31	1866.77	1521.35	1713.54	1677.27	105.51	316.33	2000
120 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
121 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 123 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
124 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
125 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
127 Methylcyclohexane	1714.80	1757.64	1813.11	1743.18	1827.14	1768.98	1759.43	1725.88	1763.77	39.27	117.72	2000
128 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
129 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
130 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
131 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
132 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
133 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
134 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

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METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/04apr16.b/a16q0315d.m
Batch File: /chem/msda.i/04apr16.b
Inst ID: msda.i

PATV RL

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
135 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
136 1,4-Dioxane	1233.55	1304.63	1281.84	1269.53	1277.04	1331.56	1188.75	1301.45	1273.54	44.72	134.07	2000
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	25110.31	24786.95	24630.73	24213.00	24565.27	24728.19	24493.29	24846.35	24671.76	265.81	796.91	
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	1169.11	1079.63	1128.90	1101.68	1135.96	1130.28	1097.70	1020.41	1107.96	44.84	134.42	2000

Eurofins Air Toxics Inc.
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Inst ID: msda.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	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	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	28161.37	28038.19	28535.77	28534.35	28104.16	28558.09	28175.19	28462.00	28321.14	220.87	662.17
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Inst ID: msda.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	PPTV RL
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	1873.60	1853.74	1882.07	1795.93	1828.91	1904.91	1832.75	1860.82	1854.09	34.36	103.00	2000
227 Hexachlorobutadiene	1981.04	1936.52	1934.33	2021.79	2052.25	2004.32	1969.37	1937.44	1979.63	43.85	131.46	2000
228 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

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Inst ID: msda.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Inst ID: msda.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

To15. naph only. 4/5/16
MSDA
#2759-281A (10 ppbv) 4/6/16
20 mL load

Report Date : 05-Apr-2016 19:37

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/05apr16.b/a16q0315d.m
Batch File: /chem/msda.i/05apr16.b
Inst ID: msda.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	a040507	a040508	a040509	a040510	a040511	a040512	a040513	a040514
INJ.DATE:	05-APR-2016	05-APR-2016	05-APR-2016	05-APR-2016	05-APR-2016	05-APR-2016	05-APR-2016	05-APR-2016
INJ.TIME:	15:08	15:31	15:55	16:19	16:43	17:07	17:30	17:54

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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Reviewer 1 _____ Date: 4/6/16
Reviewer 2 _____ Date: 4/7/16

$\bar{x}$ = 13457 ppbv = 0.1346 ppbv

MDL verification @ 0.25 ppbv
#2789-53 (.5 ppbv)
100 mL load

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

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Inst ID: msda.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
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/msda.i/05apr16.b/a16q0315d.m
Batch File: /chem/msda.i/05apr16.b
Inst ID: msda.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
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/msda.i/05apr16.b/a16q0315d.m
Batch File: /chem/msda.i/05apr16.b
Inst ID: msda.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
84 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/05apr16.b/a16q0315d.m
Batch File: /chem/msda.i/05apr16.b
Inst ID: msda.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
92 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
94 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 98 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
99 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
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/msda.i/05apr16.b/a16q0315d.m
Batch File: /chem/msda.i/05apr16.b
Inst ID: msda.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 117 1,2-Dichloroethane-d4	23316.08	23711.81	24321.33	23979.73	23300.49	23747.06	24563.58	24467.00	23925.88	492.74	1477.22
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 123 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
124 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
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/msda.i/05apr16.b/a16q0315d.m
Batch File: /chem/msda.i/05apr16.b
Inst ID: msda.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	24970.90	25110.56	25206.66	24715.16	24931.13	24688.94	24853.51	24779.73	24907.07	184.90	554.32
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/05apr16.b/a16q0315d.m
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Inst ID: msda.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	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	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	28646.95	28647.43	28553.20	28230.47	27516.73	28219.41	28637.38	28438.71	28361.28	384.16	1151.71
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/msda.i/05apr16.b/a16q0315d.m
Batch File: /chem/msda.i/05apr16.b
Inst ID: msda.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/msda.i/05apr16.b/a16q0315d.m
Batch File: /chem/msda.i/05apr16.b
Inst ID: msda.i

ppbv
RL

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	680.13	762.78	790.23	801.21	820.01	796.98	797.74	813.75	782.85	44.89	134.57
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

100

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msda.i/05apr16.b/a16q0315d.m
Batch File: /chem/msda.i/05apr16.b
Inst ID: msda.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-Dichloroethane (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/msda.i/05apr16.b/a16q0315d.m
Batch File: /chem/msda.i/05apr16.b
Inst ID: msda.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

10/5 5 ppb
loaded 50ml of # 2789-133
5.0ppbv → 5.0ppbv

Report Date : 27-May-2016 08:26

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/25may16.b/14650525a.m
Batch File: /chem/msd14.i/25may16.b
Inst ID: msd14.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	14052518	14052519	14052520	14052521	14052522	14052523	14052524	14052525
INJ.DATE:	26-MAY-2016	26-MAY-2016	26-MAY-2016	26-MAY-2016	26-MAY-2016	26-MAY-2016	26-MAY-2016	26-MAY-2016
INJ.TIME:	10:03	10:23	10:44	11:09	11:42	12:05	13:09	13:41

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL ppbv	(PPBV)	R.L (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	5484.25	4714.43	5477.90	4954.86	5257.31	5131.87	4254.86	4042.70	4914.77	540.32	1619.88	1.61988	5.0
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
15 Freon 114	5309.21	5032.58	5070.64	4626.51	4661.03	5179.69	4044.73	4846.61	4846.37	402.78	1207.52	1.20752	5.0
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
17 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Reviewer 1 _____ Date: 5/27/16
Reviewer 2 _____ Date: 5/31/16

CAR# G5WH2A1165

$\bar{X}$ = 1.153079

Report Date : 27-May-2016 08:26

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/25may16.b/14650525a.m
Batch File: /chem/msd14.i/25may16.b
Inst ID: msd14.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
25 Vinyl Chloride	4693.71	5158.15	5149.55	5245.25	5360.84	5040.81	4865.63	6063.75	5197.21	409.13	1226.56	1.226 56
26 1,3-Butadiene	5941.32	6582.45	5079.58	6035.13	5520.81	6359.00	5368.85	4459.87	5668.38	701.04	2101.71	2.10171
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
29 Bromomethane	4663.18	5065.61	5657.29	5401.86	4070.52	5283.91	5613.72	4780.86	5067.12	540.43	1620.21	1.62021
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
34 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
35 Freon 11	5515.26	5247.17	4997.51	5037.28	5147.73	4913.06	5749.15	5173.29	5222.56	280.91	843.16	0.84216
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
37 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Report Date : 27-May-2016 08:26

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/25may16.b/14650525a.m
Batch File: /chem/msd14.i/25may16.b
Inst ID: msd14.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-fluorce	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
44 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
45 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
46 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
47 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
48 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
49 Freon 113	5420.90	5907.99	5628.31	5894.92	5717.96	5997.80	5436.02	5469.39	5684.16	231.20	693.13	0.69313
50 1,1-Dichloroethene	6080.62	6164.63	6343.85	5779.65	5958.94	6594.58	6031.30	5693.75	6080.92	292.28	876.26	0.87626
51 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
52 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
53 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
54 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
55 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
56 Carbon Disulfide	4936.26	4849.67	5301.98	4729.44	4355.05	4388.05	5028.01	4719.23	4788.46	316.93	950.17	0.95017
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/msd14.i/25may16.b/14650525a.m
Batch File: /chem/msd14.i/25may16.b
Inst ID: msd14.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
64 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
65 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
66 Methylene Chloride	8424.98	8317.40	7967.98	7595.76	7431.59	7180.43	6480.23	7495.29	7611.71	632.32	1895.71	1.89571
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	5814.93	5177.86	4917.59	5153.05	4348.06	4787.49	5234.11	4765.74	5024.85	431.09	1292.42	1.29242
73 trans-1,2-Dichloroethe	5743.48	5031.08	5192.37	4955.44	4985.74	4897.46	4166.43	6151.64	5140.45	593.63	1779.69	1.77969
74 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
75 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
76 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
77 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
78 Hexane	5659.28	6157.45	5424.87	5852.41	4905.98	5817.73	4938.24	5301.25	5507.15	446.56	1338.80	1.33880
79 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
80 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
81 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
82 1,1-Dichloroethane	5520.44	5148.14	4914.46	5798.35	5281.19	5110.24	5167.76	4994.15	5241.84	290.07	869.63	0.86963
83 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
84 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
86 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/25may16.b/14650525a.m
Batch File: /chem/msd14.i/25may16.b
Inst ID: msd14.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	5127.95	4916.90	5575.63	5361.95	4291.88	5222.11	4802.74	5222.77	5065.24	394.77	1183.52	1.18352
92 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
94 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 98 Bromochloromethane	400000	400000	400000	400000	400000	400000	400000	400000	400000	0.00	0.00	
99 Tetrahydrofuran	4957.81	5694.27	4461.11	5657.47	6299.99	5560.79	4888.86	5071.10	5323.92	584.18	1751.39	1.75139
100 Chloroform	4437.35	5759.24	4788.07	5677.66	4690.66	5794.30	5089.05	4985.70	5152.76	527.15	1580.40	1.58040
101 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
102 Cyclohexane	6028.12	5723.65	5983.32	5410.79	4458.11	5077.25	4302.27	5462.85	5305.79	651.26	1952.46	1.95246
103 1,1,1-Trichloroethane	5375.27	4527.33	4725.96	5147.10	5460.81	4805.29	4339.42	5039.44	4927.58	397.71	1192.33	1.19233
104 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
105 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
106 Carbon Tetrachloride	4853.98	4906.64	3806.21	4652.26	4465.72	4062.81	4260.47	4027.90	4379.50	405.60	1215.99	1.21599
107 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
108 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
109 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
110 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/25may16.b/14650525a.m
Batch File: /chem/msd14.i/25may16.b
Inst ID: msd14.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	5384.43	5306.77	5485.74	4769.69	5084.17	5047.54	5014.39	4997.41	5136.27	236.61	709.36	0.70936
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
115 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
116 Benzene	5504.20	5072.11	5325.38	5948.63	5242.26	5529.58	5529.22	5012.95	5395.54	300.70	901.51	0.90151
$ 117 1,2-Dichloroethane-d4	420554	406949	415383	406583	404491	409843	406252	421862	411490	6852.91	20545.02	
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
119 tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
120 1,2-Dichloroethane	4068.66	4933.68	4961.24	4285.51	4984.18	5720.63	4828.58	4804.34	4823.35	495.90	1486.70	1.48670
121 Heptane	4687.02	5231.48	4564.99	4943.32	5041.41	4568.17	4591.82	4514.50	4767.84	268.14	803.89	0.80389
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 123 1,4-Difluorobenzene	400000	400000	400000	400000	400000	400000	400000	400000	400000	0.00	0.00	
124 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
125 Trichloroethene	5534.92	5244.21	5132.12	4925.91	4551.97	5453.90	5214.77	4668.22	5090.75	351.69	1054.36	1.05436
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
128 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
129 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
130 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
131 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
132 1,2-Dichloropropane	5681.14	4791.15	4855.84	4980.56	6120.17	4478.78	4910.31	4828.15	5080.76	539.92	1618.68	1.61868
133 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
134 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/25may16.b/14650525a.m
Batch File: /chem/msd14.i/25may16.b
Inst ID: msd14.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	4853.65	4619.62	5241.91	4743.39	4399.45	4909.56	5141.51	4809.01	4839.76	270.03	809.55	0.80955
139 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
140 bis(chloromethyl) Ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
141 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
142 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
143 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
144 cis-1,3-Dichloropropen	4373.23	4345.22	3636.01	4552.83	4025.20	3690.89	3080.67	3855.50	3944.94	483.23	1448.72	1.44872
145 4-Methyl-2-pentanone	4100.63	6428.07	5675.03	4782.87	6444.31	3190.36	3384.49	5550.73	4944.56	1287.33	3859.41	3.85941
$ 146 Toluene-d8	387888	400853	405007	407813	408945	399257	400472	395155	400674	6909.19	20713.75	
147 Toluene	5116.96	5248.54	4980.71	4868.28	4824.94	5230.68	5029.90	4702.85	5000.36	195.02	584.67	0.58467
148 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
149 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
150 trans-1,3-Dichloroprop	3299.31	2973.03	3529.74	3794.93	3164.71	3399.26	3392.95	2859.26	3301.65	301.35	903.44	0.90344
151 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
152 1-Chloro-2-Bromopropan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
153 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
154 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
155 1,1,2-Trichloroethane	4598.09	5405.03	4914.57	4759.60	5590.07	4474.83	4386.13	4583.28	4838.95	440.40	1320.31	1.32031
156 Tetrachloroethene	5428.16	5816.36	5521.11	4651.14	5371.23	5464.90	4846.59	4198.92	5162.30	541.36	1623.00	1.62300
157 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
158 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/25may16.b/14650525a.m
Batch File: /chem/msd14.i/25may16.b
Inst ID: msd14.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
159 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
160 Dibromochloromethane	4649.30	4206.59	4237.13	4407.61	4413.45	4893.34	4564.44	4581.29	4494.14	226.37	678.67	0.67867
161 1,2-Dibromoethane (EDB	5225.55	4436.07	4886.91	4434.35	4773.45	4766.12	4667.34	4097.99	4660.97	340.68	1021.36	1.02136
162 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 163 Chlorobenzene-d5	400000	400000	400000	400000	400000	400000	400000	400000	400000	0.00	0.00	
164 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
165 Chlorobenzene	4558.29	4676.47	4762.99	4193.14	4815.22	5385.49	4613.22	4830.77	4729.45	334.31	1002.28	1.00228
166 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
167 Ethyl Benzene	5009.77	4553.08	4713.35	4664.13	4074.07	4309.08	4335.58	4764.33	4552.92	299.40	897.61	0.89761
168 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
169 m,p-Xylene	4711.49	4873.22	4919.08	4201.81	4645.01	4672.88	4629.75	4262.90	4614.52	258.46	774.87	0.77487
170 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
171 o-Xylene	5105.31	4596.45	4067.87	4792.75	4992.06	4818.93	4866.06	3888.09	4639.69	437.05	1310.28	1.31028
172 Styrene	3252.83	3963.34	3570.37	3480.10	3298.23	3321.00	3059.72	3092.31	3378.74	292.67	877.42	0.87742
173 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
174 Bromoform	4946.36	4319.91	4516.06	4694.28	4071.45	4355.15	4240.08	4705.38	4481.08	288.14	863.85	0.86385
175 Cumene	4973.85	4543.64	4386.25	4629.37	4430.81	4549.61	4719.76	4549.46	4597.84	184.20	552.24	0.55224
176 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 177 4-Bromofluorobenzene	393513	396447	394122	397524	390362	395286	395514	394724	394687	2158.04	6469.82	
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
179 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
180 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
181 1,1,2,2-Tetrachloroeth	4622.15	4911.81	4581.10	4685.29	4591.98	4673.80	4950.89	5151.90	4771.12	208.51	625.11	0.62511
182 Propylbenzene	4489.38	4518.52	4523.12	4338.05	4157.36	4619.56	4661.48	4325.38	4454.11	168.45	505.02	0.50502

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/25may16.b/14650525a.m
Batch File: /chem/msd14.i/25may16.b
Inst ID: msd14.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	4474.93	4274.42	4450.28	4330.71	4069.06	4280.08	4144.99	4514.59	4317.38	158.64	475.61	0.47561
189 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
190 1,3,5-Trimethylbenzene	4286.74	3833.77	4405.04	4096.17	4015.44	4383.24	3934.37	4092.97	4130.97	209.08	626.82	0.62682
191 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
192 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
193 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
194 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
195 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
196 1,2,4-Trimethylbenzene	4595.19	4523.91	3948.06	4051.11	4526.91	4350.93	4721.06	4306.20	4378.05	268.95	806.32	0.80632
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/msd14.i/25may16.b/14650525a.m
Batch File: /chem/msd14.i/25may16.b
Inst ID: msd14.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	4831.85	4611.54	4601.43	4206.65	4503.70	4786.17	4365.85	4567.91	4559.39	205.36	615.67	0.61567
209 1,4-Dichlorobenzene	4605.00	4721.88	4595.48	4404.70	4815.79	5091.83	4418.57	4623.66	4659.62	222.50	667.06	0.66706
210 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
211 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
212 alpha-Chlorotoluene	4214.08	4133.70	4578.36	3892.04	3652.71	4094.45	4124.75	3649.61	4042.46	307.83	922.87	0.92287
213 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
214 1,2-Dichlorobenzene	5227.23	4203.14	5091.70	4112.08	4404.99	5077.29	4647.73	4615.94	4672.51	423.77	1270.45	1.27045
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/25may16.b/14650525a.m
Batch File: /chem/msd14.i/25may16.b
Inst ID: msd14.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~~	~~10871.43~~	~~9947.98~~	~~10767.99~~	~~10317.39~~	~~9277.62~~	~~10119.58~~	~~8969.16~~	~~11374.41~~	~~10205.70~~	~~810.81~~	~~2430.82~~
M 238 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 239 Total Xylene	9816.80	9469.67	8986.95	8994.55	9637.08	9491.81	9485.81	8150.98	9254.21	531.25	1592.68
M 240 3 and 4-Ethyltoluene	4474.93	4274.42	~~4450.28~~	~~4330.71~~	~~4069.06~~	~~4280.08~~	~~4144.99~~	~~4514.59~~	~~4317.38~~	~~158.64~~	~~475.61~~
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

SJ 5/31/16

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/25may16.b/14650525a.m
Batch File: /chem/msd14.i/25may16.b
Inst ID: msd14.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

TO15 5+20
loaded 5mL of #2789-83
200ppbv → 20 ppbv

Report Date : 26-May-2016 20:57

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

MDL verification file # 14052614
2.5mL of #2789-83
200ppbv → 10 ppbv

Method File: /chem/msd14.i/26may16.b/14650525a.m
Batch File: /chem/msd14.i/26may16.b
Inst ID: msd14.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	14052605	14052606	14052607	14052608	14052609	14052610	14052611	14052612
INJ.DATE:	26-MAY-2016	26-MAY-2016	26-MAY-2016	26-MAY-2016	26-MAY-2016	26-MAY-2016	26-MAY-2016	26-MAY-2016
INJ.TIME:	16:43	17:14	17:41	18:04	18:27	18:59	19:52	20:19

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL (PPTV)	(PPBV)	(R.L. PPBV)
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
6 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
7 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
8 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
9 Propylene	22498.73	19741.10	16458.61	19023.88	17983.43	19675.08	17607.66	22287.48	19409.50	2142.87	6424.34	6.42434	20.0
10 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
11 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
15 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
17 Chloromethane	21933.19	20811.68	20548.30	21966.95	17124.53	19999.01	19024.56	19149.15	20069.67	1624.39	4869.92	4.86992	20.0

Reviewer 1 _____ Date: 5/27/16
Reviewer 2 _____ Date: 5/31/16

$\overline{X} = 4.420805$

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/26may16.b/14650525a.m
Batch File: /chem/msd14.i/26may16.b
Inst ID: msd14.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL09	AVG CONC	STD DEV	MDL (PPTV)	(PPBV)	(RL PPBV)
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
19 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
20 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
21 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
22 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
23 Butane	19273.15	16086.24	20343.66	17818.97	19495.60	17924.00	20232.34	16414.14	18448.51	1644.93	4931.49	4.93149	20.0
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
25 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
26 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
29 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
30 Chloroethane	17877.61	20121.89	18449.43	20057.20	20239.50	12084.52	16779.05	16276.91	17735.76	2748.01	8238.54	8.23854	20.0
31 Isopentane	19495.22	16806.71	16764.51	18797.10	18272.49	18069.48	18855.15	17065.95	18017.07	1036.42	3107.18	3.10718	20.0
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/msd14.i/26may16.b/14650525a.m
Batch File: /chem/msd14.i/26may16.b
Inst ID: msd14.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL (PPTV)	(PPBV)	(R.L. PPBV)
40 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
41 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
42 Ethanol	19337.77	19668.00	17376.83	19378.45	16204.28	19419.43	19708.92	18263.77	18669.68	1281.84	3842.97	3.84297	20.0
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	19045.56	17742.30	15988.38	17454.88	17119.27	16378.58	18048.04	17208.02	17623.13	919.29	2756.03	2.75603	20.0
53 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
54 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
55 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
56 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
57 2-Propanol	17140.84	18247.08	17795.12	17224.88	16195.64	15806.36	16533.72	16196.64	16892.54	853.56	2558.98	2.55898	20.0
58 3-Chloropropene	13240.29	11346.30	10579.67	10699.71	7959.12	12562.43	13924.36	13122.22	11691.76	1950.96	5848.98	5.84898	20.0
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/msd14.i/26may16.b/14650525a.m
Batch File: /chem/msd14.i/26may16.b
Inst ID: msd14.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL (PPBV)	(PPBV)	(R.L. PPBV)
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	17753.91	18183.54	19202.37	17669.96	16617.19	17314.38	17279.00	18945.32	17870.71	871.03	2611.35	2.6135	20.0
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	18202.73	18486.97	16996.86	18177.56	16634.81	17021.76	17224.47	17041.61	17473.35	700.80	2100.99	2.1099	20.0
84 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
86 Vinyl Acetate	8639.92	12711.91	10702.21	12608.57	15128.17	12465.18	13644.85	11553.05	12181.73	1945.49	5832.58	5.8325	20.0

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/26may16.b/14650525a.m
Batch File: /chem/msd14.i/26may16.b
Inst ID: msd14.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL (PPTV)	(PPBV)	(R.L. PPBV)
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
88 Ethyl-tert-butyl ether	17076.37	17055.07	16643.69	17305.00	16075.36	16818.87	17141.94	17434.21	16943.81	430.95	1291.99	1.29199	20.0
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
90 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
91 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
92 2-Butanone	16362.40	18657.09	17556.90	18914.42	18674.52	18550.24	15205.94	15360.65	17412.77	1549.78	4646.25	4.64625	20.0
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
94 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
* 98 Bromochloromethane	400000	400000	400000	400000	400000	400000	400000	400000	400000	0.00	0.00		
99 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
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/msd14.i/26may16.b/14650525a.m
Batch File: /chem/msd14.i/26may16.b
Inst ID: msd14.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL (PPTV)	(PPBV)	(R.L.PPBV)
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
$ 112 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
113 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
115 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
116 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
$ 117 1,2-Dichloroethane-d4	413892	419759	415877	405871	385670	411192	406297	394607	406646	11439.15	34294.59		
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
119 tert-Amyl methyl ether	16964.08	18300.36	16999.17	17899.95	16563.74	16222.95	17264.66	17228.84	17180.47	671.68	2013.71	2.01371	20.0
120 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
121 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
* 123 1,4-Difluorobenzene	400000	400000	400000	400000	400000	400000	400000	400000	400000	0.00	0.00		
124 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
125 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
127 Methylcyclohexane	19297.78	18606.02	16950.01	18272.06	19043.46	16952.07	18001.00	18168.67	18161.39	864.79	2592.64	2.59264	20.0
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/msd14.i/26may16.b/14650525a.m
Batch File: /chem/msd14.i/26may16.b
Inst ID: msd14.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL (PPTV)	(PPBV)	(R.L. PPBV?)
135 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
136 1,4-Dioxane	18367.42	16002.21	17883.45	16277.12	18397.36	16613.47	18370.01	15869.65	17222.59	1135.70	3404.84	3.40484	20.0
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	394941	395885	392423	400445	408724	405578	398683	392510	398648	5983.17	17937.54		
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	16667.58	17949.01	17081.12	16528.41	18223.20	16203.87	16869.34	16200.79	16965.41	757.48	2270.91	2.27091	20.0

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/26may16.b/14650525a.m
Batch File: /chem/msd14.i/26may16.b
Inst ID: msd14.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	400000	400000	400000	400000	400000	400000	400000	400000	400000	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	389069	386209	388602	394388	388262	402246	391936	386907	390952	5284.58	15843.19
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/msd14.i/26may16.b/14650525a.m
Batch File: /chem/msd14.i/26may16.b
Inst ID: msd14.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/msd14.i/26may16.b/14650525a.m
Batch File: /chem/msd14.i/26may16.b
Inst ID: msd14.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL (PPBV)	(PPBV)	(R.L. PPBV)
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	21100.38	20840.32	22205.98	17758.52	14885.50	21666.43	21163.92	16540.24	19520.15	2731.43	8188.83	8.18883	20.0
227 Hexachlorobutadiene	16682.02	21733.13	25134.78	17203.00	14996.06	23726.51	19760.40	17464.65	19587.57	3630.28	10883.59	10.88359	20.0
228 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/26may16.b/14650525a.m
Batch File: /chem/msd14.i/26may16.b
Inst ID: msd14.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/msd14.i/26may16.b/14650525a.m
Batch File: /chem/msd14.i/26may16.b
Inst ID: msd14.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

20 ppbv

Tols 5 & 20 Naph only 5/10/16

loaded 1mL of #27589-64

1000 ppbv → 20 ppbv

MDL verification file # 14051017

loaded 0.5mL of #27589-64

1000 ppbv → 10 ppbv

Report Date : 10-May-2016 14:27

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/10may16.b/14650422b.m
Batch File: /chem/msd14.i/10may16.b
Inst ID: msd14.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	14051008	14051009	14051010	14051011	14051012	14051013	14051014	14051015
INJ.DATE:	10-MAY-2016	10-MAY-2016	10-MAY-2016	10-MAY-2016	10-MAY-2016	10-MAY-2016	10-MAY-2016	10-MAY-2016
INJ.TIME:	10:58	11:19	11:43	12:16	12:38	13:02	13:38	13:56

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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Freon 12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Reviewer 1 _____ Date: 5/10/16
Reviewer 2 _____ Date: 5/31/16

$\bar{x}$ = 8472.39 PDV = 8.47 ppbv

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/10may16.b/14650422b.m
Batch File: /chem/msd14.i/10may16.b
Inst ID: msd14.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 Freon 11	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Report Date : 10-May-2016 14:27

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/10may16.b/14650422b.m
Batch File: /chem/msd14.i/10may16.b
Inst ID: msd14.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Report Date : 10-May-2016 14:27

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/10may16.b/14650422b.m
Batch File: /chem/msd14.i/10may16.b
Inst ID: msd14.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
84 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/10may16.b/14650422b.m
Batch File: /chem/msd14.i/10may16.b
Inst ID: msd14.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
92 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
94 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 98 Bromochloromethane	400000	400000	400000	400000	400000	400000	400000	400000	400000	0.00	0.00
99 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Report Date : 10-May-2016 14:27

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/10may16.b/14650422b.m
Batch File: /chem/msd14.i/10may16.b
Inst ID: msd14.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 117 1,2-Dichloroethane-d4	439928	458210	437924	433400	444352	433225	456719	443377	443392	9585.71	28737.95
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 tert-Amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 123 1,4-Difluorobenzene	400000	400000	400000	400000	400000	400000	400000	400000	400000	0.00	0.00
124 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
132 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
133 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
134 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Report Date : 10-May-2016 14:27

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/10may16.b/14650422b.m
Batch File: /chem/msd14.i/10may16.b
Inst ID: msd14.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	399296	409956	410567	407511	403475	405389	402488	401410	405012	4071.84	12207.38
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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Report Date : 10-May-2016 14:27

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/10may16.b/14650422b.m
Batch File: /chem/msd14.i/10may16.b
Inst ID: msd14.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	400000	400000	400000	400000	400000	400000	400000	400000	400000	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	381799	381246	377335	379206	384805	378235	382761	384308	381212	2755.61	8261.33
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Report Date : 10-May-2016 14:27

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/10may16.b/14650422b.m
Batch File: /chem/msd14.i/10may16.b
Inst ID: msd14.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Report Date : 10-May-2016 14:27

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/10may16.b/14650422b.m
Batch File: /chem/msd14.i/10may16.b
Inst ID: msd14.i

(ppbv) RL

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	12094.83	16445.59	8243.49	10460.84	12473.50	7926.22	9592.62	9013.88	10781.37	2826.01	8472.39 20,000
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Report Date : 10-May-2016 14:27

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/10may16.b/14650422b.m
Batch File: /chem/msd14.i/10may16.b
Inst ID: msd14.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Report Date : 10-May-2016 14:27

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd14.i/10may16.b/14650422b.m
Batch File: /chem/msd14.i/10may16.b
Inst ID: msd14.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Client Sample ID: CCV

Lab ID#: 1701428B-21A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a020202**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 2/2/17 10:10 AM**

Compound	%Recovery
Freon 12	102
Freon 114	100
Chloromethane	108
Vinyl Chloride	100
1,3-Butadiene	99
Bromomethane	92
Chloroethane	95
Freon 11	100
Ethanol	94
Freon 113	97
1,1-Dichloroethene	98
Acetone	100
2-Propanol	102
Carbon Disulfide	97
3-Chloropropene	95
Methylene Chloride	103
Methyl tert-butyl ether	94
trans-1,2-Dichloroethene	99
Hexane	98
1,1-Dichloroethane	97
2-Butanone (Methyl Ethyl Ketone)	94
cis-1,2-Dichloroethene	98
Tetrahydrofuran	102
Chloroform	99
1,1,1-Trichloroethane	93
Cyclohexane	94
Carbon Tetrachloride	96
2,2,4-Trimethylpentane	99
Benzene	94
1,2-Dichloroethane	106
Heptane	96
Trichloroethene	96
1,2-Dichloropropane	98
1,4-Dioxane	97
Bromodichloromethane	101
cis-1,3-Dichloropropene	101
4-Methyl-2-pentanone	97
Toluene	99
trans-1,3-Dichloropropene	93
1,1,2-Trichloroethane	89
Tetrachloroethene	92
2-Hexanone	91

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Client Sample ID: CCV

Lab ID#: 1701428B-21A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a020202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/2/17 10:10 AM**	

Compound	**%Recovery**
Dibromochloromethane	92
1,2-Dibromoethane (EDB)	92
Chlorobenzene	92
Ethyl Benzene	90
m,p-Xylene	91
o-Xylene	91
Styrene	90
Bromoform	94
Cumene	90
1,1,2,2-Tetrachloroethane	92
Propylbenzene	90
4-Ethyltoluene	90
1,3,5-Trimethylbenzene	87
1,2,4-Trimethylbenzene	90
1,3-Dichlorobenzene	93
1,4-Dichlorobenzene	90
alpha-Chlorotoluene	90
1,2-Dichlorobenzene	92
1,2,4-Trichlorobenzene	93
Hexachlorobutadiene	92
Naphthalene	90

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	103	70-130

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msda.i Injection Date: 02-FEB-2017 10:10
Lab File ID: a020202.d Init. Cal. Date(s): 16-JAN-2017 16-JAN-2017
Analysis Type: AIR Init. Cal. Times: 14:09 18:50
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/msda.i/02feb17.b/a17q0116a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 117 1,2-Dichloroethane-d4	1.31994	1.31409	0.010	0.44347	30.00000	Averaged
$ 146 Toluene-d8	1.04495	1.06158	0.010	-1.59149	30.00000	Averaged
$ 177 4-Bromofluorobenzene	0.60413	0.62198	0.010	-2.95612	30.00000	Averaged
9 Propylene	0.95216	0.90679	0.010	4.76493	40.00000	Averaged
11 Freon 12	2.26856	2.31828	0.010	-2.19156	30.00000	Averaged
15 Freon 114	1.91557	1.91889	0.010	-0.17349	30.00000	Averaged
17 Chloromethane	0.88465	0.95369	0.010	-7.80453	30.00000	Averaged
23 Butane	0.24007	0.21522	0.010	10.35097	40.00000	Averaged
25 Vinyl Chloride	1.05011	1.04631	0.010	0.36199	30.00000	Averaged
26 1,3-Butadiene	0.92498	0.91962	0.010	0.57997	30.00000	Averaged
29 Bromomethane	0.86329	0.79137	0.010	8.33057	30.00000	Averaged
30 Chloroethane	0.51377	0.48651	0.010	5.30737	30.00000	Averaged
31 Isopentane	1.33725	1.33218	0.010	0.37932	40.00000	Averaged
35 Freon 11	2.45656	2.46168	0.010	-0.20845	30.00000	Averaged
42 Ethanol	0.49698	0.46789	0.010	5.85353	30.00000	Averaged
49 Freon 113	1.88220	1.82601	0.010	2.98568	30.00000	Averaged
50 1,1-Dichloroethene	0.64061	0.62953	0.010	1.72850	30.00000	Averaged
52 Acetone	0.56731	0.56949	0.010	-0.38512	30.00000	Averaged
56 Carbon Disulfide	2.73382	2.65189	0.010	2.99670	30.00000	Averaged
57 2-Propanol	2.09165	2.12700	0.010	-1.69010	30.00000	Averaged
58 3-Chloropropene	0.45797	0.43667	0.010	4.65161	30.00000	Averaged
66 Methylene Chloride	1.42379	1.46771	0.010	-3.08499	30.00000	Averaged
71 tert-Butyl alcohol	2.51497	2.40898	0.010	4.21450	40.00000	Averaged
72 Methyl tert-butyl ether	2.80652	2.63450	0.010	6.12904	30.00000	Averaged
73 trans-1,2-Dichloroethene	0.63299	0.62771	0.010	0.83426	30.00000	Averaged
78 Hexane	2.07338	2.03350	0.010	1.92328	30.00000	Averaged
82 1,1-Dichloroethane	2.09213	2.02924	0.010	3.00605	30.00000	Averaged
83 Isopropyl ether	4.60127	4.57342	0.010	0.60532	40.00000	Averaged
86 Vinyl Acetate	0.28473	0.27636	0.010	2.93891	30.00000	Averaged
88 Ethyl-tert-butyl ether	4.13679	4.02862	0.010	2.61489	40.00000	Averaged
91 cis-1,2-Dichloroethene	0.81349	0.79618	0.010	2.12703	30.00000	Averaged
92 2-Butanone	0.52950	0.49931	0.010	5.70098	30.00000	Averaged
99 Tetrahydrofuran	1.50971	1.53974	0.010	-1.98859	30.00000	Averaged
100 Chloroform	2.22973	2.21075	0.010	0.85091	30.00000	Averaged
102 Cyclohexane	1.51144	1.42017	0.010	6.03825	30.00000	Averaged
103 1,1,1-Trichloroethane	2.45350	2.29375	0.010	6.51106	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msda.i Injection Date: 02-FEB-2017 10:10
Lab File ID: a020202.d Init. Cal. Date(s): 16-JAN-2017 16-JAN-2017
Analysis Type: AIR Init. Cal. Times: 14:09 18:50
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/msda.i/02feb17.b/a17q0116a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
106 Carbon Tetrachloride	2.55298	2.44065	0.010	4.40023	30.00000	Averaged
113 2,2,4-Trimethylpentane	7.31496	7.26781	0.010	0.64450	30.00000	Averaged
116 Benzene	0.79699	0.75242	0.010	5.59185	30.00000	Averaged
119 tert-Amyl methyl ether	0.81889	0.79418	0.010	3.01798	40.00000	Averaged
120 1,2-Dichloroethane	0.34643	0.36777	0.010	-6.15945	30.00000	Averaged
121 Heptane	0.28438	0.27429	0.010	3.55066	30.00000	Averaged
125 Trichloroethene	0.38569	0.36982	0.010	4.11305	30.00000	Averaged
127 Methylcyclohexane	2.34703	2.12468	0.010	9.47377	30.00000	Averaged
132 1,2-Dichloropropane	0.36658	0.35817	0.010	2.29452	30.00000	Averaged
136 1,4-Dioxane	0.20278	0.19728	0.010	2.71583	30.00000	Averaged
138 Bromodichloromethane	0.58966	0.59402	0.010	-0.73893	30.00000	Averaged
144 cis-1,3-Dichloropropene	0.47658	0.48003	0.010	-0.72503	30.00000	Averaged
145 4-Methyl-2-pentanone	0.34779	0.33612	0.010	3.35691	30.00000	Averaged
147 Toluene	1.08610	1.07860	0.010	0.68983	30.00000	Averaged
150 trans-1,3-Dichloropropene	0.53272	0.49520	0.010	7.04287	30.00000	Averaged
155 1,1,2-Trichloroethane	0.46339	0.41147	0.010	11.20420	30.00000	Averaged
156 Tetrachloroethene	0.64365	0.59387	0.010	7.73429	30.00000	Averaged
158 2-Hexanone	0.54701	0.49704	0.010	9.13428	30.00000	Averaged
160 Dibromochloromethane	0.86795	0.80150	0.010	7.65625	30.00000	Averaged
161 1,2-Dibromoethane (EDB)	0.73383	0.67535	0.010	7.96904	30.00000	Averaged
165 Chlorobenzene	1.10892	1.01914	0.010	8.09616	30.00000	Averaged
167 Ethyl Benzene	0.55754	0.50400	0.010	9.60182	30.00000	Averaged
169 m,p-Xylene	0.68486	0.62423	0.010	8.85282	30.00000	Averaged
171 o-Xylene	0.66621	0.60862	0.010	8.64498	30.00000	Averaged
172 Styrene	1.08663	0.97847	0.010	9.95401	30.00000	Averaged
174 Bromoform	0.84771	0.79333	0.010	6.41442	30.00000	Averaged
175 Cumene	2.07740	1.86787	0.010	10.08642	30.00000	Averaged
181 1,1,2,2-Tetrachloroethane	1.03117	0.94859	0.010	8.00783	30.00000	Averaged
182 Propylbenzene	2.36490	2.13447	0.010	9.74411	30.00000	Averaged
188 4-Ethyltoluene	0.65330	0.59032	0.010	9.64019	30.00000	Averaged
190 1,3,5-Trimethylbenzene	0.90772	0.79314	0.010	12.62226	30.00000	Averaged
196 1,2,4-Trimethylbenzene	0.82681	0.74507	0.010	9.88610	30.00000	Averaged
208 1,3-Dichlorobenzene	1.25073	1.16395	0.010	6.93856	30.00000	Averaged
209 1,4-Dichlorobenzene	1.29112	1.16756	0.010	9.56995	30.00000	Averaged
212 alpha-Chlorotoluene	1.61133	1.44717	0.010	10.18764	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msda.i Injection Date: 02-FEB-2017 10:10
Lab File ID: a020202.d Init. Cal. Date(s): 16-JAN-2017 16-JAN-2017
Analysis Type: AIR Init. Cal. Times: 14:09 18:50
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/msda.i/02feb17.b/a17q0116a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
214 1,2-Dichlorobenzene	1.21989	1.12129	0.010	8.08236	30.00000	Averaged	
226 1,2,4-Trichlorobenzene	1.17316	1.08709	0.010	7.33623	30.00000	Averaged	
227 Hexachlorobutadiene	0.87022	0.80005	0.010	8.06291	30.00000	Averaged	
228 Naphthalene	2.95500	2.65622	0.010	10.11126	40.00000	Averaged	
M 239 Total Xylene	++++	4.90145	0.010	++++	30.00000	Averaged	<-

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/02feb17.b/a020202.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 02-FEB-2017 10:10
Operator : jg Inst ID: msda.i
Smp Info : 100mL #2819-200A
Misc Info : 50ppbv(100ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /var/chem/msda.i/02feb17.b/a17q0116a.m
Meth Date : 02-Feb-2017 12:42 jscarbro Quant Type: ISTD
Cal Date : 16-JAN-2017 18:50 Cal File: a011609.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.521	5.521 (1.000)	130	213765	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	162086			50.57- 110.57	75.82
5.521	5.521 (1.000)	49	326652			118.90- 178.90	152.81
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	909926	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	137138			0.00- 45.14	15.07
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	849867	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	423927			21.31- 81.31	49.88
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.058	6.058 (1.097)	65	280906	25.0000	24.889	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	158896			29.46- 89.46	56.57
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.620	7.620 (1.189)	98	965956	25.0000	25.398	80.00- 120.00	100.00
7.620	7.620 (1.189)	70	93981			0.00- 39.82	9.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8 (continued)							
7.620	7.620 (1.189)	100	630879			36.19- 96.19	65.31
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.848	9.848 (1.112)	174	528604	25.0000	25.739	80.00- 120.00	100.00
9.848	9.848 (1.112)	95	631055			92.19- 152.19	119.38
9.848	9.848 (1.112)	176	532934			71.02- 131.02	100.82
9 Propylene					CAS #: 115-07-1		
1.524	1.524 (0.276)	41	387679	50.0000	47.618	80.00- 120.00	100.00
1.524	1.524 (0.276)	42	258450			37.76- 97.76	66.67
1.524	1.524 (0.276)	39	266411			38.24- 98.24	68.72
11 Freon 12					CAS #: 75-71-8		
1.553	1.553 (0.281)	85	991134	50.0000	51.096	80.00- 120.00	100.00
1.553	1.553 (0.281)	87	336225			2.19- 62.19	33.92
15 Freon 114					CAS #: 76-14-2		
1.675	1.675 (0.303)	135	820385	50.0000	50.087	80.00- 120.00	100.00
1.682	1.682 (0.305)	137	264251			1.62- 61.62	32.21
17 Chloromethane					CAS #: 74-87-3		
1.761	1.761 (0.319)	50	407731	50.0000	53.902	80.00- 120.00	100.00
1.761	1.761 (0.319)	52	136367			4.04- 64.04	33.45
23 Butane					CAS #: 106-97-8		
1.847	1.847 (0.334)	58	92015	50.0000	44.824	80.00- 120.00	100.00
1.847	1.847 (0.334)	43	741079			761.67- 821.67	805.39
25 Vinyl Chloride					CAS #: 75-01-4		
1.882	1.882 (0.341)	62	447329	50.0000	49.819	80.00- 120.00	100.00
1.882	1.882 (0.341)	64	132355			0.00- 59.01	29.59
26 1,3-Butadiene					CAS #: 106-99-0		
1.904	1.904 (0.345)	54	393165	50.0000	49.710	80.00- 120.00	100.00
1.904	1.904 (0.345)	39	366845			63.95- 123.95	93.31
29 Bromomethane					CAS #: 74-83-9		
2.262	2.262 (0.410)	94	338336	50.0000	45.835	80.00- 120.00	100.00
2.262	2.262 (0.410)	96	308717			64.81- 124.81	91.25
30 Chloroethane					CAS #: 75-00-3		
2.384	2.384 (0.432)	64	207996	50.0000	47.346	80.00- 120.00	100.00
2.384	2.384 (0.432)	66	68450			1.96- 61.96	32.91
2.384	2.384 (0.432)	49	68438			1.70- 61.70	32.90

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
31 Isopentane					CAS #: 78-78-4		
2.412	2.412 (0.437)	43	569546	50.0000	49.810	80.00- 120.00	100.00
2.412	2.412 (0.437)	57	394320			40.19- 100.19	69.23
35 Freon 11					CAS #: 75-69-4		
2.642	2.642 (0.478)	101	1052442	50.0000	50.104	80.00- 120.00	100.00
2.642	2.642 (0.478)	103	684737			34.98- 94.98	65.06
42 Ethanol					CAS #: 64-17-5		
2.978	2.978 (0.539)	45	200038	50.0000	47.073	80.00- 120.00	100.00
2.978	2.978 (0.539)	46	80854			9.25- 69.25	40.42
49 Freon 113					CAS #: 76-13-1		
3.293	3.293 (0.596)	151	780672	50.0000	48.507	80.00- 120.00	100.00
3.293	3.293 (0.596)	153	498644			34.55- 94.55	63.87
3.293	3.293 (0.596)	101	891420			83.34- 143.34	114.19
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.322	3.322 (0.602)	98	269144	50.0000	49.136	80.00- 120.00	100.00
3.322	3.322 (0.602)	96	400163			120.22- 180.22	148.68
3.322	3.322 (0.602)	61	755179			243.84- 303.84	280.59
52 Acetone					CAS #: 67-64-1		
3.480	3.480 (0.630)	58	243476	50.0000	50.192	80.00- 120.00	100.00
3.473	3.473 (0.629)	43	745430			267.70- 327.70	306.16
56 Carbon Disulfide					CAS #: 75-15-0		
3.558	3.558 (0.645)	76	1133764	50.0000	48.502	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.637	3.637 (0.659)	45	909358	50.0000	50.845	80.00- 120.00	100.00
3.637	3.637 (0.659)	43	154453			0.00- 46.48	16.98
3.637	3.637 (0.659)	59	35620			0.00- 33.95	3.92
58 3-Chloropropene					CAS #: 107-05-1		
3.802	3.802 (0.689)	76	186690	50.0000	47.674	80.00- 120.00	100.00
3.802	3.802 (0.689)	41	653047			307.27- 367.27	349.80
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.721)	49	627491	50.0000	51.542	80.00- 120.00	100.00
3.988	3.988 (0.722)	84	370022			32.37- 92.37	58.97
3.988	3.988 (0.722)	51	194988			0.49- 60.49	31.07
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.096	4.096 (0.742)	59	1029910	50.0000	47.893	80.00- 120.00	100.00
4.096	4.096 (0.742)	41	210395			0.00- 49.68	20.43

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

   71 tert-Butyl alcohol (continued)
  4.096   4.096 (0.742)    57    108657                     0.00-  40.06    10.55
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                      CAS #: 1634-04-4
  4.196   4.196 (0.760)    73   1126329 50.0000   46.935  80.00- 120.00   100.00
  4.196   4.196 (0.760)    57    333572                     0.00-  59.21    29.62
  4.196   4.196 (0.760)    41    297882                     0.00-  55.49    26.45
-------------------------------------------------------------------------------
   73 trans-1,2-Dichloroethene                     CAS #: 156-60-5
  4.225   4.225 (0.765)    98    268363 50.0000   49.583  80.00- 120.00   100.00
  4.225   4.225 (0.765)    61    673490                   224.99- 284.99   250.96
  4.225   4.225 (0.765)    96    396901                   119.77- 179.77   147.90
-------------------------------------------------------------------------------
   78 Hexane                                       CAS #: 110-54-3
  4.432   4.432 (0.803)    57    869384 50.0000   49.038  80.00- 120.00   100.00
  4.432   4.432 (0.803)    43    555306                    31.75-  91.75    63.87
  4.432   4.432 (0.803)    86    105797                     0.00-  42.75    12.17
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                           CAS #: 75-34-3
  4.712   4.712 (0.853)    63    867559 50.0000   48.497  80.00- 120.00   100.00
  4.712   4.712 (0.853)    65    274042                     1.80-  61.80    31.59
-------------------------------------------------------------------------------
   83 Isopropyl ether                              CAS #: 108-20-3
  4.697   4.697 (0.851)    45   1955275 50.0000   49.697  80.00- 120.00   100.00
  4.697   4.697 (0.851)    87    395440                     0.00-  51.16    20.22
  4.697   4.697 (0.851)    59    204395                     0.00-  40.60    10.45
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                CAS #: 108-05-4
  4.755   4.755 (0.861)    86    118152 50.0000   48.530  80.00- 120.00   100.00
  4.755   4.755 (0.861)    43   1581081                  1309.99-1369.99  1338.18
-------------------------------------------------------------------------------
   88 Ethyl-tert-butyl ether                       CAS #: 637-92-3
  5.056   5.056 (0.916)    59   1722356 50.0000   48.692  80.00- 120.00   100.00
  5.056   5.056 (0.916)    87    576334                     4.12-  64.12    33.46
  5.056   5.056 (0.916)    41    303891                     0.00-  46.98    17.64
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                       CAS #: 156-59-2
  5.292   5.292 (0.958)    98    340392 50.0000   48.936  80.00- 120.00   100.00
  5.292   5.292 (0.958)    96    508620                   123.57- 183.57   149.42
  5.292   5.292 (0.958)    61    776575                   194.30- 254.30   228.14
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
  5.313   5.313 (0.962)    72    213470 50.0000   47.150  80.00- 120.00   100.00
  5.313   5.313 (0.962)    43   1135793                   492.83- 552.83   532.06
  5.313   5.313 (0.962)    57     89338                    11.22-  71.22    41.85
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Tetrahydrofuran					CAS #: 109-99-9		
5.514	5.514 (0.999)	42	658283	50.0000	50.994	80.00- 120.00	100.00
5.514	5.514 (0.999)	71	196232			1.67- 61.67	29.81
5.514	5.514 (0.999)	72	201869			1.66- 61.66	30.67
100 Chloroform					CAS #: 67-66-3		
5.586	5.586 (1.012)	83	945163	50.0000	49.574	80.00- 120.00	100.00
5.586	5.586 (1.012)	85	612867			35.62- 95.62	64.84
102 Cyclohexane					CAS #: 110-82-7		
5.686	5.686 (1.030)	84	607167	50.0000	46.981	80.00- 120.00	100.00
5.686	5.686 (1.030)	56	969497			127.28- 187.28	159.68
5.686	5.686 (1.030)	41	472316			46.63- 106.63	77.79
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.034)	97	980646	50.0000	46.744	80.00- 120.00	100.00
5.707	5.707 (1.034)	99	625513			33.98- 93.98	63.79
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.054)	119	1043450	50.0000	47.800	80.00- 120.00	100.00
5.822	5.822 (1.054)	117	1048571			70.95- 130.95	100.49
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.090)	57	3107208	50.0000	49.678	80.00- 120.00	100.00
6.015	6.015 (1.090)	56	962406			0.93- 60.93	30.97
6.015	6.015 (1.090)	41	707019			0.00- 52.07	22.75
116 Benzene					CAS #: 71-43-2		
6.037	6.037 (0.942)	78	1369294	50.0000	47.204	80.00- 120.00	100.00
6.037	6.037 (0.942)	77	323000			0.00- 52.91	23.59
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.101	6.101 (1.105)	87	339536	50.0000	48.491	80.00- 120.00	100.00
6.101	6.101 (1.105)	73	1328355			372.87- 432.87	391.23
6.101	6.101 (1.105)	55	433057			97.70- 157.70	127.54
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.123	6.123 (0.955)	62	669293	50.0000	53.080	80.00- 120.00	100.00
6.123	6.123 (0.955)	64	213801			2.36- 62.36	31.94
121 Heptane					CAS #: 142-82-5		
6.180	6.180 (0.964)	71	499160	50.0000	48.225	80.00- 120.00	100.00
6.180	6.180 (0.964)	43	1162583			192.75- 252.75	232.91
6.180	6.180 (0.964)	57	624872			92.77- 152.77	125.18
125 Trichloroethene					CAS #: 79-01-6		
6.603	6.603 (1.030)	95	673022	50.0000	47.943	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.603	6.603 (1.030)	130	745469			78.45- 138.45	110.76
6.603	6.603 (1.030)	97	452521			35.78- 95.78	67.24
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.214)	83	908364	50.0000	45.263	80.00- 120.00	100.00
6.703	6.703 (1.214)	98	425748			16.08- 76.08	46.87
6.703	6.703 (1.214)	55	937619			69.75- 129.75	103.22
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.839	6.839 (1.067)	63	651820	50.0000	48.853	80.00- 120.00	100.00
6.839	6.839 (1.067)	62	458594			40.72- 100.72	70.36
6.839	6.839 (1.067)	41	318789			20.11- 80.11	48.91
136 1,4-Dioxane					CAS #: 123-91-1		
6.925	6.925 (1.080)	88	359012	50.0000	48.642	80.00- 120.00	100.00
6.925	6.925 (1.080)	58	315931			57.35- 117.35	88.00
6.925	6.925 (1.080)	57	99593			0.00- 56.09	27.74
138 Bromodichloromethane					CAS #: 75-27-4		
7.061	7.061 (1.102)	83	1081029	50.0000	50.369	80.00- 120.00	100.00
7.061	7.061 (1.102)	85	694791			34.91- 94.91	64.27
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.441	7.441 (1.161)	75	873585	50.0000	50.362	80.00- 120.00	100.00
7.441	7.441 (1.161)	77	293476			3.24- 63.24	33.59
7.441	7.441 (1.161)	39	499725			23.84- 83.84	57.20
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.178)	58	611684	50.0000	48.322	80.00- 120.00	100.00
7.548	7.548 (1.178)	43	1602554			220.90- 280.90	261.99
7.548	7.548 (1.178)	85	218073			5.60- 65.60	35.65
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.198)	91	1962899	50.0000	49.655	80.00- 120.00	100.00
7.677	7.677 (1.198)	92	1143530			28.71- 88.71	58.26
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.894)	75	841715	50.0000	46.478	80.00- 120.00	100.00
7.921	7.921 (0.894)	77	276898			2.84- 62.84	32.90
7.921	7.921 (0.894)	39	453388			22.14- 82.14	53.86
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.912)	97	699389	50.0000	44.398	80.00- 120.00	100.00
8.078	8.078 (0.912)	99	434014			33.31- 93.31	62.06
8.078	8.078 (0.912)	83	597631			55.94- 115.94	85.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
156 Tetrachloroethene					CAS #: 127-18-4		
8.114	8.114 (0.916)	166	1009415	50.0000	46.133	80.00- 120.00	100.00
8.114	8.114 (0.916)	129	762515			46.29- 106.29	75.54
8.114	8.114 (0.916)	131	738991			44.37- 104.37	73.21
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	844842	50.0000	45.433	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	1568085			152.24- 212.24	185.61
8.243	8.243 (0.930)	100	134648			0.00- 47.15	15.94
160 Dibromochloromethane					CAS #: 124-48-1		
8.386	8.386 (0.947)	129	1362340	50.0000	46.172	80.00- 120.00	100.00
8.386	8.386 (0.947)	127	1059350			46.82- 106.82	77.76
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.501	8.501 (0.960)	107	1147911	50.0000	46.015	80.00- 120.00	100.00
8.501	8.501 (0.960)	109	1063288			64.56- 124.56	92.63
165 Chlorobenzene					CAS #: 108-90-7		
8.881	8.881 (1.002)	112	1732270	50.0000	45.952	80.00- 120.00	100.00
8.881	8.881 (1.002)	114	544898			2.04- 62.04	31.46
8.881	8.881 (1.002)	77	921721			25.23- 85.23	53.21
167 Ethyl Benzene					CAS #: 100-41-4		
8.931	8.931 (1.008)	106	856674	50.0000	45.199	80.00- 120.00	100.00
8.931	8.931 (1.008)	91	2650556			278.30- 338.30	309.40
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	1061031	50.0000	45.574	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	2089832			162.42- 222.42	196.96
171 o-Xylene					CAS #: 95-47-6		
9.375	9.375 (1.058)	106	1034486	50.0000	45.678	80.00- 120.00	100.00
9.368	9.368 (1.057)	91	2108302			175.73- 235.73	203.80
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.061)	104	1663132	50.0000	45.023	80.00- 120.00	100.00
9.389	9.389 (1.060)	78	761510			16.95- 76.95	45.79
174 Bromoform					CAS #: 75-25-2		
9.590	9.590 (1.082)	173	1348456	50.0000	46.793	80.00- 120.00	100.00
9.590	9.590 (1.082)	171	684808			21.43- 81.43	50.78
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.091)	105	3174877	50.0000	44.957	80.00- 120.00	100.00
9.661	9.661 (1.091)	120	877935			0.00- 57.61	27.65

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

  175 Cumene (continued)
  9.661   9.661 (1.091)    51    356936                     0.00-  40.74    11.24
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
  9.977   9.977 (1.126)    83   1612356 50.0000   45.996  80.00- 120.00   100.00
  9.977   9.977 (1.126)    85   1041148                    34.51-  94.51    64.57
-------------------------------------------------------------------------------
  182 Propylbenzene                                CAS #: 103-65-1
 10.005  10.005 (1.129)    91   3628023 50.0000   45.128  80.00- 120.00   100.00
 10.005  10.005 (1.129)   120    915362                     0.00-  54.88    25.23
 10.005  10.005 (1.129)   105    133118                     0.00-  33.79     3.67
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                               CAS #: 622-96-8
 10.098  10.098 (1.140)   120   1003384 50.0000   45.180  80.00- 120.00   100.00
 10.098  10.098 (1.140)   105   3222364                   289.38- 349.38   321.15
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 10.156  10.156 (1.146)   120   1348131 50.0000   43.689  80.00- 120.00   100.00
 10.149  10.149 (1.146)   105   2723220                   171.33- 231.33   202.00
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                       CAS #: 95-63-6
 10.478  10.478 (1.183)   120   1266424 50.0000   45.057  80.00- 120.00   100.00
 10.478  10.478 (1.183)   105   2694058                   182.43- 242.43   212.73
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                          CAS #: 541-73-1
 10.765  10.765 (1.215)   146   1978401 50.0000   46.531  80.00- 120.00   100.00
 10.765  10.765 (1.215)   148   1245839                    33.68-  93.68    62.97
 10.765  10.765 (1.215)   111    770493                    10.08-  70.08    38.95
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                          CAS #: 106-46-7
 10.843  10.843 (1.224)   146   1984548 50.0000   45.215  80.00- 120.00   100.00
 10.843  10.843 (1.224)   148   1265667                    33.78-  93.78    63.78
 10.843  10.843 (1.224)   111    756367                     8.79-  68.79    38.11
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                          CAS #: 100-44-7
 10.965  10.965 (1.238)    91   2459805 50.0000   44.906  80.00- 120.00   100.00
 10.965  10.965 (1.238)   126    570441                     0.00-  53.35    23.19
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                          CAS #: 95-50-1
 11.173  11.173 (1.261)   146   1905903 50.0000   45.959  80.00- 120.00   100.00
 11.173  11.173 (1.261)   148   1198965                    32.96-  92.96    62.91
 11.173  11.173 (1.261)   111    758167                    10.66-  70.66    39.78
-------------------------------------------------------------------------------
  226 1,2,4-Trichlorobenzene                       CAS #: 120-82-1
 12.591  12.591 (1.421)   180   1847766 50.0000   46.332  80.00- 120.00   100.00
 12.591  12.591 (1.421)   182   1736064                    64.75- 124.75    93.95
-------------------------------------------------------------------------------
```

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

  227 Hexachlorobutadiene                          CAS #: 87-68-3
 12.684  12.684 (1.432)   225   1359880 50.0000   45.968  80.00- 120.00   100.00
 12.684  12.684 (1.432)   223    856871                   32.54-  92.54    63.01
-------------------------------------------------------------------------------
  228 Naphthalene                                  CAS #: 91-20-3
 12.870  12.870 (1.453)   128    451486 5.00000    4.494  80.00- 120.00   100.00
 12.870  12.870 (1.453)   127     56260                    0.00-  42.17    12.46
-------------------------------------------------------------------------------
M 239 Total Xylene                                 CAS #: 1330-20-7
                                 2095517 50.0000   91.251
-------------------------------------------------------------------------------
```

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a020202.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /var/chem/msda.i/02feb17.b/a17q0116a.m
Misc Info: 50ppbv(100ppbv)

Calibration Date: 02-FEB-2017
Calibration Time: 10:10
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

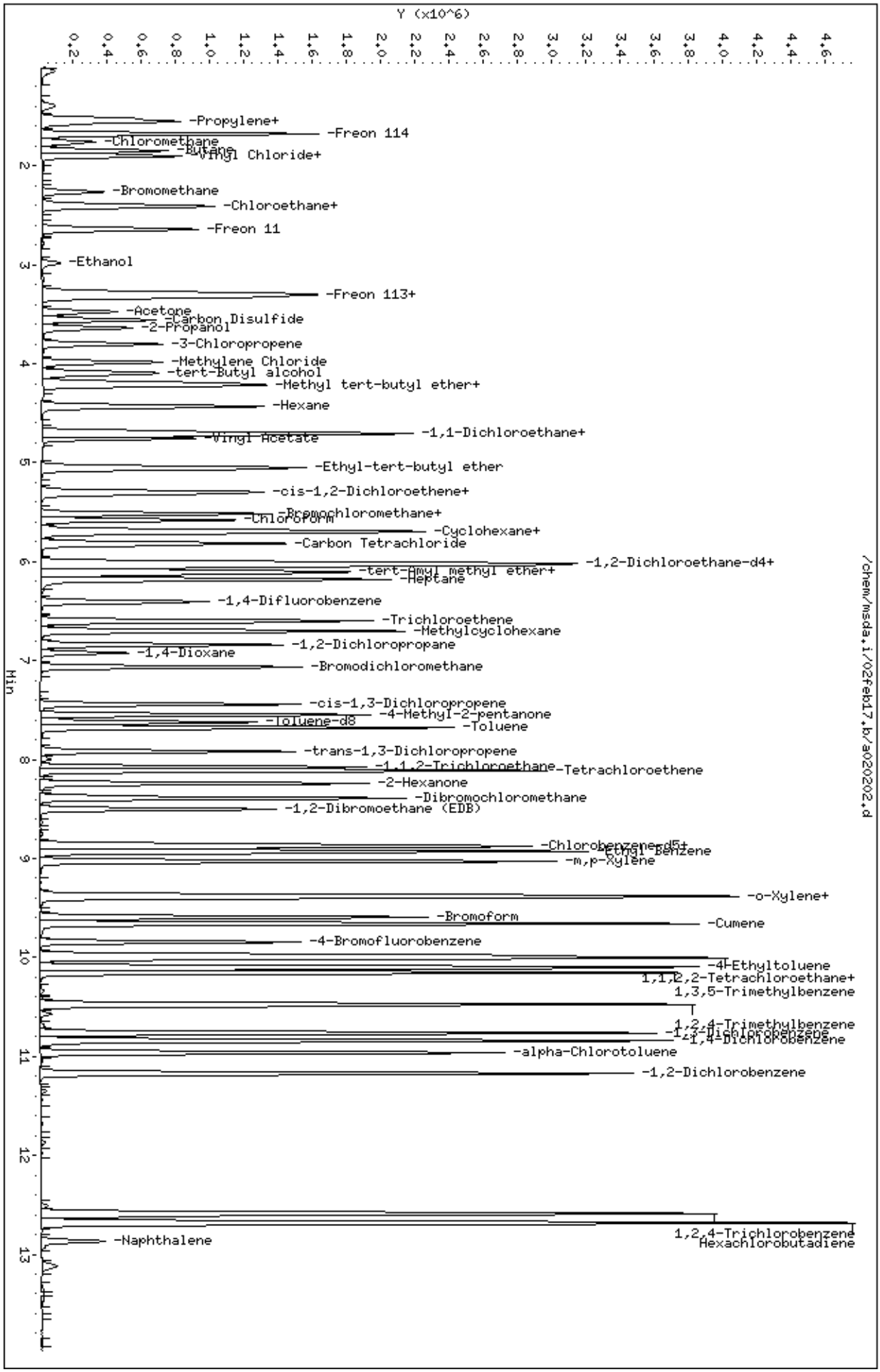
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	213765	128259	299271	213765	0.00
123 1,4-Difluorobenze	909926	545956	1273896	909926	0.00
163 Chlorobenzene-d5	849867	509920	1189814	849867	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	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/msda.i/02feb17.b/a020202.d
Date : 02-FEB-2017 10:10
Client ID: CCV
Sample Info: 100mL #2819-200A
Column phase: RTX-624

Instrument: msda.i
Operator: jg
Column diameter: 0.25



Page 1

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Client Sample ID: CCV
Lab ID#: 1701428B-21B
EPA METHOD TO-15 GC/MS

File Name:	**14020602**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 2/6/17 09:15 AM**

Compound	%Recovery
Freon 12	111
Freon 114	116
Chloromethane	123
Vinyl Chloride	96
1,3-Butadiene	89
Bromomethane	87
Chloroethane	115
Freon 11	135 Q
Ethanol	105
Freon 113	134 Q
1,1-Dichloroethene	126
Acetone	119
2-Propanol	105
Carbon Disulfide	116
3-Chloropropene	106
Methylene Chloride	124
Methyl tert-butyl ether	115
trans-1,2-Dichloroethene	106
Hexane	123
1,1-Dichloroethane	122
2-Butanone (Methyl Ethyl Ketone)	105
cis-1,2-Dichloroethene	120
Tetrahydrofuran	106
Chloroform	119
1,1,1-Trichloroethane	119
Cyclohexane	120
Carbon Tetrachloride	122
2,2,4-Trimethylpentane	117
Benzene	119
1,2-Dichloroethane	103
Heptane	95
Trichloroethene	114
1,2-Dichloropropane	110
1,4-Dioxane	109
Bromodichloromethane	110
cis-1,3-Dichloropropene	104
4-Methyl-2-pentanone	89
Toluene	112
trans-1,3-Dichloropropene	104
1,1,2-Trichloroethane	104
Tetrachloroethene	120
2-Hexanone	96

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Client Sample ID: CCV
Lab ID#: 1701428B-21B
EPA METHOD TO-15 GC/MS

File Name:	**14020602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/6/17 09:15 AM**	

Compound	**%Recovery**
Dibromochloromethane	109
1,2-Dibromoethane (EDB)	109
Chlorobenzene	110
Ethyl Benzene	105
m,p-Xylene	107
o-Xylene	103
Styrene	103
Bromoform	111
Cumene	104
1,1,2,2-Tetrachloroethane	105
Propylbenzene	106
4-Ethyltoluene	96
1,3,5-Trimethylbenzene	122
1,2,4-Trimethylbenzene	102
1,3-Dichlorobenzene	105
1,4-Dichlorobenzene	105
alpha-Chlorotoluene	79
1,2-Dichlorobenzene	104
1,2,4-Trichlorobenzene	78
Hexachlorobutadiene	77
Naphthalene	99

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

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

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd14.i Injection Date: 06-FEB-2017 09:15
Lab File ID: 14020602.d Init. Cal. Date(s): 01-DEC-2016 19-DEC-2016
Analysis Type: AIR Init. Cal. Times: 12:05 12:01
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd14.i/06feb17.b/14651201b.m

COMPOUND	RRF / AMOUNT	RF100	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 117 1,2-Dichloroethane-d4	1.22471	1.16577	0.010	4.81274	30.00000	Averaged	
$ 146 Toluene-d8	0.98778	0.97165	0.010	1.63347	30.00000	Averaged	
$ 177 4-Bromofluorobenzene	0.62075	0.62603	0.010	-0.85108	30.00000	Averaged	
9 Propylene	1.10861	1.17584	0.010	-6.06460	30.00000	Averaged	
11 Freon 12	3.18884	3.52836	0.010	-10.64724	30.00000	Averaged	
15 Freon 114	2.68476	3.10569	0.010	-15.67848	30.00000	Averaged	
17 Chloromethane	1.22499	1.50418	0.010	-22.79153	30.00000	Averaged	
23 Butane	0.29278	0.28542	0.010	2.51362	40.00000	Averaged	
25 Vinyl Chloride	1.22358	1.17987	0.010	3.57229	30.00000	Averaged	
26 1,3-Butadiene	1.22747	1.09704	0.010	10.62604	30.00000	Averaged	
29 Bromomethane	0.75608	0.65780	0.010	12.99842	30.00000	Averaged	
30 Chloroethane	0.59497	0.68336	0.010	-14.85750	30.00000	Averaged	
31 Isopentane	1.29296	1.85036	0.010	-43.11056	40.00000	Averaged	<-
35 Freon 11	2.88354	3.90296	0.010	-35.35285	30.00000	Averaged	<-
42 Ethanol	0.62345	0.65475	0.010	-5.02073	30.00000	Averaged	
49 Freon 113	2.18350	2.93894	0.010	-34.59755	30.00000	Averaged	<-
50 1,1-Dichloroethene	1.84329	2.32180	0.010	-25.95928	30.00000	Averaged	
52 Acetone	0.62777	0.74486	0.010	-18.65256	30.00000	Averaged	
56 Carbon Disulfide	3.27236	3.78994	0.010	-15.81675	30.00000	Averaged	
57 2-Propanol	2.42317	2.53476	0.010	-4.60505	30.00000	Averaged	
58 3-Chloropropene	0.51015	0.54193	0.010	-6.22980	30.00000	Averaged	
66 Methylene Chloride	1.44875	1.80263	0.010	-24.42655	30.00000	Averaged	
72 Methyl tert-butyl ether	3.20626	3.69103	0.010	-15.11962	30.00000	Averaged	
73 trans-1,2-Dichloroethene	1.31047	1.39342	0.010	-6.32958	30.00000	Averaged	
78 Hexane	2.11758	2.60692	0.010	-23.10847	30.00000	Averaged	
82 1,1-Dichloroethane	2.15256	2.62904	0.010	-22.13551	30.00000	Averaged	
86 Vinyl Acetate	0.34301	0.35414	0.010	-3.24516	30.00000	Averaged	
91 cis-1,2-Dichloroethene	1.79509	2.15933	0.010	-20.29055	30.00000	Averaged	
92 2-Butanone	0.62433	0.65382	0.010	-4.72264	30.00000	Averaged	
99 Tetrahydrofuran	1.69837	1.79953	0.010	-5.95648	30.00000	Averaged	
100 Chloroform	2.46157	2.91977	0.010	-18.61423	30.00000	Averaged	
102 Cyclohexane	1.62258	1.94553	0.010	-19.90359	30.00000	Averaged	
103 1,1,1-Trichloroethane	2.70823	3.21551	0.010	-18.73106	30.00000	Averaged	
106 Carbon Tetrachloride	2.84102	3.47193	0.010	-22.20703	30.00000	Averaged	
113 2,2,4-Trimethylpentane	7.17146	8.38108	0.010	-16.86719	30.00000	Averaged	
116 Benzene	0.90162	1.07382	0.010	-19.09946	30.00000	Averaged	

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd14.i Injection Date: 06-FEB-2017 09:15
Lab File ID: 14020602.d Init. Cal. Date(s): 01-DEC-2016 19-DEC-2016
Analysis Type: AIR Init. Cal. Times: 12:05 12:01
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd14.i/06feb17.b/14651201b.m

COMPOUND	RRF / AMOUNT	RF100	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
120 1,2-Dichloroethane	0.43181	0.44681	0.010	-3.47529	30.00000	Averaged
121 Heptane	0.37140	0.35198	0.010	5.23111	30.00000	Averaged
125 Trichloroethene	0.43867	0.50146	0.010	-14.31419	30.00000	Averaged
127 Methylcyclohexane	0.55652	0.64608	0.010	-16.09198	40.00000	Averaged
132 1,2-Dichloropropane	0.37753	0.41654	0.010	-10.33130	30.00000	Averaged
136 1,4-Dioxane	0.24502	0.26815	0.010	-9.44255	30.00000	Averaged
138 Bromodichloromethane	0.69678	0.76524	0.010	-9.82444	30.00000	Averaged
144 cis-1,3-Dichloropropene	0.55631	0.57775	0.010	-3.85317	30.00000	Averaged
145 4-Methyl-2-pentanone	0.15841	0.14091	0.010	11.04635	30.00000	Averaged
147 Toluene	1.24887	1.39751	0.010	-11.90125	30.00000	Averaged
150 trans-1,3-Dichloropropene	0.55147	0.57133	0.010	-3.60089	30.00000	Averaged
155 1,1,2-Trichloroethane	0.48693	0.50857	0.010	-4.44488	30.00000	Averaged
156 Tetrachloroethene	0.69398	0.83317	0.010	-20.05674	30.00000	Averaged
158 2-Hexanone	0.52669	0.50598	0.010	3.93167	30.00000	Averaged
160 Dibromochloromethane	0.94108	1.02287	0.010	-8.69132	30.00000	Averaged
161 1,2-Dibromoethane (EDB)	0.74428	0.80955	0.010	-8.76924	30.00000	Averaged
165 Chlorobenzene	1.14956	1.26419	0.010	-9.97156	30.00000	Averaged
167 Ethyl Benzene	0.59258	0.62474	0.010	-5.42749	30.00000	Averaged
169 m,p-Xylene	0.72282	0.77129	0.010	-6.70506	30.00000	Averaged
171 o-Xylene	0.68644	0.70952	0.010	-3.36280	30.00000	Averaged
172 Styrene	1.17908	1.21118	0.010	-2.72249	30.00000	Averaged
174 Bromoform	0.90386	1.00416	0.010	-11.09715	30.00000	Averaged
175 Cumene	2.15092	2.24099	0.010	-4.18752	30.00000	Averaged
181 1,1,2,2-Tetrachloroethane	0.98614	1.03326	0.010	-4.77823	30.00000	Averaged
182 Propylbenzene	2.36886	2.50421	0.010	-5.71356	30.00000	Averaged
188 4-Ethyltoluene	2.19536	2.10363	0.010	4.17850	30.00000	Averaged
190 1,3,5-Trimethylbenzene	1.68689	2.05242	0.010	-21.66866	30.00000	Averaged
196 1,2,4-Trimethylbenzene	1.65968	1.69702	0.010	-2.25006	30.00000	Averaged
208 1,3-Dichlorobenzene	1.27504	1.34314	0.010	-5.34125	30.00000	Averaged
209 1,4-Dichlorobenzene	1.25295	1.32073	0.010	-5.40953	30.00000	Averaged
212 alpha-Chlorotoluene	1.47254	1.16534	0.010	20.86205	30.00000	Averaged
214 1,2-Dichlorobenzene	1.12965	1.17180	0.010	-3.73171	30.00000	Averaged
226 1,2,4-Trichlorobenzene	0.58849	0.46025	0.010	21.79105	30.00000	Averaged
227 Hexachlorobutadiene	0.50335	0.38988	0.010	22.54172	30.00000	Averaged
228 Naphthalene	0.94129	0.92849	0.010	1.35979	40.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd14.i Injection Date: 06-FEB-2017 09:15
Lab File ID: 14020602.d Init. Cal. Date(s): 01-DEC-2016 19-DEC-2016
Analysis Type: AIR Init. Cal. Times: 12:05 12:01
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd14.i/06feb17.b/14651201b.m

```
|Average %D / Drift Results.                        |
|===================================================|
|Calculated Average %D/Drift =   11.90501           |
|Maximun Average %D/Drift    =   30.00000           |
|* Passed Average %D/Drift Test.                    |
|___________________________________________________|
```

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/06feb17.b/14020602.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 06-FEB-2017 09:15
Operator : gd Inst ID: msd14.i
Smp Info : 50mL #2819-162A
Misc Info : 100ppbv (100ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/06feb17.b/14651201b.m
Meth Date : 06-Feb-2017 10:03 gdelacru Quant Type: ISTD
Cal Date : 19-DEC-2016 11:43 Cal File: 14121908.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12-Oxy.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.312	5.312 (1.000)	130	81368	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	64780			46.96- 106.96	79.61
5.312	5.312 (1.000)	49	104508			97.69- 157.69	128.44
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.446	6.446 (1.000)	114	344671	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	50851			0.00- 45.92	14.75
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
10.335	10.335 (1.000)	117	321726	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	150163			19.32- 79.32	46.67
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.984	5.984 (1.126)	65	94856	400.000	380.75	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	50726			24.72- 84.72	53.48
$ 146 Toluene-d8					CAS #: 2037-26-5		
8.503	8.503 (1.319)	98	334898	400.000	393.47	80.00- 120.00	100.00
8.489	8.489 (1.317)	70	33295			0.00- 40.20	9.94

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

$ 146 Toluene-d8 (continued)
  8.489   8.489 (1.317)   100    230016                    38.62-  98.62    68.68
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 11.343  11.343 (1.097)   174    201411 400.000   403.40  80.00- 120.00   100.00
 11.343  11.343 (1.097)    95    230748                    89.78- 149.78   114.57
 11.343  11.343 (1.097)   176    196877                    66.10- 126.10    97.75
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.423   1.423 (0.268)    41     23919 100.000   106.06  80.00- 120.00   100.00
  1.423   1.423 (0.268)    42     15758                    33.78-  93.78    65.88
  1.423   1.423 (0.268)    39     17705                    36.58-  96.58    74.02
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.451   1.451 (0.273)    85     71774 100.000   110.65  80.00- 120.00   100.00
  1.451   1.451 (0.273)    87     22480                     1.64-  61.64    31.32
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.563   1.563 (0.294)   135     63176 100.000   115.68  80.00- 120.00   100.00
  1.563   1.563 (0.294)   137     21111                     1.10-  61.10    33.42
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.647   1.647 (0.310)    50     30598 100.000   122.79  80.00- 120.00   100.00
  1.647   1.647 (0.310)    52      9889                     2.75-  62.75    32.32
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.717   1.717 (0.323)    58      5806 100.000   97.486  80.00- 120.00   100.00
  1.717   1.717 (0.323)    43     42163                   736.71- 796.71   726.20
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.744   1.744 (0.328)    62     24001 100.000   96.428  80.00- 120.00   100.00
  1.744   1.744 (0.328)    64      8361                     1.78-  61.78    34.84
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.772   1.772 (0.334)    54     22316 100.000   89.374  80.00- 120.00   100.00
  1.772   1.772 (0.334)    39     20224                    67.57- 127.57    90.63
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.122   2.122 (0.399)    94     13381 100.000   87.002  80.00- 120.00   100.00
  2.122   2.122 (0.399)    96     12317                    62.49- 122.49    92.05
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.220   2.220 (0.418)    64     13901 100.000   114.86  80.00- 120.00   100.00
  2.220   2.220 (0.418)    66      4849                     0.76-  60.76    34.88
-------------------------------------------------------------------------------
   31 Isopentane                                    CAS #: 78-78-4
  2.248   2.248 (0.423)    43     37640 100.000   143.11  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
31 Isopentane (continued)							
2.248	2.248 (0.423)	57	26710			37.62- 97.62	70.96
2.248	2.248 (0.423)	72	2576			0.00- 36.64	6.84
35 Freon 11					CAS #: 75-69-4		
2.458	2.458 (0.463)	101	79394	100.000	135.35	80.00- 120.00	100.00
2.458	2.458 (0.463)	103	51256			34.68- 94.68	64.56
42 Ethanol					CAS #: 64-17-5		
2.752	2.752 (0.518)	45	13319	100.000	105.02	80.00- 120.00	100.00
2.752	2.752 (0.518)	46	5335			11.88- 71.88	40.06
49 Freon 113					CAS #: 76-13-1		
3.018	3.018 (0.568)	151	59784	100.000	134.60	80.00- 120.00	100.00
3.018	3.018 (0.568)	153	39568			36.16- 96.16	66.18
3.018	3.018 (0.568)	101	67662			85.93- 145.93	113.18
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.046	3.046 (0.573)	61	47230	100.000	125.96	80.00- 120.00	100.00
3.046	3.046 (0.573)	96	30099			30.16- 90.16	63.73
3.046	3.046 (0.573)	98	19413			8.09- 68.09	41.10
52 Acetone					CAS #: 67-64-1		
3.186	3.186 (0.600)	58	15152	100.000	118.65	80.00- 120.00	100.00
3.186	3.186 (0.600)	43	45517			284.49- 344.49	300.40
56 Carbon Disulfide					CAS #: 75-15-0		
3.256	3.256 (0.613)	76	77095	100.000	115.82	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.326	3.326 (0.626)	45	51562	100.000	104.60	80.00- 120.00	100.00
3.326	3.326 (0.626)	43	10488			0.00- 46.84	20.34
3.326	3.326 (0.626)	59	1998			0.00- 34.10	3.87
58 3-Chloropropene					CAS #: 107-05-1		
3.479	3.479 (0.655)	76	11024	100.000	106.23	80.00- 120.00	100.00
3.479	3.479 (0.655)	41	39813			310.63- 370.63	361.15
66 Methylene Chloride					CAS #: 75-09-2		
3.647	3.647 (0.687)	49	36669	100.000	124.43	80.00- 120.00	100.00
3.647	3.647 (0.687)	84	25197			35.90- 95.90	68.71
3.647	3.647 (0.687)	51	11271			0.00- 59.48	30.74
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.857	3.857 (0.726)	73	75083	100.000	115.12	80.00- 120.00	100.00
3.857	3.857 (0.726)	57	20147			0.00- 56.69	26.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether (continued)							
3.857	3.857 (0.726)	41	19729			0.00- 54.89	26.28
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.885	3.885 (0.731)	96	28345	100.000	106.33	80.00- 120.00	100.00
3.885	3.885 (0.731)	61	40118			113.59- 173.59	141.53
3.885	3.885 (0.731)	98	19123			32.57- 92.57	67.47
78 Hexane					CAS #: 110-54-3		
4.095	4.095 (0.771)	57	53030	100.000	123.11	80.00- 120.00	100.00
4.095	4.095 (0.771)	43	34056			34.03- 94.03	64.22
4.095	4.095 (0.771)	86	8174			0.00- 45.63	15.41
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.389	4.389 (0.826)	63	53480	100.000	122.14	80.00- 120.00	100.00
4.389	4.389 (0.826)	65	16404			1.36- 61.36	30.67
86 Vinyl Acetate					CAS #: 108-05-4		
4.445	4.445 (0.837)	86	7204	100.000	103.24	80.00- 120.00	100.00
4.445	4.445 (0.837)	43	82221			1119.78-1179.78	1141.32
4.445	4.445 (0.837)	42	6410			63.36- 123.36	88.98
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.033	5.033 (0.947)	61	43925	100.000	120.29	80.00- 120.00	100.00
5.033	5.033 (0.947)	96	34207			46.92- 106.92	77.88
5.033	5.033 (0.947)	98	21798			18.93- 78.93	49.63
92 2-Butanone					CAS #: 78-93-3		
5.089	5.089 (0.958)	72	13300	100.000	104.72	80.00- 120.00	100.00
5.089	5.089 (0.958)	43	64892			439.29- 499.29	487.91
5.089	5.089 (0.958)	57	4951			8.51- 68.51	37.23
99 Tetrahydrofuran					CAS #: 109-99-9		
5.298	5.298 (0.997)	42	36606	100.000	105.96	80.00- 120.00	100.00
5.298	5.298 (0.997)	71	12161			3.78- 63.78	33.22
5.298	5.298 (0.997)	72	13613			4.55- 64.55	37.19
100 Chloroform					CAS #: 67-66-3		
5.382	5.382 (1.013)	83	59394	100.000	118.61	80.00- 120.00	100.00
5.382	5.382 (1.013)	85	40828			35.58- 95.58	68.74
102 Cyclohexane					CAS #: 110-82-7		
5.494	5.494 (1.034)	84	39576	100.000	119.90	80.00- 120.00	100.00
5.494	5.494 (1.034)	56	54732			109.96- 169.96	138.30
5.494	5.494 (1.034)	41	28994			47.10- 107.10	73.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.536	5.536 (1.042)	97	65410	100.000	118.73	80.00- 120.00	100.00
5.536	5.536 (1.042)	99	41259			34.47- 94.47	63.08
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.662	5.662 (1.066)	119	70626	100.000	122.21	80.00- 120.00	100.00
5.662	5.662 (1.066)	117	74908			75.51- 135.51	106.06
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.928	5.928 (1.116)	57	170488	100.000	116.87	80.00- 120.00	100.00
5.928	5.928 (1.116)	56	55646			1.61- 61.61	32.64
5.928	5.928 (1.116)	41	42550			0.00- 55.08	24.96
116 Benzene					CAS #: 71-43-2		
5.942	5.942 (0.922)	78	92529	100.000	119.10	80.00- 120.00	100.00
5.942	5.942 (0.922)	77	22000			0.00- 53.47	23.78
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.068	6.068 (0.941)	62	38501	100.000	103.48	80.00- 120.00	100.00
6.068	6.068 (0.941)	64	12971			1.44- 61.44	33.69
121 Heptane					CAS #: 142-82-5		
6.152	6.152 (0.954)	71	30329	100.000	94.769	80.00- 120.00	100.00
6.152	6.152 (0.954)	43	63718			167.16- 227.16	210.09
6.166	6.166 (0.957)	100	11125			4.59- 64.59	36.68
125 Trichloroethene					CAS #: 79-01-6		
6.698	6.698 (1.039)	95	43210	100.000	114.31	80.00- 120.00	100.00
6.698	6.698 (1.039)	130	49589			80.33- 140.33	114.76
6.698	6.698 (1.039)	97	27532			34.11- 94.11	63.72
127 Methylcyclohexane					CAS #: 108-87-2		
6.824	6.824 (1.059)	83	55671	100.000	116.09	80.00- 120.00	100.00
6.824	6.824 (1.059)	98	28416			18.36- 78.36	51.04
6.824	6.824 (1.059)	55	51425			64.11- 124.11	92.37
132 1,2-Dichloropropane					CAS #: 78-87-5		
7.047	7.047 (1.093)	63	35892	100.000	110.33	80.00- 120.00	100.00(H)
7.047	7.047 (1.093)	62	24850			38.98- 98.98	69.24
7.047	7.047 (1.093)	41	19693			26.92- 86.92	54.87
136 1,4-Dioxane					CAS #: 123-91-1		
7.187	7.187 (1.115)	88	23106	100.000	109.44	80.00- 120.00	100.00
7.187	7.187 (1.115)	58	16996			45.23- 105.23	73.56
7.201	7.201 (1.117)	57	5227			0.00- 54.84	22.62

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

  138 Bromodichloromethane                        CAS #: 75-27-4
  7.411   7.411 (1.150)    83     65939 100.000   109.82  80.00- 120.00   100.00
  7.411   7.411 (1.150)    85     42578                   35.40-  95.40    64.57
-------------------------------------------------------------------------------
  144 cis-1,3-Dichloropropene                     CAS #: 10061-01-5
  8.125   8.125 (1.260)    75     49783 100.000   103.85  80.00- 120.00   100.00
  8.125   8.125 (1.260)    77     16530                    4.01-  64.01    33.20
  8.125   8.125 (1.260)    39     27364                   28.76-  88.76    54.97
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                        CAS #: 108-10-1
  8.419   8.419 (1.306)    85     12142 100.000   88.954  80.00- 120.00   100.00
  8.405   8.405 (1.304)    43     82745                  608.29- 668.29   681.48
  8.405   8.405 (1.304)    58     33544                  218.56- 278.56   276.26
-------------------------------------------------------------------------------
  147 Toluene                                     CAS #: 108-88-3
  8.614   8.614 (1.336)    91    120420 100.000   111.90  80.00- 120.00   100.00
  8.614   8.614 (1.336)    92     70244                   28.41-  88.41    58.33
-------------------------------------------------------------------------------
  150 trans-1,3-Dichloropropene                   CAS #: 10061-02-6
  9.104   9.104 (0.881)    75     45953 100.000   103.60  80.00- 120.00   100.00
  9.104   9.104 (0.881)    77     16642                    3.39-  63.39    36.22
  9.104   9.104 (0.881)    39     23589                   23.99-  83.99    51.33
-------------------------------------------------------------------------------
  155 1,1,2-Trichloroethane                       CAS #: 79-00-5
  9.342   9.342 (0.904)    97     40905 100.000   104.44  80.00- 120.00   100.00
  9.342   9.342 (0.904)    99     24167                   30.16-  90.16    59.08
  9.342   9.342 (0.904)    83     34035                   52.74- 112.74    83.20
-------------------------------------------------------------------------------
  156 Tetrachloroethene                           CAS #: 127-18-4
  9.356   9.356 (0.905)   166     67013 100.000   120.06  80.00- 120.00   100.00
  9.356   9.356 (0.905)   129     48926                   44.78- 104.78    73.01
  9.356   9.356 (0.905)   131     49547                   43.76- 103.76    73.94
-------------------------------------------------------------------------------
  158 2-Hexanone                                  CAS #: 591-78-6
  9.636   9.636 (0.932)    58     40697 100.000   96.068  80.00- 120.00   100.00
  9.636   9.636 (0.932)    43     73909                  158.05- 218.05   181.61
  9.636   9.636 (0.932)   100      8319                    0.00-  51.23    20.44
-------------------------------------------------------------------------------
  160 Dibromochloromethane                        CAS #: 124-48-1
  9.762   9.762 (0.944)   129     82271 100.000   108.69  80.00- 120.00   100.00
  9.762   9.762 (0.944)   127     65209                   48.15- 108.15    79.26
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                     CAS #: 106-93-4
  9.888   9.888 (0.957)   107     65113 100.000   108.77  80.00- 120.00   100.00
  9.888   9.888 (0.957)   109     64639                   64.77- 124.77    99.27
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene					CAS #: 108-90-7		
10.363	10.363 (1.003)	112	101681	100.000	109.97	80.00- 120.00	100.00
10.363	10.363 (1.003)	114	33186			2.05- 62.05	32.64
10.363	10.363 (1.003)	77	57106			25.53- 85.53	56.16
167 Ethyl Benzene					CAS #: 100-41-4		
10.447	10.447 (1.011)	106	50249	100.000	105.43	80.00- 120.00	100.00
10.447	10.447 (1.011)	91	153403			275.38- 335.38	305.29
169 m,p-Xylene					CAS #: 108-38-3		
10.559	10.559 (1.022)	106	62036	100.000	106.70	80.00- 120.00	100.00
10.559	10.559 (1.022)	91	119683			163.96- 223.96	192.93
171 o-Xylene					CAS #: 95-47-6		
10.909	10.909 (1.056)	106	57068	100.000	103.36	80.00- 120.00	100.00
10.909	10.909 (1.056)	91	119502			178.07- 238.07	209.40
172 Styrene					CAS #: 100-42-5		
10.937	10.937 (1.058)	104	97417	100.000	102.72	80.00- 120.00	100.00
10.937	10.937 (1.058)	78	44038			17.50- 77.50	45.21
174 Bromoform					CAS #: 75-25-2		
11.105	11.105 (1.074)	173	80766	100.000	111.10	80.00- 120.00	100.00
11.105	11.105 (1.074)	171	41802			20.99- 80.99	51.76
175 Cumene					CAS #: 98-82-8		
11.203	11.203 (1.084)	105	180246	100.000	104.19	80.00- 120.00	100.00
11.203	11.203 (1.084)	120	50720			0.00- 57.87	28.14
11.189	11.189 (1.083)	51	18869			0.00- 40.21	10.47
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.483	11.483 (1.111)	83	83107	100.000	104.78	80.00- 120.00	100.00
11.483	11.483 (1.111)	85	56290			36.88- 96.88	67.73
182 Propylbenzene					CAS #: 103-65-1		
11.497	11.497 (1.112)	91	201417	100.000	105.71	80.00- 120.00	100.00
11.497	11.497 (1.112)	120	51958			0.00- 55.56	25.80
11.497	11.497 (1.112)	105	8243			0.00- 34.03	4.09
188 4-Ethyltoluene					CAS #: 622-96-8		
11.581	11.581 (1.120)	105	169198	100.000	95.821	80.00- 120.00	100.00
11.581	11.581 (1.120)	120	52282			0.00- 57.62	30.90
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.623	11.623 (1.125)	105	165079	100.000	121.67	80.00- 120.00	100.00
11.623	11.623 (1.125)	120	80364			23.73- 83.73	48.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.861	11.861 (1.148)	105	136494	100.000	102.25	80.00- 120.00	100.00
11.861	11.861 (1.148)	120	62948			17.13- 77.13	46.12
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.056	12.056 (1.167)	146	108031	100.000	105.34	80.00- 120.00	100.00
12.056	12.056 (1.167)	148	66996			33.49- 93.49	62.02
12.056	12.056 (1.167)	111	39174			7.53- 67.53	36.26
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.112	12.112 (1.172)	146	106228	100.000	105.41	80.00- 120.00	100.00
12.112	12.112 (1.172)	148	67026			33.27- 93.27	63.10
12.112	12.112 (1.172)	111	38568			7.29- 67.29	36.31
212 alpha-Chlorotoluene					CAS #: 100-44-7		
12.196	12.196 (1.180)	91	93730	100.000	79.138	80.00- 120.00	100.00
12.210	12.210 (1.181)	126	22341			0.00- 53.95	23.84
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.336	12.336 (1.194)	146	94250	100.000	103.73	80.00- 120.00	100.00
12.336	12.336 (1.194)	148	59467			32.65- 92.65	63.09
12.336	12.336 (1.194)	111	36809			9.40- 69.40	39.05
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
13.176	13.176 (1.275)	180	37019	100.000	78.209	80.00- 120.00	100.00
13.176	13.176 (1.275)	182	34437			63.10- 123.10	93.03
227 Hexachlorobutadiene					CAS #: 87-68-3		
13.232	13.232 (1.280)	225	31359	100.000	77.458	80.00- 120.00	100.00
13.232	13.232 (1.280)	223	19669			33.31- 93.31	62.72
228 Naphthalene					CAS #: 91-20-3		
13.316	13.316 (1.288)	128	7468	10.0000	9.864	80.00- 120.00	100.00(a)
13.316	13.316 (1.288)	127	984			0.00- 44.56	13.18

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14020602.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msd14.i/06feb17.b/14651201b.m
Misc Info: 100ppbv (100ppbv)

Calibration Date: 06-FEB-2017
Calibration Time: 09:15
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

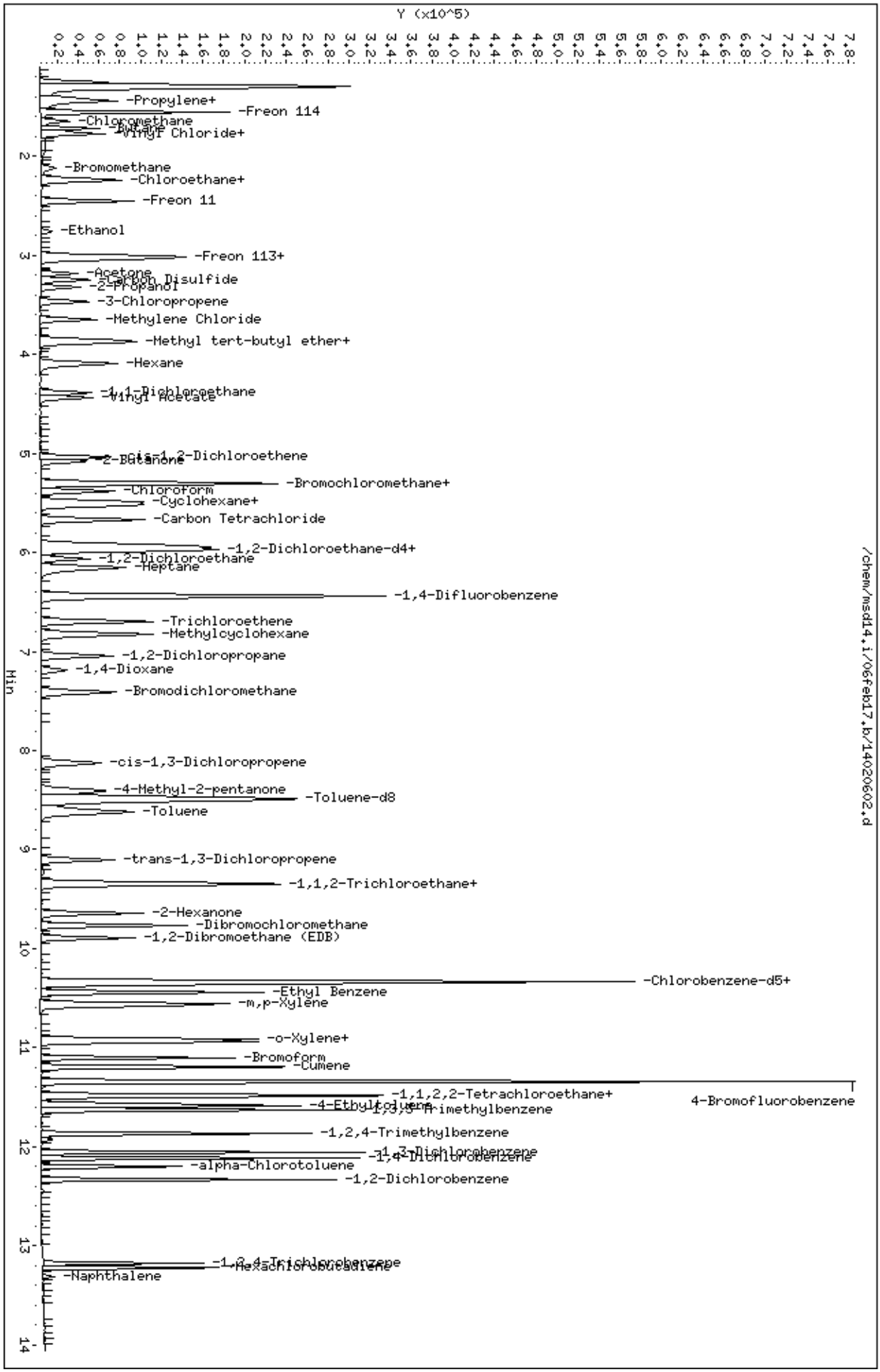
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	81368	48821	113915	81368	0.00
123 1,4-Difluorobenze	344671	206803	482539	344671	0.00
163 Chlorobenzene-d5	321726	193036	450416	321726	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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/msd14.i/06feb17.b/14020602.d
Date : 06-FEB-2017 09:15
Client ID: CCV
Sample Info: 50mL #2819-162A
Column phase: RTX-624

Instrument: msd14.i
Operator: gd
Column diameter: 0.18



/chem/msd14.i/06feb17.b/14020602.d

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Client Sample ID: LCS

Lab ID#: 1701428B-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a020203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/2/17 10:35 AM**	

Compound	%Recovery	Method Limits
Freon 12	98	70-130
Freon 114	94	70-130
Chloromethane	104	70-130
Vinyl Chloride	95	70-130
1,3-Butadiene	93	70-130
Bromomethane	93	70-130
Chloroethane	94	70-130
Freon 11	96	70-130
Ethanol	80	70-130
Freon 113	91	70-130
1,1-Dichloroethene	95	70-130
Acetone	96	70-130
2-Propanol	98	70-130
Carbon Disulfide	94	70-130
3-Chloropropene	92	70-130
Methylene Chloride	96	70-130
Methyl tert-butyl ether	90	70-130
trans-1,2-Dichloroethene	99	70-130
Hexane	95	70-130
1,1-Dichloroethane	92	70-130
2-Butanone (Methyl Ethyl Ketone)	88	70-130
cis-1,2-Dichloroethene	89	70-130
Tetrahydrofuran	97	70-130
Chloroform	94	70-130
1,1,1-Trichloroethane	91	70-130
Cyclohexane	93	70-130
Carbon Tetrachloride	92	70-130
2,2,4-Trimethylpentane	95	70-130
Benzene	91	70-130
1,2-Dichloroethane	102	70-130
Heptane	96	70-130
Trichloroethene	95	70-130
1,2-Dichloropropane	96	70-130
1,4-Dioxane	100	70-130
Bromodichloromethane	99	70-130
cis-1,3-Dichloropropene	106	70-130
4-Methyl-2-pentanone	98	70-130
Toluene	95	70-130
trans-1,3-Dichloropropene	89	70-130
1,1,2-Trichloroethane	86	70-130
Tetrachloroethene	87	70-130
2-Hexanone	94	70-130

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Client Sample ID: LCS

Lab ID#: 1701428B-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a020203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/2/17 10:35 AM**	

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	90	70-130
1,2-Dibromoethane (EDB)	87	70-130
Chlorobenzene	87	70-130
Ethyl Benzene	89	70-130
m,p-Xylene	88	70-130
o-Xylene	89	70-130
Styrene	92	70-130
Bromoform	93	70-130
Cumene	87	70-130
1,1,2,2-Tetrachloroethane	88	70-130
Propylbenzene	88	70-130
4-Ethyltoluene	87	70-130
1,3,5-Trimethylbenzene	87	70-130
1,2,4-Trimethylbenzene	87	70-130
1,3-Dichlorobenzene	90	70-130
1,4-Dichlorobenzene	89	70-130
alpha-Chlorotoluene	91	70-130
1,2-Dichlorobenzene	89	70-130
1,2,4-Trichlorobenzene	88	70-130
Hexachlorobutadiene	88	70-130
Naphthalene	91	60-140

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	104	70-130

Report Date: 02-Feb-2017 12:43

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 02feb17
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCS
Client Smp ID: LCS
Level: LOW
Operator: jg
Data Type: MS DATA
SampleType: LCS
SpikeList File: AT12ethanol.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /var/chem/msda.i/02feb17.b/a17q0116a.m
Misc Info: 50ppbv(200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	43.795	87.59	60-140
11 Freon 12	50.000	48.981	97.96	70-130
15 Freon 114	50.000	46.877	93.75	70-130
17 Chloromethane	50.000	52.130	104.26	70-130
23 Butane	50.000	43.766	87.53	60-140
25 Vinyl Chloride	50.000	47.304	94.61	70-130
26 1,3-Butadiene	50.000	46.446	92.89	70-130
29 Bromomethane	50.000	46.449	92.90	70-130
30 Chloroethane	50.000	46.806	93.61	70-130
31 Isopentane	50.000	47.113	94.23	60-140
35 Freon 11	50.000	47.991	95.98	70-130
42 Ethanol	57.500	46.342	80.60	70-130
49 Freon 113	50.000	45.735	91.47	70-130
50 1,1-Dichloroethene	50.000	47.447	94.89	70-130
52 Acetone	50.000	47.999	96.00	70-130
56 Carbon Disulfide	50.000	46.870	93.74	70-130
57 2-Propanol	50.000	48.996	97.99	70-130
58 3-Chloropropene	50.000	45.831	91.66	70-130
66 Methylene Chloride	50.000	47.991	95.98	70-130
72 Methyl tert-butyl	50.000	44.986	89.97	70-130
73 trans-1,2-Dichloro	50.000	49.714	99.43	70-130
78 Hexane	50.000	47.633	95.27	70-130
82 1,1-Dichloroethane	50.000	46.080	92.16	70-130
86 Vinyl Acetate	50.000	44.889	89.78	70-130
91 cis-1,2-Dichloroet	50.000	44.369	88.74	70-130
92 2-Butanone	50.000	44.087	88.17	70-130
99 Tetrahydrofuran	50.000	48.656	97.31	70-130
100 Chloroform	50.000	47.147	94.29	70-130
103 1,1,1-Trichloroeth	50.000	45.551	91.10	70-130
106 Carbon Tetrachlori	50.000	46.055	92.11	70-130
102 Cyclohexane	50.000	46.735	93.47	70-130
113 2,2,4-Trimethylpen	50.000	47.685	95.37	70-130
116 Benzene	50.000	45.322	90.64	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	51.026	102.05	70-130
121 Heptane	50.000	48.031	96.06	70-130
125 Trichloroethene	50.000	47.455	94.91	70-130
127 Methylcyclohexane	50.000	44.790	89.58	60-140
132 1,2-Dichloropropan	50.000	47.839	95.68	70-130
136 1,4-Dioxane	50.000	49.800	99.60	70-130
138 Bromodichlorometha	50.000	49.460	98.92	70-130
144 cis-1,3-Dichloropr	50.000	52.761	105.52	70-130
145 4-Methyl-2-pentano	50.000	49.141	98.28	70-130
147 Toluene	50.000	47.677	95.35	70-130
150 trans-1,3-Dichloro	50.000	44.727	89.45	70-130
155 1,1,2-Trichloroeth	50.000	42.752	85.50	70-130
156 Tetrachloroethene	50.000	43.331	86.66	70-130
158 2-Hexanone	50.000	47.058	94.12	70-130
160 Dibromochlorometha	50.000	44.998	90.00	70-130
161 1,2-Dibromoethane	50.000	43.737	87.47	70-130
165 Chlorobenzene	50.000	43.459	86.92	70-130
167 Ethyl Benzene	50.000	44.363	88.73	70-130
169 m,p-Xylene	50.000	44.043	88.09	70-130
171 o-Xylene	50.000	44.484	88.97	70-130
172 Styrene	50.000	46.090	92.18	70-130
174 Bromoform	50.000	46.316	92.63	70-130
175 Cumene	50.000	43.367	86.73	70-130
181 1,1,2,2-Tetrachlor	50.000	44.280	88.56	70-130
182 Propylbenzene	50.000	44.132	88.26	70-130
188 4-Ethyltoluene	50.000	43.546	87.09	70-130
190 1,3,5-Trimethylben	50.000	43.646	87.29	70-130
196 1,2,4-Trimethylben	50.000	43.382	86.77	70-130
208 1,3-Dichlorobenzen	50.000	44.795	89.59	70-130
209 1,4-Dichlorobenzen	50.000	44.486	88.97	70-130
212 alpha-Chlorotoluen	50.000	45.630	91.26	70-130
214 1,2-Dichlorobenzen	50.000	44.331	88.66	70-130
226 1,2,4-Trichloroben	50.000	43.872	87.74	70-130
227 Hexachlorobutadien	50.000	44.293	88.59	70-130
228 Naphthalene	5.000	4.555	91.09	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.508	98.03	70-130
$ 146 Toluene-d8	25.000	25.512	102.05	70-130
$ 177 4-Bromofluorobenze	25.000	26.000	104.00	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/02feb17.b/a020203.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 02-FEB-2017 10:35
Operator : jg Inst ID: msda.i
Smp Info : 50mL #2819-232
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /var/chem/msda.i/02feb17.b/a17q0116a.m
Meth Date : 02-Feb-2017 12:42 jscarbro Quant Type: ISTD
Cal Date : 16-JAN-2017 18:50 Cal File: a011609.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.521 (1.000)	130	166679	25.0000		80.00- 120.00	100.00
5.528	5.521 (1.000)	128	127335			50.57- 110.57	76.40
5.528	5.521 (1.000)	49	254129			118.90- 178.90	152.47
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.409 (1.000)	114	699096	25.0000		80.00- 120.00	100.00
6.416	6.409 (1.000)	88	107285			0.00- 45.14	15.35
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.866	8.859 (1.000)	117	666319	25.0000		80.00- 120.00	100.00
8.866	8.859 (1.000)	82	331751			21.31- 81.31	49.79
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.065	6.058 (1.097)	65	215674	24.5077	24.508	80.00- 120.00	100.00
6.065	6.058 (1.097)	67	125536			29.46- 89.46	58.21
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.627	7.620 (1.189)	98	745472	25.5118	25.512	80.00- 120.00	100.00
7.627	7.620 (1.189)	70	73216			0.00- 39.82	9.82

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

$ 146 Toluene-d8 (continued)
  7.627   7.620 (1.189)   100    488509                    36.19-  96.19    65.53
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
  9.855   9.848 (1.111)   174    418640 25.9999   26.000  80.00- 120.00   100.00
  9.847   9.848 (1.111)    95    490912                   92.19- 152.19   117.26
  9.855   9.848 (1.111)   176    420715                   71.02- 131.02   100.50
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.524   1.524 (0.276)    41    278018 43.7949   43.795  80.00- 120.00   100.00
  1.524   1.524 (0.276)    42    187037                   37.76-  97.76    67.28
  1.524   1.524 (0.276)    39    185646                   38.24-  98.24    66.77
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.560   1.553 (0.282)    85    740831 48.9810   48.981  80.00- 120.00   100.00
  1.560   1.553 (0.282)    87    240299                    2.19-  62.19    32.44
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.682   1.675 (0.304)   135    598692 46.8775   46.877  80.00- 120.00   100.00
  1.689   1.682 (0.305)   137    191913                    1.62-  61.62    32.06
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.768   1.761 (0.320)    50    307468 52.1301   52.130  80.00- 120.00   100.00
  1.768   1.761 (0.320)    52    103051                    4.04-  64.04    33.52
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.854   1.847 (0.335)    58     70053 43.7663   43.766  80.00- 120.00   100.00
  1.854   1.847 (0.335)    43    548011                  761.67- 821.67   782.28
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.889   1.882 (0.342)    62    331186 47.3038   47.304  80.00- 120.00   100.00
  1.889   1.882 (0.342)    64    101725                    0.00-  59.01    30.72
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.918   1.904 (0.347)    54    286431 46.4456   46.446  80.00- 120.00   100.00
  1.918   1.904 (0.347)    39    269815                   63.95- 123.95    94.20
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.276   2.262 (0.412)    94    267347 46.4491   46.449  80.00- 120.00   100.00
  2.276   2.262 (0.412)    96    252789                   64.81- 124.81    94.55
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.398   2.384 (0.434)    64    160330 46.8060   46.806  80.00- 120.00   100.00
  2.398   2.384 (0.434)    66     47356                    1.96-  61.96    29.54
  2.398   2.384 (0.434)    49     51916                    1.70-  61.70    32.38
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
31 Isopentane					CAS #: 78-78-4		
2.427	2.412 (0.439)	43	420042	47.1128	47.113	80.00- 120.00	100.00
2.427	2.412 (0.439)	57	294624			40.19- 100.19	70.14
35 Freon 11					CAS #: 75-69-4		
2.656	2.642 (0.480)	101	786004	47.9907	47.991	80.00- 120.00	100.00
2.656	2.642 (0.480)	103	505982			34.98- 94.98	64.37
42 Ethanol					CAS #: 64-17-5		
3.000	2.978 (0.543)	45	153554	46.3424	46.342	80.00- 120.00	100.00
3.000	2.978 (0.543)	46	58069			9.25- 69.25	37.82
49 Freon 113					CAS #: 76-13-1		
3.315	3.293 (0.600)	151	573932	45.7355	45.735	80.00- 120.00	100.00
3.315	3.293 (0.600)	153	372961			34.55- 94.55	64.98
3.315	3.293 (0.600)	101	664814			83.34- 143.34	115.83
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.343	3.322 (0.605)	98	202648	47.4472	47.447	80.00- 120.00	100.00
3.343	3.322 (0.605)	96	295123			120.22- 180.22	145.63
3.343	3.322 (0.605)	61	551932			243.84- 303.84	272.36
52 Acetone					CAS #: 67-64-1		
3.494	3.480 (0.632)	58	181550	47.9993	47.999	80.00- 120.00	100.00
3.494	3.473 (0.632)	43	553660			267.70- 327.70	304.96
56 Carbon Disulfide					CAS #: 75-15-0		
3.573	3.558 (0.646)	76	854287	46.8698	46.870	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.659	3.637 (0.662)	45	683268	48.9960	48.996	80.00- 120.00	100.00
3.659	3.637 (0.662)	43	117061			0.00- 46.48	17.13
3.659	3.637 (0.662)	59	25722			0.00- 33.95	3.76
58 3-Chloropropene					CAS #: 107-05-1		
3.823	3.802 (0.692)	76	139940	45.8311	45.831	80.00- 120.00	100.00
3.816	3.802 (0.690)	41	502037			307.27- 367.27	358.75
66 Methylene Chloride					CAS #: 75-09-2		
4.002	3.981 (0.724)	49	455558	47.9907	47.991	80.00- 120.00	100.00
4.002	3.988 (0.724)	84	266948			32.37- 92.37	58.60
3.995	3.988 (0.723)	51	142881			0.49- 60.49	31.36
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.210	4.196 (0.762)	73	841746	44.9855	44.986	80.00- 120.00	100.00
4.210	4.196 (0.762)	57	259917			0.00- 59.21	30.88

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether (continued)							
4.210	4.196 (0.762)	41	226726			0.00- 55.49	26.94
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.239	4.225 (0.767)	98	209805	49.7142	49.714	80.00- 120.00	100.00
4.239	4.225 (0.767)	61	554702			224.99- 284.99	264.39
4.239	4.225 (0.767)	96	326897			119.77- 179.77	155.81
78 Hexane					CAS #: 110-54-3		
4.447	4.432 (0.804)	57	658461	47.6332	47.633	80.00- 120.00	100.00
4.447	4.432 (0.804)	43	411621			31.75- 91.75	62.51
4.447	4.432 (0.804)	86	79044			0.00- 42.75	12.00
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.726	4.712 (0.855)	63	642754	46.0804	46.080	80.00- 120.00	100.00
4.726	4.712 (0.855)	65	196404			1.80- 61.80	30.56
86 Vinyl Acetate					CAS #: 108-05-4		
4.769	4.755 (0.863)	86	85214	44.8891	44.889	80.00- 120.00	100.00
4.769	4.755 (0.863)	43	1185327			1309.99-1369.99	1391.00
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.292 (0.959)	98	240643	44.3693	44.369	80.00- 120.00	100.00
5.299	5.292 (0.959)	96	357260			123.57- 183.57	148.46
5.299	5.292 (0.959)	61	534599			194.30- 254.30	222.15
92 2-Butanone					CAS #: 78-93-3		
5.328	5.313 (0.964)	72	155639	44.0874	44.087	80.00- 120.00	100.00
5.328	5.313 (0.964)	43	904552			492.83- 552.83	581.19
5.328	5.313 (0.964)	57	69797			11.22- 71.22	44.85
99 Tetrahydrofuran					CAS #: 109-99-9		
5.521	5.514 (0.999)	42	489745	48.6558	48.656	80.00- 120.00	100.00
5.521	5.514 (0.999)	71	150484			1.67- 61.67	30.73
5.521	5.514 (0.999)	72	153167			1.66- 61.66	31.27
100 Chloroform					CAS #: 67-66-3		
5.593	5.586 (1.012)	83	700880	47.1467	47.147	80.00- 120.00	100.00
5.593	5.586 (1.012)	85	448889			35.62- 95.62	64.05
102 Cyclohexane					CAS #: 110-82-7		
5.700	5.686 (1.031)	84	470948	46.7349	46.735	80.00- 120.00	100.00
5.693	5.686 (1.030)	56	734569			127.28- 187.28	155.98
5.693	5.686 (1.030)	41	367780			46.63- 106.63	78.09
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.714	5.707 (1.034)	97	745122	45.5513	45.551	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane (continued)							
5.714	5.707 (1.034)	99	477877			33.98- 93.98	64.13
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.829	5.822 (1.054)	119	783917	46.0554	46.055	80.00- 120.00	100.00
5.829	5.822 (1.054)	117	799633			70.95- 130.95	102.00
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.030	6.015 (1.091)	57	2325606	47.6852	47.685	80.00- 120.00	100.00
6.030	6.015 (1.091)	56	743856			0.93- 60.93	31.99
6.022	6.015 (1.089)	41	535878			0.00- 52.07	23.04
116 Benzene					CAS #: 71-43-2		
6.044	6.037 (0.942)	78	1010073	45.3216	45.322	80.00- 120.00	100.00
6.044	6.037 (0.942)	77	242340			0.00- 52.91	23.99
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.137	6.123 (0.956)	62	494324	51.0262	51.026	80.00- 120.00	100.00
6.137	6.123 (0.956)	64	161336			2.36- 62.36	32.64
121 Heptane					CAS #: 142-82-5		
6.194	6.180 (0.965)	71	381964	48.0310	48.031	80.00- 120.00	100.00
6.194	6.180 (0.965)	43	882838			192.75- 252.75	231.13
6.194	6.180 (0.965)	57	470694			92.77- 152.77	123.23
125 Trichloroethene					CAS #: 79-01-6		
6.610	6.603 (1.030)	95	511813	47.4549	47.455	80.00- 120.00	100.00
6.610	6.603 (1.030)	130	569043			78.45- 138.45	111.18
6.610	6.603 (1.030)	97	335495			35.78- 95.78	65.55
127 Methylcyclohexane					CAS #: 108-87-2		
6.710	6.703 (1.214)	83	700883	44.7905	44.790	80.00- 120.00	100.00
6.710	6.703 (1.214)	98	319253			16.08- 76.08	45.55
6.710	6.703 (1.214)	55	706030			69.75- 129.75	100.73
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.839 (1.067)	63	490402	47.8391	47.839	80.00- 120.00	100.00
6.846	6.839 (1.067)	62	342755			40.72- 100.72	69.89
6.846	6.839 (1.067)	41	245439			20.11- 80.11	50.05
136 1,4-Dioxane					CAS #: 123-91-1		
6.932	6.925 (1.080)	88	282394	49.7998	49.800	80.00- 120.00	100.00
6.932	6.925 (1.080)	58	255525			57.35- 117.35	90.49
6.932	6.925 (1.080)	57	76950			0.00- 56.09	27.25
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.061 (1.103)	83	815558	49.4600	49.460	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane (continued)							
7.075	7.061 (1.103)	85	523478			34.91- 94.91	64.19
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.441 (1.161)	75	703139	52.7610	52.761	80.00- 120.00	100.00
7.448	7.441 (1.161)	77	232349			3.24- 63.24	33.04
7.448	7.441 (1.161)	39	388783			23.84- 83.84	55.29
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.548 (1.178)	58	477927	49.1411	49.141	80.00- 120.00	100.00
7.555	7.548 (1.178)	43	1247068			220.90- 280.90	260.93
7.555	7.548 (1.178)	85	167650			5.60- 65.60	35.08
147 Toluene					CAS #: 108-88-3		
7.684	7.677 (1.198)	91	1448015	47.6769	47.677	80.00- 120.00	100.00
7.684	7.677 (1.198)	92	841686			28.71- 88.71	58.13
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.921 (0.894)	75	635062	44.7273	44.727	80.00- 120.00	100.00
7.928	7.921 (0.894)	77	212293			2.84- 62.84	33.43
7.928	7.921 (0.894)	39	328783			22.14- 82.14	51.77
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.078 (0.912)	97	528013	42.7521	42.752	80.00- 120.00	100.00
8.085	8.078 (0.912)	99	327582			33.31- 93.31	62.04
8.085	8.078 (0.912)	83	452279			55.94- 115.94	85.66
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.114 (0.916)	166	743346	43.3312	43.331	80.00- 120.00	100.00
8.121	8.114 (0.916)	129	573111			46.29- 106.29	77.10
8.121	8.114 (0.916)	131	552837			44.37- 104.37	74.37
158 2-Hexanone					CAS #: 591-78-6		
8.250	8.243 (0.931)	58	686074	47.0581	47.058	80.00- 120.00	100.00
8.250	8.243 (0.931)	43	1251792			152.24- 212.24	182.46
8.250	8.243 (0.931)	100	111427			0.00- 47.15	16.24
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.386 (0.947)	129	1040948	44.9976	44.998	80.00- 120.00	100.00
8.393	8.386 (0.947)	127	797761			46.82- 106.82	76.64
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.501 (0.960)	107	855431	43.7371	43.737	80.00- 120.00	100.00
8.508	8.501 (0.960)	109	812939			64.56- 124.56	95.03
165 Chlorobenzene					CAS #: 108-90-7		
8.888	8.881 (1.002)	112	1284475	43.4593	43.459	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)
  8.888   8.881 (1.002)   114    410217                     2.04-  62.04    31.94
  8.888   8.881 (1.002)    77    691163                    25.23-  85.23    53.81
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.938   8.931 (1.008)   106    659231 44.3630   44.363  80.00- 120.00   100.00
  8.938   8.931 (1.008)    91   2020735                  278.30- 338.30   306.53
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  9.038   9.031 (1.019)   106    803947 44.0435   44.043  80.00- 120.00   100.00
  9.038   9.031 (1.019)    91   1595422                  162.42- 222.42   198.45
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.375   9.375 (1.057)   106    789872 44.4839   44.484  80.00- 120.00   100.00
  9.375   9.368 (1.057)    91   1616839                  175.73- 235.73   204.70
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.396   9.396 (1.060)   104   1334847 46.0901   46.090  80.00- 120.00   100.00
  9.396   9.389 (1.060)    78    603033                   16.95-  76.95    45.18
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.597   9.590 (1.082)   173   1046459 46.3162   46.316  80.00- 120.00   100.00
  9.597   9.590 (1.082)   171    546287                   21.43-  81.43    52.20
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
  9.668   9.661 (1.090)   105   2401183 43.3673   43.367  80.00- 120.00   100.00
  9.668   9.661 (1.090)   120    648553                    0.00-  57.61    27.01
  9.661   9.661 (1.090)    51    270789                    0.00-  40.74    11.28
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
  9.976   9.977 (1.125)    83   1216965 44.2799   44.280  80.00- 120.00   100.00
  9.976   9.977 (1.125)    85    787270                   34.51-  94.51    64.69
-------------------------------------------------------------------------------
  182 Propylbenzene                                CAS #: 103-65-1
 10.012  10.005 (1.129)    91   2781676 44.1317   44.132  80.00- 120.00   100.00
 10.012  10.005 (1.129)   120    692572                    0.00-  54.88    24.90
 10.012  10.005 (1.129)   105    109903                    0.00-  33.79     3.95
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                               CAS #: 622-96-8
 10.105  10.098 (1.140)   120    758232 43.5461   43.546  80.00- 120.00   100.00
 10.105  10.098 (1.140)   105   2580178                  289.38- 349.38   340.29
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 10.155  10.156 (1.145)   120   1055925 43.6456   43.646  80.00- 120.00   100.00
 10.155  10.149 (1.145)   105   1999150                  171.33- 231.33   189.33
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.182)	120	956013	43.3826	43.382	80.00- 120.00	100.00
10.478	10.478 (1.182)	105	2038109			182.43- 242.43	213.19
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.764	10.765 (1.214)	146	1493260	44.7950	44.795	80.00- 120.00	100.00
10.764	10.765 (1.214)	148	956527			33.68- 93.68	64.06
10.764	10.765 (1.214)	111	587333			10.08- 70.08	39.33
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.843	10.843 (1.223)	146	1530851	44.4859	44.486	80.00- 120.00	100.00
10.843	10.843 (1.223)	148	972534			33.78- 93.78	63.53
10.843	10.843 (1.223)	111	579449			8.79- 68.79	37.85
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.237)	91	1959626	45.6297	45.630	80.00- 120.00	100.00
10.965	10.965 (1.237)	126	456837			0.00- 53.35	23.31
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.173	11.173 (1.260)	146	1441346	44.3308	44.331	80.00- 120.00	100.00
11.173	11.173 (1.260)	148	897127			32.96- 92.96	62.24
11.173	11.173 (1.260)	111	579356			10.66- 70.66	40.20
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.591	12.591 (1.420)	180	1371795	43.8724	43.872	80.00- 120.00	100.00
12.591	12.591 (1.420)	182	1294876			64.75- 124.75	94.39
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.684	12.684 (1.431)	225	1027321	44.2930	44.293	80.00- 120.00	100.00
12.684	12.684 (1.431)	223	647232			32.54- 92.54	63.00
228 Naphthalene					CAS #: 91-20-3		
12.870	12.870 (1.452)	128	358720	4.55465	4.555	80.00- 120.00	100.00
12.870	12.870 (1.452)	127	46282			0.00- 42.17	12.90
M 239 Total Xylene					CAS #: 1330-20-7		
			1593819	88.5274	88.527		

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a020203.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /var/chem/msda.i/02feb17.b/a17q0116a.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 02-FEB-2017
Calibration Time: 10:10
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

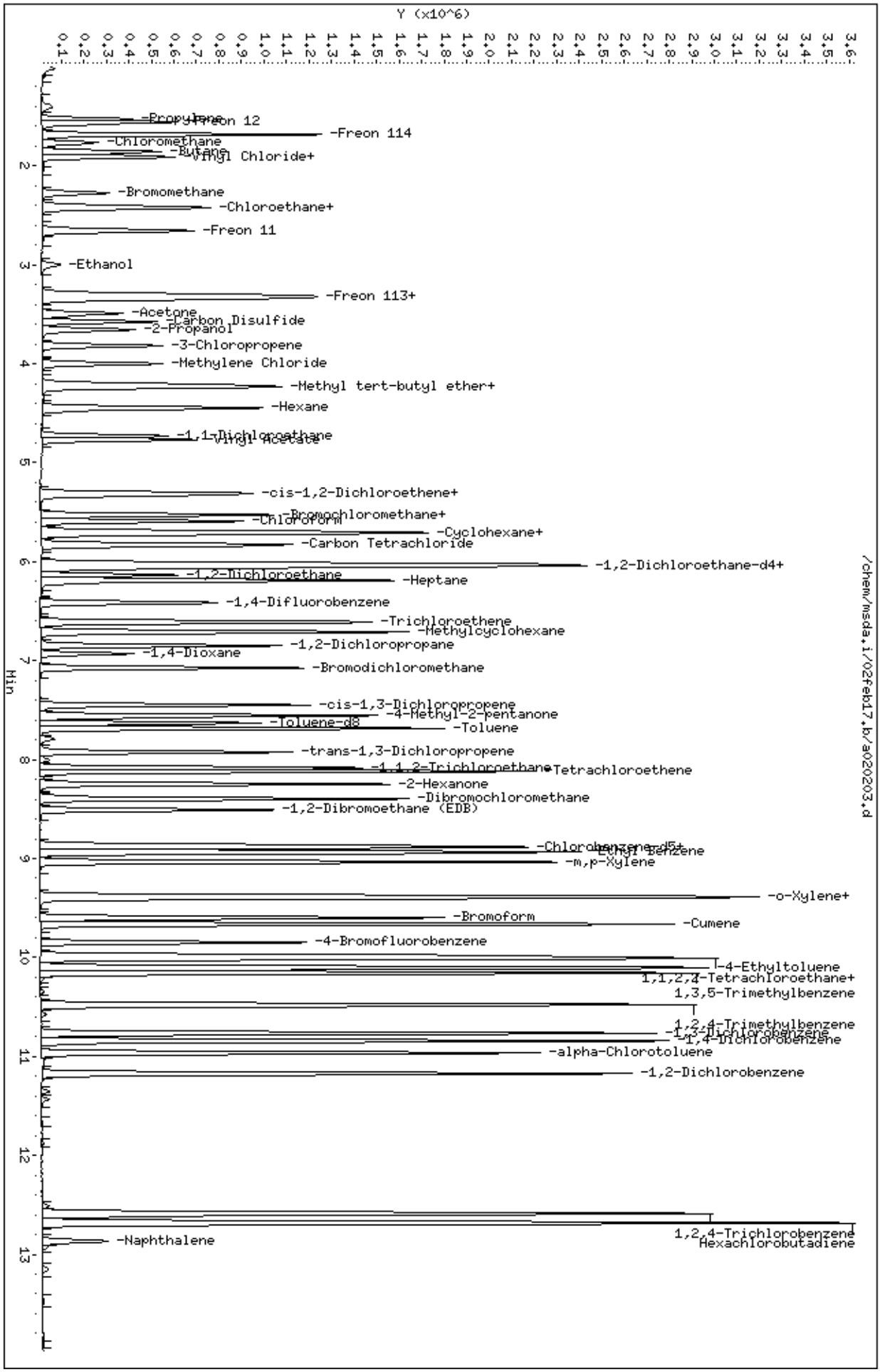
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	213765	128259	299271	166679	-22.03
123 1,4-Difluorobenze	909926	545956	1273896	699096	-23.17
163 Chlorobenzene-d5	849867	509920	1189814	666319	-21.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.42	0.11
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

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/msda.i/02feb17.b/a020203.d
Date : 02-FEB-2017 10:35
Client ID: LCS
Sample Info: 50mL #2819-232
Column phase: RTX-624

Instrument: msda.i
Operator: jg
Column diameter: 0.25



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Client Sample ID: LCSD

Lab ID#: 1701428B-22AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a020204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/2/17 11:00 AM**	

Compound	%Recovery	Method Limits
Freon 12	99	70-130
Freon 114	95	70-130
Chloromethane	106	70-130
Vinyl Chloride	98	70-130
1,3-Butadiene	94	70-130
Bromomethane	94	70-130
Chloroethane	96	70-130
Freon 11	96	70-130
Ethanol	86	70-130
Freon 113	93	70-130
1,1-Dichloroethene	95	70-130
Acetone	94	70-130
2-Propanol	100	70-130
Carbon Disulfide	94	70-130
3-Chloropropene	93	70-130
Methylene Chloride	100	70-130
Methyl tert-butyl ether	91	70-130
trans-1,2-Dichloroethene	103	70-130
Hexane	96	70-130
1,1-Dichloroethane	93	70-130
2-Butanone (Methyl Ethyl Ketone)	95	70-130
cis-1,2-Dichloroethene	87	70-130
Tetrahydrofuran	101	70-130
Chloroform	95	70-130
1,1,1-Trichloroethane	92	70-130
Cyclohexane	92	70-130
Carbon Tetrachloride	94	70-130
2,2,4-Trimethylpentane	98	70-130
Benzene	89	70-130
1,2-Dichloroethane	100	70-130
Heptane	93	70-130
Trichloroethene	92	70-130
1,2-Dichloropropane	91	70-130
1,4-Dioxane	96	70-130
Bromodichloromethane	97	70-130
cis-1,3-Dichloropropene	104	70-130
4-Methyl-2-pentanone	98	70-130
Toluene	94	70-130
trans-1,3-Dichloropropene	89	70-130
1,1,2-Trichloroethane	85	70-130
Tetrachloroethene	87	70-130
2-Hexanone	94	70-130

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Client Sample ID: LCSD

Lab ID#: 1701428B-22AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a020204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/2/17 11:00 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	90	70-130
1,2-Dibromoethane (EDB)	87	70-130
Chlorobenzene	89	70-130
Ethyl Benzene	89	70-130
m,p-Xylene	88	70-130
o-Xylene	89	70-130
Styrene	92	70-130
Bromoform	93	70-130
Cumene	87	70-130
1,1,2,2-Tetrachloroethane	89	70-130
Propylbenzene	89	70-130
4-Ethyltoluene	92	70-130
1,3,5-Trimethylbenzene	86	70-130
1,2,4-Trimethylbenzene	89	70-130
1,3-Dichlorobenzene	90	70-130
1,4-Dichlorobenzene	89	70-130
alpha-Chlorotoluene	93	70-130
1,2-Dichlorobenzene	88	70-130
1,2,4-Trichlorobenzene	90	70-130
Hexachlorobutadiene	91	70-130
Naphthalene	94	60-140

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	104	70-130

Report Date: 02-Feb-2017 12:45

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 02feb17
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCSD
Client Smp ID: LCSD
Level: LOW
Operator: jg
Data Type: MS DATA
SampleType: LCSD
SpikeList File: AT12ethanol.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /var/chem/msda.i/02feb17.b/a17q0116a.m
Misc Info: 50ppbv(200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	43.599	87.20	60-140
11 Freon 12	50.000	49.532	99.06	70-130
15 Freon 114	50.000	47.303	94.61	70-130
17 Chloromethane	50.000	52.877	105.75	70-130
23 Butane	50.000	43.666	87.33	60-140
25 Vinyl Chloride	50.000	49.284	98.57	70-130
26 1,3-Butadiene	50.000	46.787	93.57	70-130
29 Bromomethane	50.000	46.881	93.76	70-130
30 Chloroethane	50.000	48.060	96.12	70-130
31 Isopentane	50.000	47.642	95.28	60-140
35 Freon 11	50.000	47.971	95.94	70-130
42 Ethanol	57.500	49.218	85.60	70-130
49 Freon 113	50.000	46.322	92.64	70-130
50 1,1-Dichloroethene	50.000	47.395	94.79	70-130
52 Acetone	50.000	47.014	94.03	70-130
56 Carbon Disulfide	50.000	47.044	94.09	70-130
57 2-Propanol	50.000	49.769	99.54	70-130
58 3-Chloropropene	50.000	46.468	92.94	70-130
66 Methylene Chloride	50.000	49.839	99.68	70-130
72 Methyl tert-butyl	50.000	45.725	91.45	70-130
73 trans-1,2-Dichloro	50.000	51.358	102.72	70-130
78 Hexane	50.000	47.910	95.82	70-130
82 1,1-Dichloroethane	50.000	46.668	93.34	70-130
86 Vinyl Acetate	50.000	47.999	96.00	70-130
91 cis-1,2-Dichloroet	50.000	43.331	86.66	70-130
92 2-Butanone	50.000	47.696	95.39	70-130
99 Tetrahydrofuran	50.000	50.308	100.62	70-130
100 Chloroform	50.000	47.445	94.89	70-130
103 1,1,1-Trichloroeth	50.000	45.849	91.70	70-130
106 Carbon Tetrachlori	50.000	46.941	93.88	70-130
102 Cyclohexane	50.000	46.121	92.24	70-130
113 2,2,4-Trimethylpen	50.000	48.771	97.54	70-130
116 Benzene	50.000	44.699	89.40	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	50.120	100.24	70-130
121 Heptane	50.000	46.391	92.78	70-130
125 Trichloroethene	50.000	46.223	92.45	70-130
127 Methylcyclohexane	50.000	45.123	90.25	60-140
132 1,2-Dichloropropan	50.000	45.538	91.08	70-130
136 1,4-Dioxane	50.000	47.858	95.72	70-130
138 Bromodichlorometha	50.000	48.735	97.47	70-130
144 cis-1,3-Dichloropr	50.000	52.243	104.49	70-130
145 4-Methyl-2-pentano	50.000	49.041	98.08	70-130
147 Toluene	50.000	46.801	93.60	70-130
150 trans-1,3-Dichloro	50.000	44.643	89.29	70-130
155 1,1,2-Trichloroeth	50.000	42.488	84.98	70-130
156 Tetrachloroethene	50.000	43.500	87.00	70-130
158 2-Hexanone	50.000	46.895	93.79	70-130
160 Dibromochlorometha	50.000	44.768	89.54	70-130
161 1,2-Dibromoethane	50.000	43.725	87.45	70-130
165 Chlorobenzene	50.000	44.414	88.83	70-130
167 Ethyl Benzene	50.000	44.586	89.17	70-130
169 m,p-Xylene	50.000	43.877	87.75	70-130
171 o-Xylene	50.000	44.469	88.94	70-130
172 Styrene	50.000	45.833	91.67	70-130
174 Bromoform	50.000	46.577	93.15	70-130
175 Cumene	50.000	43.346	86.69	70-130
181 1,1,2,2-Tetrachlor	50.000	44.506	89.01	70-130
182 Propylbenzene	50.000	44.503	89.01	70-130
188 4-Ethyltoluene	50.000	45.817	91.63	70-130
190 1,3,5-Trimethylben	50.000	43.005	86.01	70-130
196 1,2,4-Trimethylben	50.000	44.415	88.83	70-130
208 1,3-Dichlorobenzen	50.000	45.231	90.46	70-130
209 1,4-Dichlorobenzen	50.000	44.723	89.45	70-130
212 alpha-Chlorotoluen	50.000	46.516	93.03	70-130
214 1,2-Dichlorobenzen	50.000	44.019	88.04	70-130
226 1,2,4-Trichloroben	50.000	45.021	90.04	70-130
227 Hexachlorobutadien	50.000	45.482	90.96	70-130
228 Naphthalene	5.000	4.712	94.24	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.394	97.58	70-130
$ 146 Toluene-d8	25.000	24.971	99.88	70-130
$ 177 4-Bromofluorobenze	25.000	25.964	103.86	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/02feb17.b/a020204.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 02-FEB-2017 11:00
Operator : jg Inst ID: msda.i
Smp Info : 50mL #2819-232
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /var/chem/msda.i/02feb17.b/a17q0116a.m
Meth Date : 02-Feb-2017 12:42 jscarbro Quant Type: ISTD
Cal Date : 16-JAN-2017 18:50 Cal File: a011609.d
Als bottle: 14 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.521	5.521 (1.000)	130	200581	25.0000		80.00- 120.00	100.00
5.528	5.521 (1.000)	128	160981			50.57- 110.57	80.26
5.521	5.521 (1.000)	49	303009			118.90- 178.90	151.07
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	869177	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	130224			0.00- 45.14	14.98
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	807799	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	393560			21.31- 81.31	48.72
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.058	6.058 (1.097)	65	258339	24.3941	24.394	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	150144			29.46- 89.46	58.12
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.627	7.620 (1.190)	98	907191	24.9710	24.971	80.00- 120.00	100.00
7.627	7.620 (1.190)	70	89060			0.00- 39.82	9.82

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

$ 146 Toluene-d8 (continued)
  7.627   7.620 (1.190)   100    589076                    36.19-  96.19    64.93
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
  9.855   9.848 (1.112)   174    506831 25.9641   25.964  80.00- 120.00   100.00
  9.848   9.848 (1.112)    95    611711                   92.19- 152.19   120.69
  9.855   9.848 (1.112)   176    509997                   71.02- 131.02   100.62
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.517   1.524 (0.275)    41    333067 43.5986   43.599  80.00- 120.00   100.00
  1.517   1.524 (0.275)    42    220402                   37.76-  97.76    66.17
  1.517   1.524 (0.275)    39    232289                   38.24-  98.24    69.74
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.553   1.553 (0.281)    85    901536 49.5316   49.532  80.00- 120.00   100.00
  1.553   1.553 (0.281)    87    288194                    2.19-  62.19    31.97
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.682   1.675 (0.305)   135    727000 47.3027   47.303  80.00- 120.00   100.00
  1.675   1.682 (0.303)   137    229290                    1.62-  61.62    31.54
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.760   1.761 (0.319)    50    375309 52.8773   52.877  80.00- 120.00   100.00
  1.760   1.761 (0.319)    52    121925                    4.04-  64.04    32.49
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.846   1.847 (0.334)    58     84109 43.6663   43.666  80.00- 120.00   100.00
  1.846   1.847 (0.334)    43    663386                  761.67- 821.67   788.72
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.882   1.882 (0.341)    62    415230 49.2837   49.284  80.00- 120.00   100.00
  1.882   1.882 (0.341)    64    120203                    0.00-  59.01    28.95
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.911   1.904 (0.346)    54    347222 46.7868   46.787  80.00- 120.00   100.00
  1.911   1.904 (0.346)    39    319972                   63.95- 123.95    92.15
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.269   2.262 (0.411)    94    324719 46.8814   46.881  80.00- 120.00   100.00
  2.269   2.262 (0.411)    96    314181                   64.81- 124.81    96.75
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.391   2.384 (0.433)    64    198109 48.0598   48.060  80.00- 120.00   100.00
  2.391   2.384 (0.433)    66     63588                    1.96-  61.96    32.10
  2.391   2.384 (0.433)    49     66775                    1.70-  61.70    33.71
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
31 Isopentane					CAS #: 78-78-4		
2.412	2.412 (0.437)	43	511156	47.6421	47.642	80.00- 120.00	100.00
2.412	2.412 (0.437)	57	348659			40.19- 100.19	68.21
35 Freon 11					CAS #: 75-69-4		
2.649	2.642 (0.480)	101	945490	47.9711	47.971	80.00- 120.00	100.00
2.649	2.642 (0.480)	103	618807			34.98- 94.98	65.45
42 Ethanol					CAS #: 64-17-5		
2.985	2.978 (0.541)	45	196255	49.2186	49.218	80.00- 120.00	100.00
2.985	2.978 (0.541)	46	72417			9.25- 69.25	36.90
49 Freon 113					CAS #: 76-13-1		
3.301	3.293 (0.598)	151	699519	46.3216	46.322	80.00- 120.00	100.00
3.301	3.293 (0.598)	153	441048			34.55- 94.55	63.05
3.301	3.293 (0.598)	101	806209			83.34- 143.34	115.25
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.329	3.322 (0.603)	98	243600	47.3955	47.395	80.00- 120.00	100.00
3.329	3.322 (0.603)	96	358524			120.22- 180.22	147.18
3.329	3.322 (0.603)	61	680821			243.84- 303.84	279.48
52 Acetone					CAS #: 67-64-1		
3.480	3.480 (0.630)	58	213993	47.0143	47.014	80.00- 120.00	100.00
3.480	3.473 (0.630)	43	660646			267.70- 327.70	308.72
56 Carbon Disulfide					CAS #: 75-15-0		
3.558	3.558 (0.644)	76	1031866	47.0440	47.044	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.644	3.637 (0.660)	45	835212	49.7688	49.769	80.00- 120.00	100.00
3.644	3.637 (0.660)	43	148741			0.00- 46.48	17.81
3.644	3.637 (0.660)	59	33047			0.00- 33.95	3.96
58 3-Chloropropene					CAS #: 107-05-1		
3.809	3.802 (0.690)	76	170742	46.4675	46.468	80.00- 120.00	100.00
3.809	3.802 (0.690)	41	616144			307.27- 367.27	360.86
66 Methylene Chloride					CAS #: 75-09-2		
3.988	3.981 (0.722)	49	569334	49.8393	49.839	80.00- 120.00	100.00
3.988	3.988 (0.722)	84	322520			32.37- 92.37	56.65
3.988	3.988 (0.722)	51	172671			0.49- 60.49	30.33
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.203	4.196 (0.761)	73	1029600	45.7247	45.725	80.00- 120.00	100.00
4.203	4.196 (0.761)	57	311093			0.00- 59.21	30.21

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

   72 Methyl tert-butyl ether (continued)
  4.203   4.196 (0.761)    41    276378                     0.00-  55.49    26.84
-------------------------------------------------------------------------------
   73 trans-1,2-Dichloroethene                      CAS #: 156-60-5
  4.232   4.225 (0.766)    98    260829 51.3584   51.358  80.00- 120.00   100.00
  4.232   4.225 (0.766)    61    659194                  224.99- 284.99   252.73
  4.232   4.225 (0.766)    96    386510                  119.77- 179.77   148.19
-------------------------------------------------------------------------------
   78 Hexane                                        CAS #: 110-54-3
  4.439   4.432 (0.804)    57    796995 47.9101   47.910  80.00- 120.00   100.00
  4.439   4.432 (0.804)    43    497466                   31.75-  91.75    62.42
  4.439   4.432 (0.804)    86     93289                    0.00-  42.75    11.71
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                            CAS #: 75-34-3
  4.719   4.712 (0.855)    63    783351 46.6680   46.668  80.00- 120.00   100.00
  4.719   4.712 (0.855)    65    237105                    1.80-  61.80    30.27
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                 CAS #: 108-05-4
  4.762   4.755 (0.862)    86    109650 47.9987   47.999  80.00- 120.00   100.00
  4.762   4.755 (0.862)    43   1409531                 1309.99-1369.99  1285.48
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                        CAS #: 156-59-2
  5.292   5.292 (0.958)    98    282811 43.3308   43.331  80.00- 120.00   100.00
  5.292   5.292 (0.958)    96    431612                  123.57- 183.57   152.61
  5.292   5.292 (0.958)    61    661831                  194.30- 254.30   234.02
-------------------------------------------------------------------------------
   92 2-Butanone                                    CAS #: 78-93-3
  5.320   5.313 (0.964)    72    202625 47.6958   47.696  80.00- 120.00   100.00
  5.320   5.313 (0.964)    43   1082170                  492.83- 552.83   534.08
  5.320   5.313 (0.964)    57     84993                   11.22-  71.22    41.95
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                               CAS #: 109-99-9
  5.514   5.514 (0.999)    42    609366 50.3076   50.308  80.00- 120.00   100.00
  5.514   5.514 (0.999)    71    175434                    1.67-  61.67    28.79
  5.514   5.514 (0.999)    72    184394                    1.66-  61.66    30.26
-------------------------------------------------------------------------------
  100 Chloroform                                    CAS #: 67-66-3
  5.586   5.586 (1.012)    83    848768 47.4447   47.445  80.00- 120.00   100.00
  5.586   5.586 (1.012)    85    543668                   35.62-  95.62    64.05
-------------------------------------------------------------------------------
  102 Cyclohexane                                   CAS #: 110-82-7
  5.693   5.686 (1.031)    84    559293 46.1210   46.121  80.00- 120.00   100.00
  5.693   5.686 (1.031)    56    894916                  127.28- 187.28   160.01
  5.686   5.686 (1.030)    41    445658                   46.63- 106.63    79.68
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                         CAS #: 71-55-6
  5.707   5.707 (1.034)    97    902530 45.8486   45.849  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane (continued)							
5.714	5.707 (1.035)	99	571748			33.98- 93.98	63.35
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.054)	119	961502	46.9410	46.941	80.00- 120.00	100.00
5.822	5.822 (1.054)	117	971498			70.95- 130.95	101.04
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.022	6.015 (1.091)	57	2862332	48.7706	48.771	80.00- 120.00	100.00
6.022	6.015 (1.091)	56	905622			0.93- 60.93	31.64
6.022	6.015 (1.091)	41	674759			0.00- 52.07	23.57
116 Benzene					CAS #: 71-43-2		
6.037	6.037 (0.942)	78	1238554	44.6988	44.699	80.00- 120.00	100.00
6.037	6.037 (0.942)	77	291756			0.00- 52.91	23.56
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.123 (0.956)	62	603669	50.1198	50.120	80.00- 120.00	100.00
6.130	6.123 (0.956)	64	189533			2.36- 62.36	31.40
121 Heptane					CAS #: 142-82-5		
6.187	6.180 (0.965)	71	458681	46.3915	46.391	80.00- 120.00	100.00
6.187	6.180 (0.965)	43	1055287			192.75- 252.75	230.07
6.187	6.180 (0.965)	57	587031			92.77- 152.77	127.98
125 Trichloroethene					CAS #: 79-01-6		
6.603	6.603 (1.030)	95	619810	46.2228	46.223	80.00- 120.00	100.00
6.603	6.603 (1.030)	130	689216			78.45- 138.45	111.20
6.603	6.603 (1.030)	97	407553			35.78- 95.78	65.75
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.214)	83	849699	45.1228	45.123	80.00- 120.00	100.00
6.703	6.703 (1.214)	98	398829			16.08- 76.08	46.94
6.703	6.703 (1.214)	55	862120			69.75- 129.75	101.46
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.839	6.839 (1.067)	63	580385	45.5381	45.538	80.00- 120.00	100.00
6.846	6.839 (1.068)	62	415700			40.72- 100.72	71.62
6.839	6.839 (1.067)	41	293368			20.11- 80.11	50.55
136 1,4-Dioxane					CAS #: 123-91-1		
6.925	6.925 (1.080)	88	337410	47.8585	47.858	80.00- 120.00	100.00
6.925	6.925 (1.080)	58	300662			57.35- 117.35	89.11
6.925	6.925 (1.080)	57	97370			0.00- 56.09	28.86
138 Bromodichloromethane					CAS #: 75-27-4		
7.068	7.061 (1.103)	83	999105	48.7348	48.735	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane (continued)							
7.068	7.061 (1.103)	85	643100			34.91- 94.91	64.37
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.441	7.441 (1.161)	75	865619	52.2428	52.243	80.00- 120.00	100.00
7.441	7.441 (1.161)	77	281468			3.24- 63.24	32.52
7.441	7.441 (1.161)	39	470156			23.84- 83.84	54.31
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.548 (1.179)	58	592986	49.0406	49.041	80.00- 120.00	100.00
7.555	7.548 (1.179)	43	1489672			220.90- 280.90	251.22
7.555	7.548 (1.179)	85	203444			5.60- 65.60	34.31
147 Toluene					CAS #: 108-88-3		
7.684	7.677 (1.199)	91	1767240	46.8014	46.801	80.00- 120.00	100.00
7.684	7.677 (1.199)	92	1027304			28.71- 88.71	58.13
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.894)	75	768457	44.6432	44.643	80.00- 120.00	100.00
7.921	7.921 (0.894)	77	253803			2.84- 62.84	33.03
7.921	7.921 (0.894)	39	406533			22.14- 82.14	52.90
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.912)	97	636172	42.4880	42.488	80.00- 120.00	100.00
8.078	8.078 (0.912)	99	400064			33.31- 93.31	62.89
8.078	8.078 (0.912)	83	554852			55.94- 115.94	87.22
156 Tetrachloroethene					CAS #: 127-18-4		
8.114	8.114 (0.916)	166	904700	43.5004	43.500	80.00- 120.00	100.00
8.114	8.114 (0.916)	129	704017			46.29- 106.29	77.82
8.114	8.114 (0.916)	131	677720			44.37- 104.37	74.91
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	828869	46.8952	46.895	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	1511751			152.24- 212.24	182.39
8.243	8.243 (0.930)	100	135104			0.00- 47.15	16.30
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.386 (0.947)	129	1255542	44.7683	44.768	80.00- 120.00	100.00
8.393	8.386 (0.947)	127	987288			46.82- 106.82	78.63
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.501 (0.960)	107	1036789	43.7254	43.725	80.00- 120.00	100.00
8.508	8.501 (0.960)	109	992028			64.56- 124.56	95.68
165 Chlorobenzene					CAS #: 108-90-7		
8.888	8.881 (1.003)	112	1591418	44.4140	44.414	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)
  8.888   8.881 (1.003)   114    508330                     2.04-  62.04    31.94
  8.881   8.881 (1.002)    77    858558                    25.23-  85.23    53.95
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.931   8.931 (1.008)   106    803217 44.5856   44.586  80.00- 120.00   100.00
  8.931   8.931 (1.008)    91   2433653                   278.30- 338.30   302.99
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  9.031   9.031 (1.019)   106    970958 43.8766   43.877  80.00- 120.00   100.00
  9.031   9.031 (1.019)    91   1913122                   162.42- 222.42   197.03
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.375   9.375 (1.058)   106    957272 44.4694   44.469  80.00- 120.00   100.00
  9.375   9.368 (1.058)    91   1982243                   175.73- 235.73   207.07
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.396   9.396 (1.061)   104   1609242 45.8328   45.833  80.00- 120.00   100.00
  9.396   9.389 (1.061)    78    737162                    16.95-  76.95    45.81
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.597   9.590 (1.083)   173   1275794 46.5769   46.577  80.00- 120.00   100.00
  9.597   9.590 (1.083)   171    656388                    21.43-  81.43    51.45
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
  9.661   9.661 (1.091)   105   2909590 43.3459   43.346  80.00- 120.00   100.00
  9.661   9.661 (1.091)   120    808106                     0.00-  57.61    27.77
  9.661   9.661 (1.091)    51    327886                     0.00-  40.74    11.27
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
  9.984   9.977 (1.127)    83   1482885 44.5056   44.506  80.00- 120.00   100.00
  9.984   9.977 (1.127)    85    955375                    34.51-  94.51    64.43
-------------------------------------------------------------------------------
  182 Propylbenzene                                CAS #: 103-65-1
 10.012  10.005 (1.130)    91   3400709 44.5033   44.503  80.00- 120.00   100.00
 10.012  10.005 (1.130)   120    845681                     0.00-  54.88    24.87
 10.012  10.005 (1.130)   105    131635                     0.00-  33.79     3.87
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                               CAS #: 622-96-8
 10.105  10.098 (1.141)   120    967176 45.8175   45.817  80.00- 120.00   100.00
 10.105  10.098 (1.141)   105   3037591                   289.38- 349.38   314.07
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 10.163  10.156 (1.147)   120   1261344 43.0051   43.005  80.00- 120.00   100.00
 10.156  10.149 (1.146)   105   2515213                   171.33- 231.33   199.41
-------------------------------------------------------------------------------
```

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

  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 10.485  10.478 (1.184)   120   1186579 44.4147   44.415  80.00- 120.00   100.00
 10.485  10.478 (1.184)   105   2480510                  182.43- 242.43   209.05
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 10.772  10.765 (1.216)   146   1827945 45.2310   45.231  80.00- 120.00   100.00
 10.772  10.765 (1.216)   148   1166802                   33.68-  93.68    63.83
 10.772  10.765 (1.216)   111    709532                   10.08-  70.08    38.82
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 10.850  10.843 (1.225)   146   1865806 44.7235   44.723  80.00- 120.00   100.00
 10.858  10.843 (1.226)   148   1177173                   33.78-  93.78    63.09
 10.850  10.843 (1.225)   111    703454                    8.79-  68.79    37.70
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 10.972  10.965 (1.239)    91   2421853 46.5158   46.516  80.00- 120.00   100.00
 10.972  10.965 (1.239)   126    559664                    0.00-  53.35    23.11
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 11.187  11.173 (1.263)   146   1735114 44.0194   44.019  80.00- 120.00   100.00
 11.187  11.173 (1.263)   148   1117908                   32.96-  92.96    64.43
 11.187  11.173 (1.263)   111    701766                   10.66-  70.66    40.44
-------------------------------------------------------------------------------
  226 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 12.605  12.591 (1.423)   180   1706602 45.0208   45.021  80.00- 120.00   100.00
 12.605  12.591 (1.423)   182   1628746                   64.75- 124.75    95.44
-------------------------------------------------------------------------------
  227 Hexachlorobutadiene                           CAS #: 87-68-3
 12.698  12.684 (1.433)   225   1278881 45.4818   45.482  80.00- 120.00   100.00
 12.698  12.684 (1.433)   223    798929                   32.54-  92.54    62.47
-------------------------------------------------------------------------------
  228 Naphthalene                                   CAS #: 91-20-3
 12.885  12.870 (1.454)   128    449892 4.71180    4.712  80.00- 120.00   100.00
 12.885  12.870 (1.454)   127     57990                    0.00-  42.17    12.89
-------------------------------------------------------------------------------
M 239 Total Xylene                                  CAS #: 1330-20-7
                                1928230 88.3460   88.346
-------------------------------------------------------------------------------
```

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a020204.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: jg
Method File: /var/chem/msda.i/02feb17.b/a17q0116a.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 02-FEB-2017
Calibration Time: 10:10
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

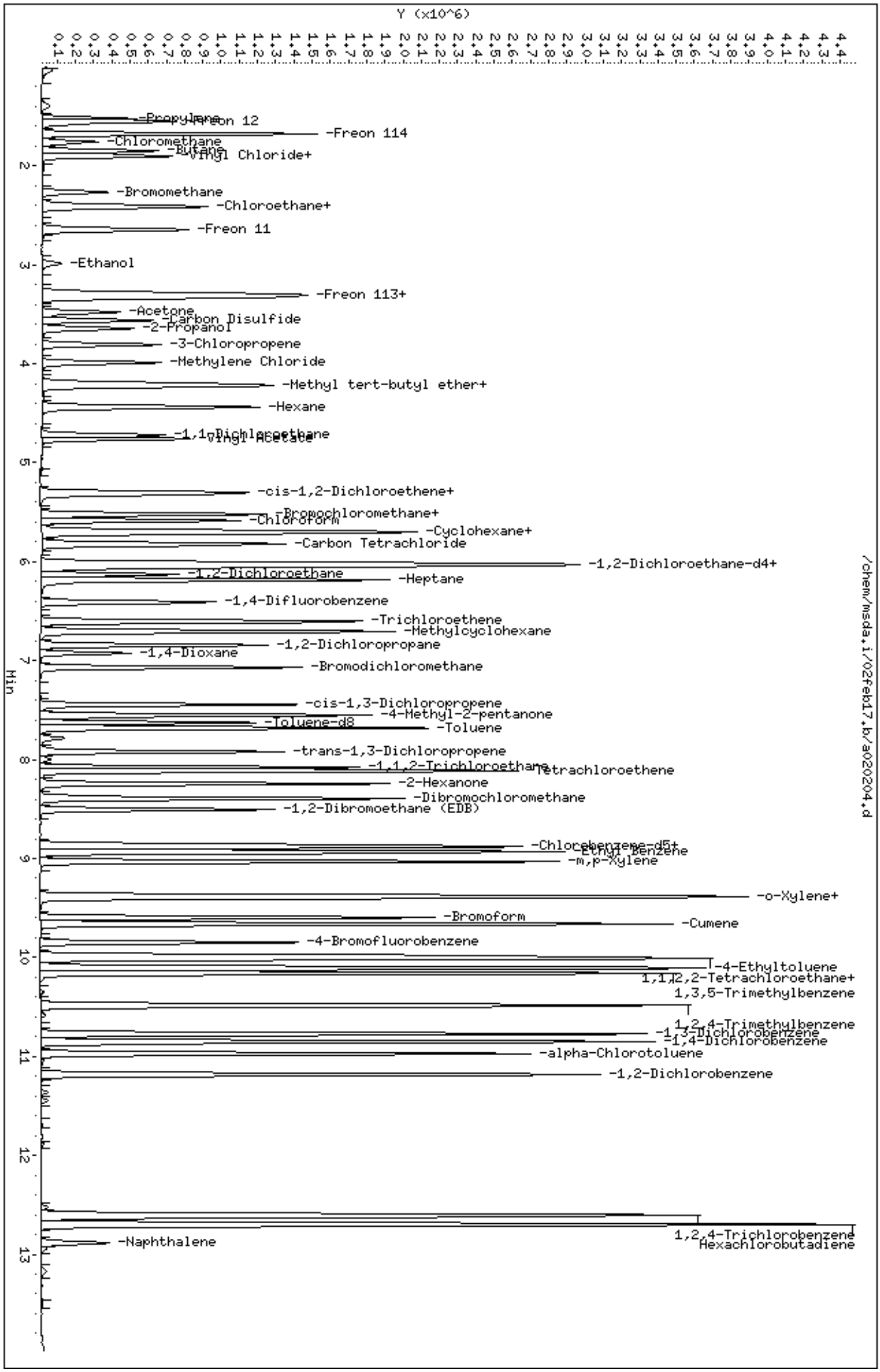
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	213765	128259	299271	200581	-6.17
123 1,4-Difluorobenze	909926	545956	1273896	869177	-4.48
163 Chlorobenzene-d5	849867	509920	1189814	807799	-4.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	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/msda.i/02feb17.b/a020204.d
Date : 02-FEB-2017 11:00
Client ID: LCSD
Sample Info: 50mL #2819-232
Column phase: RTX-624

Instrument: msda.i
Operator: jg
Column diameter: 0.25



Page 1

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Client Sample ID: LCS
Lab ID#: 1701428B-22B
EPA METHOD TO-15 GC/MS

File Name:	**14020603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/6/17 10:05 AM**	

Compound	%Recovery	Method Limits
Freon 12	110	70-130
Freon 114	115	70-130
Chloromethane	118	70-130
Vinyl Chloride	100	70-130
1,3-Butadiene	82	70-130
Bromomethane	86	70-130
Chloroethane	120	70-130
Freon 11	130	70-130
Ethanol	87	70-130
Freon 113	131 Q	70-130
1,1-Dichloroethene	122	70-130
Acetone	113	70-130
2-Propanol	109	70-130
Carbon Disulfide	113	70-130
3-Chloropropene	111	70-130
Methylene Chloride	120	70-130
Methyl tert-butyl ether	115	70-130
trans-1,2-Dichloroethene	117	70-130
Hexane	123	70-130
1,1-Dichloroethane	118	70-130
2-Butanone (Methyl Ethyl Ketone)	113	70-130
cis-1,2-Dichloroethene	111	70-130
Tetrahydrofuran	106	70-130
Chloroform	116	70-130
1,1,1-Trichloroethane	116	70-130
Cyclohexane	120	70-130
Carbon Tetrachloride	122	70-130
2,2,4-Trimethylpentane	117	70-130
Benzene	118	70-130
1,2-Dichloroethane	102	70-130
Heptane	97	70-130
Trichloroethene	114	70-130
1,2-Dichloropropane	108	70-130
1,4-Dioxane	107	70-130
Bromodichloromethane	107	70-130
cis-1,3-Dichloropropene	108	70-130
4-Methyl-2-pentanone	97	70-130
Toluene	108	70-130
trans-1,3-Dichloropropene	104	70-130
1,1,2-Trichloroethane	107	70-130
Tetrachloroethene	116	70-130
2-Hexanone	102	70-130

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Client Sample ID: LCS
Lab ID#: 1701428B-22B
EPA METHOD TO-15 GC/MS

File Name:	**14020603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/6/17 10:05 AM**	

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	113	70-130
1,2-Dibromoethane (EDB)	110	70-130
Chlorobenzene	112	70-130
Ethyl Benzene	109	70-130
m,p-Xylene	110	70-130
o-Xylene	111	70-130
Styrene	110	70-130
Bromoform	114	70-130
Cumene	108	70-130
1,1,2,2-Tetrachloroethane	109	70-130
Propylbenzene	110	70-130
4-Ethyltoluene	104	70-130
1,3,5-Trimethylbenzene	130	70-130
1,2,4-Trimethylbenzene	108	70-130
1,3-Dichlorobenzene	111	70-130
1,4-Dichlorobenzene	113	70-130
alpha-Chlorotoluene	103	70-130
1,2-Dichlorobenzene	115	70-130
1,2,4-Trichlorobenzene	101	70-130
Hexachlorobutadiene	99	70-130
Naphthalene	136	60-140

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	103	70-130

Report Date: 06-Feb-2017 10:37

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 06feb17
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCS
Client Smp ID: LCS
Level: LOW
Operator: gd
Data Type: MS DATA
SampleType: LCS
SpikeList File: AT12ethanol.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msd14.i/06feb17.b/14651201b.m
Misc Info: 200ppbv (200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	200.00	212.61	106.31	60-140
11 Freon 12	200.00	221.07	110.53	70-130
15 Freon 114	200.00	229.90	114.95	70-130
17 Chloromethane	200.00	236.47	118.23	70-130
23 Butane	200.00	188.82	94.41	60-140
25 Vinyl Chloride	200.00	199.42	99.71	70-130
26 1,3-Butadiene	200.00	164.81	82.41	70-130
29 Bromomethane	200.00	172.15	86.08	70-130
30 Chloroethane	200.00	239.26	119.63	70-130
31 Isopentane	200.00	267.63	133.81	60-140
35 Freon 11	200.00	261.18	130.59*	70-130
42 Ethanol	230.00	200.88	87.34	70-130
49 Freon 113	200.00	261.46	130.73*	70-130
50 1,1-Dichloroethene	200.00	244.98	122.49	70-130
52 Acetone	200.00	226.62	113.31	70-130
56 Carbon Disulfide	200.00	225.58	112.79	70-130
57 2-Propanol	200.00	218.00	109.00	70-130
58 3-Chloropropene	200.00	222.19	111.09	70-130
66 Methylene Chloride	200.00	240.52	120.26	70-130
72 Methyl tert-butyl	200.00	229.20	114.60	70-130
73 trans-1,2-Dichloro	200.00	233.97	116.98	70-130
78 Hexane	200.00	245.44	122.72	70-130
82 1,1-Dichloroethane	200.00	235.35	117.68	70-130
86 Vinyl Acetate	200.00	215.61	107.80	60-140
91 cis-1,2-Dichloroet	200.00	221.44	110.72	70-130
92 2-Butanone	200.00	225.38	112.69	70-130
99 Tetrahydrofuran	200.00	212.01	106.01	70-130
100 Chloroform	200.00	232.03	116.01	70-130
103 1,1,1-Trichloroeth	200.00	231.80	115.90	70-130
106 Carbon Tetrachlori	200.00	243.63	121.82	70-130
102 Cyclohexane	200.00	239.79	119.90	70-130
113 2,2,4-Trimethylpen	200.00	234.49	117.24	70-130
116 Benzene	200.00	235.17	117.59	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	200.00	203.59	101.80	70-130
121 Heptane	200.00	194.85	97.42	70-130
125 Trichloroethene	200.00	228.36	114.18	70-130
127 Methylcyclohexane	200.00	230.97	115.48	60-140
132 1,2-Dichloropropan	200.00	215.94	107.97	70-130
136 1,4-Dioxane	200.00	214.67	107.33	70-130
138 Bromodichlorometha	200.00	213.63	106.82	70-130
144 cis-1,3-Dichloropr	200.00	216.36	108.18	70-130
145 4-Methyl-2-pentano	200.00	193.69	96.85	70-130
147 Toluene	200.00	215.99	108.00	70-130
150 trans-1,3-Dichloro	200.00	209.01	104.50	70-130
155 1,1,2-Trichloroeth	200.00	213.28	106.64	70-130
156 Tetrachloroethene	200.00	231.74	115.87	70-130
158 2-Hexanone	200.00	203.08	101.54	70-130
160 Dibromochlorometha	200.00	226.68	113.34	70-130
161 1,2-Dibromoethane	200.00	219.96	109.98	70-130
165 Chlorobenzene	200.00	223.06	111.53	70-130
167 Ethyl Benzene	200.00	218.36	109.18	70-130
169 m,p-Xylene	200.00	220.00	110.00	70-130
171 o-Xylene	200.00	222.14	111.07	70-130
172 Styrene	200.00	219.38	109.69	70-130
174 Bromoform	200.00	229.13	114.57	70-130
175 Cumene	200.00	216.82	108.41	70-130
181 1,1,2,2-Tetrachlor	200.00	217.51	108.76	70-130
182 Propylbenzene	200.00	219.10	109.55	70-130
188 4-Ethyltoluene	200.00	208.51	104.25	70-130
190 1,3,5-Trimethylben	200.00	260.88	130.44*	70-130
196 1,2,4-Trimethylben	200.00	215.88	107.94	70-130
208 1,3-Dichlorobenzen	200.00	222.44	111.22	70-130
209 1,4-Dichlorobenzen	200.00	226.99	113.49	70-130
212 alpha-Chlorotoluen	200.00	205.79	102.90	70-130
214 1,2-Dichlorobenzen	200.00	229.88	114.94	70-130
226 1,2,4-Trichloroben	200.00	201.95	100.97	70-130
227 Hexachlorobutadien	200.00	198.77	99.39	70-130
228 Naphthalene	20.000	27.253	136.27	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	400.00	377.96	94.49	70-130
$ 146 Toluene-d8	400.00	391.94	97.99	70-130
$ 177 4-Bromofluorobenze	400.00	412.60	103.15	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/06feb17.b/14020603.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 06-FEB-2017 10:05
Operator : gd Inst ID: msd14.i
Smp Info : 50mL #2819-234
Misc Info : 200ppbv (200ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/06feb17.b/14651201b.m
Meth Date : 06-Feb-2017 10:03 gdelacru Quant Type: ISTD
Cal Date : 19-DEC-2016 11:43 Cal File: 14121908.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.312	5.312 (1.000)	130	84875	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	66078			46.96- 106.96	77.85
5.312	5.312 (1.000)	49	107696			97.69- 157.69	126.89
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.446	6.446 (1.000)	114	357525	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	53299			0.00- 45.92	14.91
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
10.336	10.335 (1.000)	117	326355	400.000		80.00- 120.00	100.00
10.336	10.335 (1.000)	82	155475			19.32- 79.32	47.64
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.984	5.984 (1.126)	65	98218	377.955	377.96	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	51388			24.72- 84.72	52.32
$ 146 Toluene-d8					CAS #: 2037-26-5		
8.489	8.503 (1.317)	98	346043	391.944	391.94	80.00- 120.00	100.00
8.489	8.489 (1.317)	70	34926			0.00- 40.20	10.09

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

$ 146 Toluene-d8 (continued)
  8.489   8.489 (1.317)   100    237879                    38.62-  98.62    68.74
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                          CAS #: 460-00-4
 11.343  11.343 (1.097)   174    208969 412.606   412.60  80.00- 120.00   100.00
 11.343  11.343 (1.097)    95    236413                   89.78- 149.78   113.13
 11.343  11.343 (1.097)   176    203266                   66.10- 126.10    97.27
-------------------------------------------------------------------------------
    9 Propylene                                     CAS #: 115-07-1
  1.423   1.423 (0.268)    41     50013 212.612   212.61  80.00- 120.00   100.00
  1.423   1.423 (0.268)    42     31951                   33.78-  93.78    63.88
  1.423   1.423 (0.268)    39     33503                   36.58-  96.58    66.99
-------------------------------------------------------------------------------
   11 Freon 12                                      CAS #: 75-71-8
  1.451   1.451 (0.273)    85    149582 221.068   221.07  80.00- 120.00   100.00
  1.451   1.451 (0.273)    87     47096                    1.64-  61.64    31.49
-------------------------------------------------------------------------------
   15 Freon 114                                     CAS #: 76-14-2
  1.563   1.563 (0.294)   135    130971 229.904   229.90  80.00- 120.00   100.00
  1.563   1.563 (0.294)   137     40996                    1.10-  61.10    31.30
-------------------------------------------------------------------------------
   17 Chloromethane                                 CAS #: 74-87-3
  1.647   1.647 (0.310)    50     61464 236.468   236.47  80.00- 120.00   100.00
  1.647   1.647 (0.310)    52     19870                    2.75-  62.75    32.33
-------------------------------------------------------------------------------
   23 Butane                                        CAS #: 106-97-8
  1.717   1.717 (0.323)    58     11730 188.820   188.82  80.00- 120.00   100.00
  1.717   1.717 (0.323)    43     83079                  736.71- 796.71   708.24
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                CAS #: 75-01-4
  1.745   1.744 (0.328)    62     51776 199.422   199.42  80.00- 120.00   100.00
  1.745   1.744 (0.328)    64     16046                    1.78-  61.78    30.99
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                 CAS #: 106-99-0
  1.773   1.772 (0.334)    54     42926 164.812   164.81  80.00- 120.00   100.00
  1.773   1.772 (0.334)    39     40313                   67.57- 127.57    93.91
-------------------------------------------------------------------------------
   29 Bromomethane                                  CAS #: 74-83-9
  2.122   2.122 (0.399)    94     27618 172.152   172.15  80.00- 120.00   100.00
  2.122   2.122 (0.399)    96     26570                   62.49- 122.49    96.21
-------------------------------------------------------------------------------
   30 Chloroethane                                  CAS #: 75-00-3
  2.220   2.220 (0.418)    64     30206 239.264   239.26  80.00- 120.00   100.00
  2.220   2.220 (0.418)    66      9095                    0.76-  60.76    30.11
-------------------------------------------------------------------------------
   31 Isopentane                                    CAS #: 78-78-4
  2.248   2.248 (0.423)    43     73424 267.629   267.63  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
31 Isopentane (continued)							
2.248	2.248 (0.423)	57	51984			37.62- 97.62	70.80
2.248	2.248 (0.423)	72	4970			0.00- 36.64	6.77
35 Freon 11					CAS #: 75-69-4		
2.458	2.458 (0.463)	101	159806	261.183	261.18	80.00- 120.00	100.00(R)
2.458	2.458 (0.463)	103	102524			34.68- 94.68	64.16
42 Ethanol					CAS #: 64-17-5		
2.766	2.752 (0.521)	45	26574	200.880	200.88	80.00- 120.00	100.00
2.766	2.752 (0.521)	46	11280			11.88- 71.88	42.45
49 Freon 113					CAS #: 76-13-1		
3.018	3.018 (0.568)	151	121136	261.457	261.46	80.00- 120.00	100.00(R)
3.018	3.018 (0.568)	153	76240			36.16- 96.16	62.94
3.018	3.018 (0.568)	101	135521			85.93- 145.93	111.87
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.046	3.046 (0.573)	61	95819	244.982	244.98	80.00- 120.00	100.00
3.046	3.046 (0.573)	96	59697			30.16- 90.16	62.30
3.046	3.046 (0.573)	98	38959			8.09- 68.09	40.66
52 Acetone					CAS #: 67-64-1		
3.186	3.186 (0.600)	58	30186	226.618	226.62	80.00- 120.00	100.00
3.186	3.186 (0.600)	43	97926			284.49- 344.49	324.40
56 Carbon Disulfide					CAS #: 75-15-0		
3.256	3.256 (0.613)	76	156635	225.584	225.58	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.326	3.326 (0.626)	45	112086	217.995	218.00	80.00- 120.00	100.00
3.326	3.326 (0.626)	43	21625			0.00- 46.84	19.29
3.340	3.326 (0.629)	59	4422			0.00- 34.10	3.95
58 3-Chloropropene					CAS #: 107-05-1		
3.480	3.479 (0.655)	76	24051	222.189	222.19	80.00- 120.00	100.00
3.480	3.479 (0.655)	41	80925			310.63- 370.63	336.46
66 Methylene Chloride					CAS #: 75-09-2		
3.647	3.647 (0.687)	49	73938	240.524	240.52	80.00- 120.00	100.00
3.647	3.647 (0.687)	84	50235			35.90- 95.90	67.94
3.647	3.647 (0.687)	51	23112			0.00- 59.48	31.26
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.857	3.857 (0.726)	73	155935	229.205	229.20	80.00- 120.00	100.00
3.857	3.857 (0.726)	57	43477			0.00- 56.69	27.88

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether (continued)							
3.857	3.857 (0.726)	41	41324			0.00- 54.89	26.50
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.885	3.885 (0.731)	96	65059	233.970	233.97	80.00- 120.00	100.00
3.885	3.885 (0.731)	61	92122			113.59- 173.59	141.60
3.885	3.885 (0.731)	98	41135			32.57- 92.57	63.23
78 Hexane					CAS #: 110-54-3		
4.095	4.095 (0.771)	57	110281	245.438	245.44	80.00- 120.00	100.00
4.095	4.095 (0.771)	43	69930			34.03- 94.03	63.41
4.095	4.095 (0.771)	86	16793			0.00- 45.63	15.23
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.389	4.389 (0.826)	63	107497	235.354	235.35	80.00- 120.00	100.00
4.389	4.389 (0.826)	65	32073			1.36- 61.36	29.84
86 Vinyl Acetate					CAS #: 108-05-4		
4.445	4.445 (0.837)	86	15692	215.606	215.61	80.00- 120.00	100.00
4.445	4.445 (0.837)	43	174655			1119.78-1179.78	1112.98
4.445	4.445 (0.837)	42	14655			63.36- 123.36	93.39
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.033	5.033 (0.947)	61	84345	221.438	221.44	80.00- 120.00	100.00
5.047	5.033 (0.950)	96	65300			46.92- 106.92	77.42
5.033	5.033 (0.947)	98	41551			18.93- 78.93	49.26
92 2-Butanone					CAS #: 78-93-3		
5.089	5.089 (0.958)	72	29857	225.382	225.38	80.00- 120.00	100.00
5.089	5.089 (0.958)	43	136899			439.29- 499.29	458.50
5.089	5.089 (0.958)	57	11092			8.51- 68.51	37.15
99 Tetrahydrofuran					CAS #: 109-99-9		
5.298	5.298 (0.997)	42	76403	212.013	212.01	80.00- 120.00	100.00
5.298	5.298 (0.997)	71	26097			3.78- 63.78	34.16
5.298	5.298 (0.997)	72	27673			4.55- 64.55	36.22
100 Chloroform					CAS #: 67-66-3		
5.382	5.382 (1.013)	83	121192	232.028	232.03	80.00- 120.00	100.00
5.382	5.382 (1.013)	85	82211			35.58- 95.58	67.84
102 Cyclohexane					CAS #: 110-82-7		
5.494	5.494 (1.034)	84	82558	239.792	239.79	80.00- 120.00	100.00
5.494	5.494 (1.034)	56	114473			109.96- 169.96	138.66
5.494	5.494 (1.034)	41	56963			47.10- 107.10	69.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.536	5.536 (1.042)	97	133207	231.803	231.80	80.00- 120.00	100.00
5.536	5.536 (1.042)	99	84140			34.47- 94.47	63.16
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.662	5.662 (1.066)	119	146870	243.633	243.63	80.00- 120.00	100.00
5.662	5.662 (1.066)	117	152842			75.51- 135.51	104.07
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.928	5.928 (1.116)	57	356819	234.487	234.49	80.00- 120.00	100.00
5.928	5.928 (1.116)	56	114116			1.61- 61.61	31.98
5.928	5.928 (1.116)	41	87126			0.00- 55.08	24.42
116 Benzene					CAS #: 71-43-2		
5.942	5.942 (0.922)	78	189521	235.174	235.17	80.00- 120.00	100.00
5.942	5.942 (0.922)	77	43555			0.00- 53.47	22.98
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.068	6.068 (0.941)	62	78577	203.592	203.59	80.00- 120.00	100.00
6.068	6.068 (0.941)	64	25400			1.44- 61.44	32.33
121 Heptane					CAS #: 142-82-5		
6.152	6.152 (0.954)	71	64683	194.850	194.85	80.00- 120.00	100.00
6.152	6.152 (0.954)	43	129710			167.16- 227.16	200.53
6.152	6.166 (0.954)	100	24860			4.59- 64.59	38.43
125 Trichloroethene					CAS #: 79-01-6		
6.698	6.698 (1.039)	95	89538	228.363	228.36	80.00- 120.00	100.00
6.698	6.698 (1.039)	130	101102			80.33- 140.33	112.91
6.698	6.698 (1.039)	97	56785			34.11- 94.11	63.42
127 Methylcyclohexane					CAS #: 108-87-2		
6.824	6.824 (1.059)	83	114889	230.969	230.97	80.00- 120.00	100.00
6.824	6.824 (1.059)	98	57893			18.36- 78.36	50.39
6.824	6.824 (1.059)	55	106199			64.11- 124.11	92.44
132 1,2-Dichloropropane					CAS #: 78-87-5		
7.047	7.047 (1.093)	63	72866	215.938	215.94	80.00- 120.00	100.00
7.047	7.047 (1.093)	62	49376			38.98- 98.98	67.76
7.047	7.047 (1.093)	41	39337			26.92- 86.92	53.99
136 1,4-Dioxane					CAS #: 123-91-1		
7.201	7.187 (1.117)	88	47011	214.669	214.67	80.00- 120.00	100.00
7.187	7.187 (1.115)	58	37178			45.23- 105.23	79.08
7.187	7.201 (1.115)	57	11576			0.00- 54.84	24.62

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane					CAS #: 75-27-4		
7.411	7.411 (1.150)	83	133048	213.632	213.63	80.00- 120.00	100.00
7.411	7.411 (1.150)	85	90679			35.40- 95.40	68.15
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
8.125	8.125 (1.260)	75	107583	216.363	216.36	80.00- 120.00	100.00
8.125	8.125 (1.260)	77	34610			4.01- 64.01	32.17
8.125	8.125 (1.260)	39	57458			28.76- 88.76	53.41
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
8.419	8.419 (1.306)	85	27424	193.694	193.69	80.00- 120.00	100.00
8.419	8.405 (1.306)	43	171447			608.29- 668.29	625.16
8.419	8.405 (1.306)	58	66532			218.56- 278.56	242.60
147 Toluene					CAS #: 108-88-3		
8.615	8.614 (1.336)	91	241103	215.992	215.99	80.00- 120.00	100.00
8.615	8.614 (1.336)	92	142908			28.41- 88.41	59.27
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
9.104	9.104 (0.881)	75	94040	209.007	209.01	80.00- 120.00	100.00
9.104	9.104 (0.881)	77	32220			3.39- 63.39	34.26
9.104	9.104 (0.881)	39	48356			23.99- 83.99	51.42
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
9.342	9.342 (0.904)	97	84732	213.283	213.28	80.00- 120.00	100.00
9.342	9.342 (0.904)	99	51546			30.16- 90.16	60.83
9.342	9.342 (0.904)	83	69045			52.74- 112.74	81.49
156 Tetrachloroethene					CAS #: 127-18-4		
9.356	9.356 (0.905)	166	131212	231.738	231.74	80.00- 120.00	100.00
9.356	9.356 (0.905)	129	98659			44.78- 104.78	75.19
9.356	9.356 (0.905)	131	96352			43.76- 103.76	73.43
158 2-Hexanone					CAS #: 591-78-6		
9.636	9.636 (0.932)	58	87266	203.076	203.08	80.00- 120.00	100.00
9.636	9.636 (0.932)	43	162622			158.05- 218.05	186.35
9.636	9.636 (0.932)	100	17793			0.00- 51.23	20.39
160 Dibromochloromethane					CAS #: 124-48-1		
9.762	9.762 (0.944)	129	174044	226.675	226.68	80.00- 120.00	100.00
9.762	9.762 (0.944)	127	135202			48.15- 108.15	77.68
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
9.888	9.888 (0.957)	107	133572	219.963	219.96	80.00- 120.00	100.00
9.888	9.888 (0.957)	109	132339			64.77- 124.77	99.08

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene					CAS #: 108-90-7		
10.364	10.363 (1.003)	112	209212	223.061	223.06	80.00- 120.00	100.00
10.364	10.363 (1.003)	114	67552			2.05- 62.05	32.29
10.364	10.363 (1.003)	77	111633			25.53- 85.53	53.36
167 Ethyl Benzene					CAS #: 100-41-4		
10.447	10.447 (1.011)	106	105573	218.362	218.36	80.00- 120.00	100.00
10.447	10.447 (1.011)	91	321540			275.38- 335.38	304.57
169 m,p-Xylene					CAS #: 108-38-3		
10.559	10.559 (1.022)	106	129744	220.001	220.00	80.00- 120.00	100.00
10.559	10.559 (1.022)	91	249033			163.96- 223.96	191.94
171 o-Xylene					CAS #: 95-47-6		
10.909	10.909 (1.056)	106	124413	222.144	222.14	80.00- 120.00	100.00
10.909	10.909 (1.056)	91	249193			178.07- 238.07	200.29
172 Styrene					CAS #: 100-42-5		
10.937	10.937 (1.058)	104	211041	219.379	219.38	80.00- 120.00	100.00
10.937	10.937 (1.058)	78	95031			17.50- 77.50	45.03
174 Bromoform					CAS #: 75-25-2		
11.105	11.105 (1.074)	173	168972	229.132	229.13	80.00- 120.00	100.00
11.105	11.105 (1.074)	171	86378			20.99- 80.99	51.12
175 Cumene					CAS #: 98-82-8		
11.189	11.203 (1.083)	105	380494	216.817	216.82	80.00- 120.00	100.00
11.189	11.203 (1.083)	120	106070			0.00- 57.87	27.88
11.189	11.189 (1.083)	51	38791			0.00- 40.21	10.19
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.483	11.483 (1.111)	83	175008	217.515	217.51	80.00- 120.00	100.00
11.483	11.483 (1.111)	85	117525			36.88- 96.88	67.15
182 Propylbenzene					CAS #: 103-65-1		
11.497	11.497 (1.112)	91	423467	219.104	219.10	80.00- 120.00	100.00
11.497	11.497 (1.112)	120	107398			0.00- 55.56	25.36
11.497	11.497 (1.112)	105	17113			0.00- 34.03	4.04
188 4-Ethyltoluene					CAS #: 622-96-8		
11.581	11.581 (1.120)	105	373471	208.507	208.51	80.00- 120.00	100.00
11.581	11.581 (1.120)	120	115557			0.00- 57.62	30.94
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.623	11.623 (1.125)	105	359050	260.878	260.88	80.00- 120.00	100.00(R)
11.623	11.623 (1.125)	120	174067			23.73- 83.73	48.48

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.861	11.861 (1.148)	105	292321	215.877	215.88	80.00- 120.00	100.00
11.861	11.861 (1.148)	120	138946			17.13- 77.13	47.53
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.057	12.056 (1.167)	146	231400	222.438	222.44	80.00- 120.00	100.00
12.057	12.056 (1.167)	148	145578			33.49- 93.49	62.91
12.057	12.056 (1.167)	111	84840			7.53- 67.53	36.66
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.113	12.112 (1.172)	146	232040	226.986	226.99	80.00- 120.00	100.00
12.113	12.112 (1.172)	148	147107			33.27- 93.27	63.40
12.113	12.112 (1.172)	111	85121			7.29- 67.29	36.68
212 alpha-Chlorotoluene					CAS #: 100-44-7		
12.196	12.196 (1.180)	91	247246	205.794	205.79	80.00- 120.00	100.00
12.210	12.210 (1.181)	126	61689			0.00- 53.95	24.95
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.336	12.336 (1.194)	146	211876	229.883	229.88	80.00- 120.00	100.00
12.336	12.336 (1.194)	148	132393			32.65- 92.65	62.49
12.336	12.336 (1.194)	111	81169			9.40- 69.40	38.31
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
13.176	13.176 (1.275)	180	96965	201.950	201.95	80.00- 120.00	100.00
13.176	13.176 (1.275)	182	92675			63.10- 123.10	95.58
227 Hexachlorobutadiene					CAS #: 87-68-3		
13.232	13.232 (1.280)	225	81630	198.772	198.77	80.00- 120.00	100.00
13.232	13.232 (1.280)	223	50488			33.31- 93.31	61.85
228 Naphthalene					CAS #: 91-20-3		
13.316	13.316 (1.288)	128	20930	27.2535	27.253	80.00- 120.00	100.00
13.316	13.316 (1.288)	127	2740			0.00- 44.56	13.09

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 06-Feb-2017 10:37

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14020603.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msd14.i/06feb17.b/14651201b.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 06-FEB-2017
Calibration Time: 09:15
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

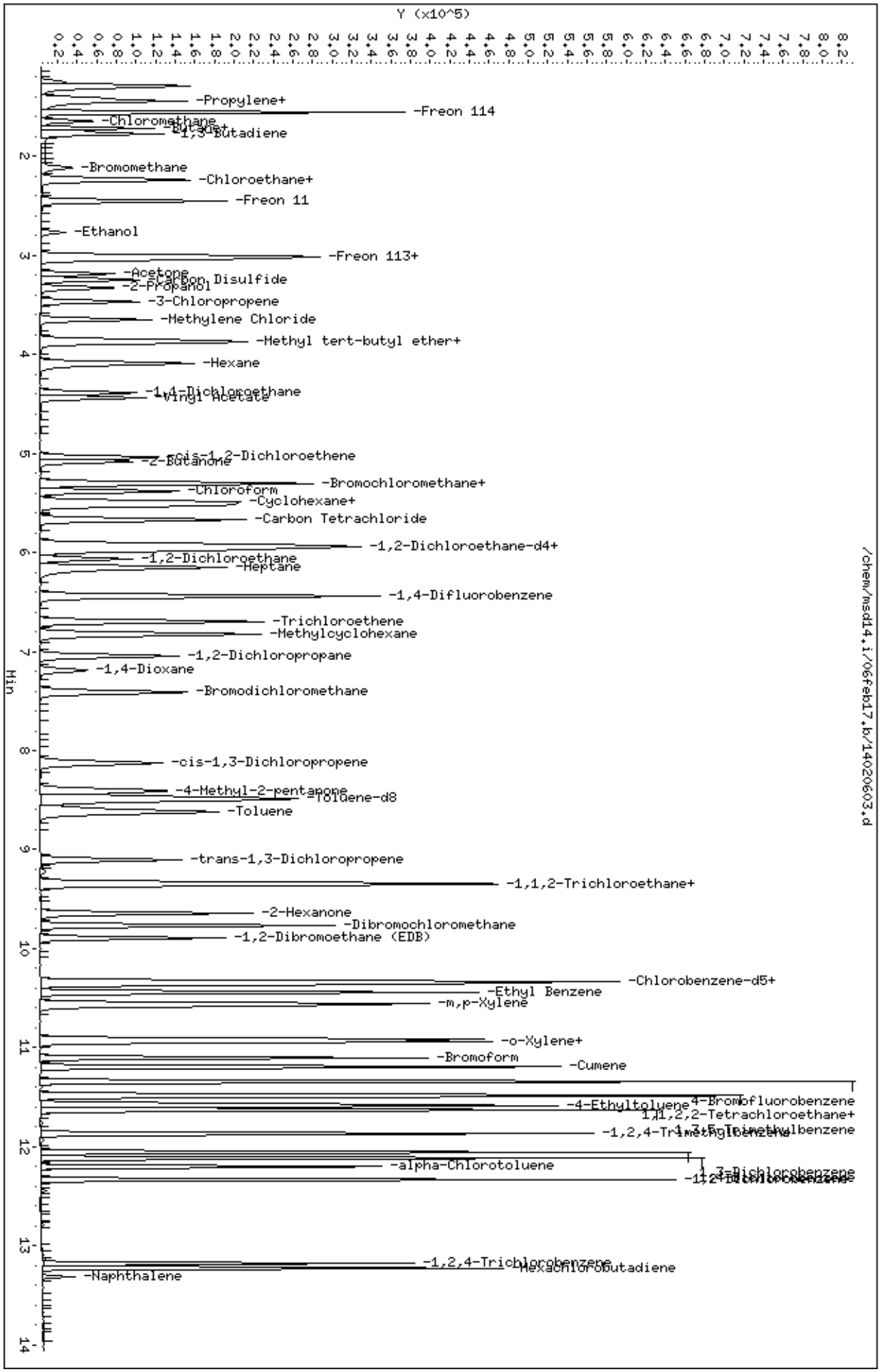
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	81368	48821	113915	84875	4.31
123 1,4-Difluorobenze	344671	206803	482539	357525	3.73
163 Chlorobenzene-d5	321726	193036	450416	326355	1.44

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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/msd14.i/06feb17.b/14020603.d
Date : 06-FEB-2017 10:05
Client ID: LCS
Sample Info: 50mL #2819-234
Column phase: RTX-624

Instrument: msd14.i
Operator: gd
Column diameter: 0.18



eurofins | Air Toxics

Client Sample ID: LCSD
Lab ID#: 1701428B-22BB
EPA METHOD TO-15 GC/MS

File Name:	**14020604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/6/17 10:34 AM**	

Compound	%Recovery	Method Limits
Freon 12	108	70-130
Freon 114	112	70-130
Chloromethane	112	70-130
Vinyl Chloride	98	70-130
1,3-Butadiene	79	70-130
Bromomethane	96	70-130
Chloroethane	114	70-130
Freon 11	126	70-130
Ethanol	82	70-130
Freon 113	128	70-130
1,1-Dichloroethene	118	70-130
Acetone	116	70-130
2-Propanol	106	70-130
Carbon Disulfide	112	70-130
3-Chloropropene	114	70-130
Methylene Chloride	118	70-130
Methyl tert-butyl ether	113	70-130
trans-1,2-Dichloroethene	110	70-130
Hexane	119	70-130
1,1-Dichloroethane	116	70-130
2-Butanone (Methyl Ethyl Ketone)	112	70-130
cis-1,2-Dichloroethene	108	70-130
Tetrahydrofuran	104	70-130
Chloroform	112	70-130
1,1,1-Trichloroethane	113	70-130
Cyclohexane	115	70-130
Carbon Tetrachloride	118	70-130
2,2,4-Trimethylpentane	114	70-130
Benzene	115	70-130
1,2-Dichloroethane	102	70-130
Heptane	98	70-130
Trichloroethene	112	70-130
1,2-Dichloropropane	107	70-130
1,4-Dioxane	104	70-130
Bromodichloromethane	107	70-130
cis-1,3-Dichloropropene	104	70-130
4-Methyl-2-pentanone	93	70-130
Toluene	106	70-130
trans-1,3-Dichloropropene	103	70-130
1,1,2-Trichloroethane	103	70-130
Tetrachloroethene	117	70-130
2-Hexanone	100	70-130

eurofins | Air Toxics

Client Sample ID: LCSD
Lab ID#: 1701428B-22BB
EPA METHOD TO-15 GC/MS

File Name:	**14020604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/6/17 10:34 AM**	

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	111	70-130
1,2-Dibromoethane (EDB)	110	70-130
Chlorobenzene	108	70-130
Ethyl Benzene	107	70-130
m,p-Xylene	111	70-130
o-Xylene	108	70-130
Styrene	108	70-130
Bromoform	112	70-130
Cumene	106	70-130
1,1,2,2-Tetrachloroethane	108	70-130
Propylbenzene	107	70-130
4-Ethyltoluene	103	70-130
1,3,5-Trimethylbenzene	128	70-130
1,2,4-Trimethylbenzene	107	70-130
1,3-Dichlorobenzene	106	70-130
1,4-Dichlorobenzene	110	70-130
alpha-Chlorotoluene	101	70-130
1,2-Dichlorobenzene	110	70-130
1,2,4-Trichlorobenzene	101	70-130
Hexachlorobutadiene	94	70-130
Naphthalene	152 Q	60-140

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	103	70-130

Report Date: 06-Feb-2017 11:05

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 06feb17
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCSD
Client Smp ID: LCSD
Level: LOW
Operator: gd
Data Type: MS DATA
SampleType: LCSD
SpikeList File: AT12ethanol.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msd14.i/06feb17.b/14651201b.m
Misc Info: 200ppbv (200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	200.00	199.60	99.80	60-140
11 Freon 12	200.00	215.42	107.71	70-130
15 Freon 114	200.00	223.69	111.84	70-130
17 Chloromethane	200.00	224.62	112.31	70-130
23 Butane	200.00	177.20	88.60	60-140
25 Vinyl Chloride	200.00	195.75	97.88	70-130
26 1,3-Butadiene	200.00	158.74	79.37	70-130
29 Bromomethane	200.00	191.66	95.83	70-130
30 Chloroethane	200.00	229.01	114.50	70-130
31 Isopentane	200.00	267.65	133.83	60-140
35 Freon 11	200.00	251.89	125.94	70-130
42 Ethanol	230.00	189.62	82.44	70-130
49 Freon 113	200.00	256.14	128.07	70-130
50 1,1-Dichloroethene	200.00	237.02	118.51	70-130
52 Acetone	200.00	231.22	115.61	70-130
56 Carbon Disulfide	200.00	224.97	112.49	70-130
57 2-Propanol	200.00	211.84	105.92	70-130
58 3-Chloropropene	200.00	227.13	113.56	70-130
66 Methylene Chloride	200.00	235.91	117.95	70-130
72 Methyl tert-butyl	200.00	226.36	113.18	70-130
73 trans-1,2-Dichloro	200.00	220.82	110.41	70-130
78 Hexane	200.00	238.73	119.36	70-130
82 1,1-Dichloroethane	200.00	232.57	116.28	70-130
86 Vinyl Acetate	200.00	211.90	105.95	60-140
91 cis-1,2-Dichloroet	200.00	216.17	108.09	70-130
92 2-Butanone	200.00	224.40	112.20	70-130
99 Tetrahydrofuran	200.00	207.91	103.95	70-130
100 Chloroform	200.00	223.60	111.80	70-130
103 1,1,1-Trichloroeth	200.00	226.51	113.26	70-130
106 Carbon Tetrachlori	200.00	236.62	118.31	70-130
102 Cyclohexane	200.00	230.74	115.37	70-130
113 2,2,4-Trimethylpen	200.00	227.56	113.78	70-130
116 Benzene	200.00	230.35	115.18	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	200.00	203.43	101.71	70-130
121 Heptane	200.00	196.72	98.36	70-130
125 Trichloroethene	200.00	223.82	111.91	70-130
127 Methylcyclohexane	200.00	226.60	113.30	60-140
132 1,2-Dichloropropan	200.00	213.62	106.81	70-130
136 1,4-Dioxane	200.00	209.07	104.54	70-130
138 Bromodichlorometha	200.00	214.22	107.11	70-130
144 cis-1,3-Dichloropr	200.00	208.40	104.20	70-130
145 4-Methyl-2-pentano	200.00	185.78	92.89	70-130
147 Toluene	200.00	212.87	106.43	70-130
150 trans-1,3-Dichloro	200.00	205.29	102.64	70-130
155 1,1,2-Trichloroeth	200.00	206.73	103.36	70-130
156 Tetrachloroethene	200.00	233.35	116.68	70-130
158 2-Hexanone	200.00	199.84	99.92	70-130
160 Dibromochlorometha	200.00	222.09	111.04	70-130
161 1,2-Dibromoethane	200.00	220.05	110.02	70-130
165 Chlorobenzene	200.00	216.26	108.13	70-130
167 Ethyl Benzene	200.00	214.93	107.47	70-130
169 m,p-Xylene	200.00	221.88	110.94	70-130
171 o-Xylene	200.00	216.11	108.05	70-130
172 Styrene	200.00	217.03	108.52	70-130
174 Bromoform	200.00	224.48	112.24	70-130
175 Cumene	200.00	212.28	106.14	70-130
181 1,1,2,2-Tetrachlor	200.00	216.30	108.15	70-130
182 Propylbenzene	200.00	214.80	107.40	70-130
188 4-Ethyltoluene	200.00	206.80	103.40	70-130
190 1,3,5-Trimethylben	200.00	257.12	128.56	70-130
196 1,2,4-Trimethylben	200.00	214.10	107.05	70-130
208 1,3-Dichlorobenzen	200.00	211.91	105.96	70-130
209 1,4-Dichlorobenzen	200.00	220.32	110.16	70-130
212 alpha-Chlorotoluen	200.00	202.84	101.42	70-130
214 1,2-Dichlorobenzen	200.00	220.78	110.39	70-130
226 1,2,4-Trichloroben	200.00	202.97	101.48	70-130
227 Hexachlorobutadien	200.00	187.26	93.63	70-130
228 Naphthalene	20.000	30.469	152.34*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	400.00	368.18	92.04	70-130
$ 146 Toluene-d8	400.00	394.08	98.52	70-130
$ 177 4-Bromofluorobenze	400.00	411.30	102.83	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msd14.i/06feb17.b/14020604.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 06-FEB-2017 10:34
Operator : gd Inst ID: msd14.i
Smp Info : 50mL #2819-234
Misc Info : 200ppbv (200ppbv)
Comment : 5 and 20 - GC/MS
Method : /chem/msd14.i/06feb17.b/14651201b.m
Meth Date : 06-Feb-2017 10:03 gdelacru Quant Type: ISTD
Cal Date : 19-DEC-2016 11:43 Cal File: 14121908.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.312	5.312 (1.000)	130	85261	400.000		80.00- 120.00	100.00
5.312	5.312 (1.000)	128	65640			46.96- 106.96	76.99
5.312	5.312 (1.000)	49	108612			97.69- 157.69	127.39
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.446	6.446 (1.000)	114	358100	400.000		80.00- 120.00	100.00
6.446	6.446 (1.000)	88	51394			0.00- 45.92	14.35
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
10.335	10.335 (1.000)	117	325529	400.000		80.00- 120.00	100.00
10.335	10.335 (1.000)	82	154101			19.32- 79.32	47.34
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.984	5.984 (1.126)	65	96112	368.177	368.18	80.00- 120.00	100.00
5.984	5.984 (1.126)	67	53497			24.72- 84.72	55.66
$ 146 Toluene-d8					CAS #: 2037-26-5		
8.488	8.503 (1.317)	98	348491	394.082	394.08	80.00- 120.00	100.00
8.488	8.489 (1.317)	70	32979			0.00- 40.20	9.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8 (continued)							
8.488	8.489 (1.317)	100	245007			38.62- 98.62	70.31
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
11.343	11.343 (1.097)	174	207781	411.302	411.30	80.00- 120.00	100.00
11.343	11.343 (1.097)	95	238768			89.78- 149.78	114.91
11.343	11.343 (1.097)	176	201133			66.10- 126.10	96.80
9 Propylene					CAS #: 115-07-1		
1.423	1.423 (0.268)	41	47165	199.597	199.60	80.00- 120.00	100.00
1.423	1.423 (0.268)	42	31548			33.78- 93.78	66.89
1.423	1.423 (0.268)	39	32050			36.58- 96.58	67.95
11 Freon 12					CAS #: 75-71-8		
1.451	1.451 (0.273)	85	146422	215.419	215.42	80.00- 120.00	100.00
1.451	1.451 (0.273)	87	46178			1.64- 61.64	31.54
15 Freon 114					CAS #: 76-14-2		
1.562	1.563 (0.294)	135	128009	223.689	223.69	80.00- 120.00	100.00
1.562	1.563 (0.294)	137	41221			1.10- 61.10	32.20
17 Chloromethane					CAS #: 74-87-3		
1.646	1.647 (0.310)	50	58651	224.625	224.62	80.00- 120.00	100.00
1.646	1.647 (0.310)	52	18541			2.75- 62.75	31.61
23 Butane					CAS #: 106-97-8		
1.716	1.717 (0.323)	58	11058	177.198	177.20	80.00- 120.00	100.00
1.716	1.717 (0.323)	43	82446			736.71- 796.71	745.56
25 Vinyl Chloride					CAS #: 75-01-4		
1.744	1.744 (0.328)	62	51054	195.752	195.75	80.00- 120.00	100.00
1.744	1.744 (0.328)	64	15689			1.78- 61.78	30.73
26 1,3-Butadiene					CAS #: 106-99-0		
1.772	1.772 (0.334)	54	41533	158.742	158.74	80.00- 120.00	100.00
1.772	1.772 (0.334)	39	40150			67.57- 127.57	96.67
29 Bromomethane					CAS #: 74-83-9		
2.122	2.122 (0.399)	94	30888	191.661	191.66	80.00- 120.00	100.00
2.122	2.122 (0.399)	96	29379			62.49- 122.49	95.12
30 Chloroethane					CAS #: 75-00-3		
2.220	2.220 (0.418)	64	29042	229.007	229.01	80.00- 120.00	100.00
2.220	2.220 (0.418)	66	8647			0.76- 60.76	29.78
31 Isopentane					CAS #: 78-78-4		
2.248	2.248 (0.423)	43	73764	267.651	267.65	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
31 Isopentane (continued)							
2.248	2.248 (0.423)	57	50192			37.62- 97.62	68.05
2.248	2.248 (0.423)	72	5243			0.00- 36.64	7.11
35 Freon 11					CAS #: 75-69-4		
2.458	2.458 (0.463)	101	154819	251.888	251.89	80.00- 120.00	100.00
2.458	2.458 (0.463)	103	100860			34.68- 94.68	65.15
42 Ethanol					CAS #: 64-17-5		
2.766	2.752 (0.521)	45	25198	189.620	189.62	80.00- 120.00	100.00
2.766	2.752 (0.521)	46	10655			11.88- 71.88	42.28
49 Freon 113					CAS #: 76-13-1		
3.018	3.018 (0.568)	151	119215	256.145	256.14	80.00- 120.00	100.00
3.018	3.018 (0.568)	153	76040			36.16- 96.16	63.78
3.018	3.018 (0.568)	101	134392			85.93- 145.93	112.73
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.046	3.046 (0.573)	61	93126	237.022	237.02	80.00- 120.00	100.00
3.046	3.046 (0.573)	96	60625			30.16- 90.16	65.10
3.046	3.046 (0.573)	98	37096			8.09- 68.09	39.83
52 Acetone					CAS #: 67-64-1		
3.186	3.186 (0.600)	58	30939	231.220	231.22	80.00- 120.00	100.00
3.186	3.186 (0.600)	43	95697			284.49- 344.49	309.30
56 Carbon Disulfide					CAS #: 75-15-0		
3.255	3.256 (0.613)	76	156922	224.974	224.97	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.339	3.326 (0.629)	45	109419	211.846	211.84	80.00- 120.00	100.00
3.339	3.326 (0.629)	43	20407			0.00- 46.84	18.65
3.339	3.326 (0.629)	59	4305			0.00- 34.10	3.94
58 3-Chloropropene					CAS #: 107-05-1		
3.479	3.479 (0.655)	76	24698	227.128	227.13	80.00- 120.00	100.00
3.479	3.479 (0.655)	41	79271			310.63- 370.63	320.96
66 Methylene Chloride					CAS #: 75-09-2		
3.647	3.647 (0.687)	49	72849	235.909	235.91	80.00- 120.00	100.00
3.647	3.647 (0.687)	84	49233			35.90- 95.90	67.58
3.647	3.647 (0.687)	51	22544			0.00- 59.48	30.95
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
3.857	3.857 (0.726)	73	154698	226.358	226.36	80.00- 120.00	100.00
3.857	3.857 (0.726)	57	41743			0.00- 56.69	26.98

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether (continued)							
3.857	3.857 (0.726)	41	40472			0.00- 54.89	26.16
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.885	3.885 (0.731)	96	61682	220.821	220.82	80.00- 120.00	100.00
3.885	3.885 (0.731)	61	89969			113.59- 173.59	145.86
3.885	3.885 (0.731)	98	41507			32.57- 92.57	67.29
78 Hexane					CAS #: 110-54-3		
4.095	4.095 (0.771)	57	107754	238.727	238.73	80.00- 120.00	100.00
4.095	4.095 (0.771)	43	69179			34.03- 94.03	64.20
4.095	4.095 (0.771)	86	16343			0.00- 45.63	15.17
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.389	4.389 (0.826)	63	106707	232.566	232.57	80.00- 120.00	100.00
4.389	4.389 (0.826)	65	32541			1.36- 61.36	30.50
86 Vinyl Acetate					CAS #: 108-05-4		
4.445	4.445 (0.837)	86	15492	211.896	211.90	80.00- 120.00	100.00
4.445	4.445 (0.837)	43	172154			1119.78-1179.78	1111.20
4.445	4.445 (0.837)	42	13916			63.36- 123.36	89.83
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.032	5.033 (0.947)	61	82713	216.171	216.17	80.00- 120.00	100.00
5.046	5.033 (0.950)	96	64284			46.92- 106.92	77.72
5.046	5.033 (0.950)	98	40842			18.93- 78.93	49.38
92 2-Butanone					CAS #: 78-93-3		
5.088	5.089 (0.958)	72	29863	224.405	224.40	80.00- 120.00	100.00
5.088	5.089 (0.958)	43	135235			439.29- 499.29	452.85
5.088	5.089 (0.958)	57	10576			8.51- 68.51	35.42
99 Tetrahydrofuran					CAS #: 109-99-9		
5.298	5.298 (0.997)	42	75265	207.908	207.91	80.00- 120.00	100.00
5.298	5.298 (0.997)	71	24513			3.78- 63.78	32.57
5.298	5.298 (0.997)	72	27443			4.55- 64.55	36.46
100 Chloroform					CAS #: 67-66-3		
5.382	5.382 (1.013)	83	117321	223.601	223.60	80.00- 120.00	100.00
5.382	5.382 (1.013)	85	81496			35.58- 95.58	69.46
102 Cyclohexane					CAS #: 110-82-7		
5.494	5.494 (1.034)	84	79804	230.744	230.74	80.00- 120.00	100.00
5.494	5.494 (1.034)	56	110777			109.96- 169.96	138.81
5.494	5.494 (1.034)	41	59227			47.10- 107.10	74.22

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.536	5.536 (1.042)	97	130758	226.512	226.51	80.00- 120.00	100.00
5.536	5.536 (1.042)	99	86734			34.47- 94.47	66.33
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.662	5.662 (1.066)	119	143291	236.621	236.62	80.00- 120.00	100.00
5.662	5.662 (1.066)	117	152544			75.51- 135.51	106.46
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.928	5.928 (1.116)	57	347858	227.564	227.56	80.00- 120.00	100.00
5.928	5.928 (1.116)	56	110475			1.61- 61.61	31.76
5.928	5.928 (1.116)	41	84807			0.00- 55.08	24.38
116 Benzene					CAS #: 71-43-2		
5.942	5.942 (0.922)	78	185936	230.354	230.35	80.00- 120.00	100.00
5.942	5.942 (0.922)	77	43703			0.00- 53.47	23.50
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.068	6.068 (0.941)	62	78640	203.427	203.43	80.00- 120.00	100.00
6.068	6.068 (0.941)	64	24735			1.44- 61.44	31.45
121 Heptane					CAS #: 142-82-5		
6.152	6.152 (0.954)	71	65411	196.725	196.72	80.00- 120.00	100.00
6.152	6.152 (0.954)	43	129133			167.16- 227.16	197.42
6.152	6.166 (0.954)	100	22955			4.59- 64.59	35.09
125 Trichloroethene					CAS #: 79-01-6		
6.697	6.698 (1.039)	95	87899	223.820	223.82	80.00- 120.00	100.00
6.697	6.698 (1.039)	130	101613			80.33- 140.33	115.60
6.697	6.698 (1.039)	97	55680			34.11- 94.11	63.35
127 Methylcyclohexane					CAS #: 108-87-2		
6.823	6.824 (1.059)	83	112899	226.603	226.60	80.00- 120.00	100.00
6.823	6.824 (1.059)	98	55798			18.36- 78.36	49.42
6.823	6.824 (1.059)	55	104672			64.11- 124.11	92.71
132 1,2-Dichloropropane					CAS #: 78-87-5		
7.047	7.047 (1.093)	63	72199	213.617	213.62	80.00- 120.00	100.00
7.047	7.047 (1.093)	62	49161			38.98- 98.98	68.09
7.047	7.047 (1.093)	41	39453			26.92- 86.92	54.64
136 1,4-Dioxane					CAS #: 123-91-1		
7.187	7.187 (1.115)	88	45860	209.074	209.07	80.00- 120.00	100.00
7.187	7.187 (1.115)	58	35457			45.23- 105.23	77.32
7.187	7.201 (1.115)	57	10813			0.00- 54.84	23.58

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane					CAS #: 75-27-4		
7.411	7.411 (1.150)	83	133629	214.220	214.22	80.00- 120.00	100.00
7.411	7.411 (1.150)	85	88679			35.40- 95.40	66.36
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
8.125	8.125 (1.260)	75	103789	208.396	208.40	80.00- 120.00	100.00
8.125	8.125 (1.260)	77	35372			4.01- 64.01	34.08
8.125	8.125 (1.260)	39	55409			28.76- 88.76	53.39
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
8.418	8.419 (1.306)	85	26346	185.775	185.78	80.00- 120.00	100.00
8.404	8.405 (1.304)	43	170985			608.29- 668.29	649.00
8.404	8.405 (1.304)	58	66155			218.56- 278.56	251.10
147 Toluene					CAS #: 108-88-3		
8.614	8.614 (1.336)	91	237997	212.867	212.87	80.00- 120.00	100.00
8.614	8.614 (1.336)	92	141260			28.41- 88.41	59.35
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
9.104	9.104 (0.881)	75	92133	205.288	205.29	80.00- 120.00	100.00
9.104	9.104 (0.881)	77	31979			3.39- 63.39	34.71
9.104	9.104 (0.881)	39	47103			23.99- 83.99	51.13
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
9.342	9.342 (0.904)	97	81921	206.730	206.73	80.00- 120.00	100.00
9.342	9.342 (0.904)	99	51301			30.16- 90.16	62.62
9.342	9.342 (0.904)	83	67632			52.74- 112.74	82.56
156 Tetrachloroethene					CAS #: 127-18-4		
9.356	9.356 (0.905)	166	131792	233.354	233.35	80.00- 120.00	100.00
9.356	9.356 (0.905)	129	99235			44.78- 104.78	75.30
9.356	9.356 (0.905)	131	94851			43.76- 103.76	71.97
158 2-Hexanone					CAS #: 591-78-6		
9.636	9.636 (0.932)	58	85656	199.836	199.84	80.00- 120.00	100.00
9.636	9.636 (0.932)	43	159696			158.05- 218.05	186.44
9.636	9.636 (0.932)	100	17357			0.00- 51.23	20.26
160 Dibromochloromethane					CAS #: 124-48-1		
9.762	9.762 (0.944)	129	170090	222.088	222.09	80.00- 120.00	100.00
9.762	9.762 (0.944)	127	134599			48.15- 108.15	79.13
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
9.888	9.888 (0.957)	107	133284	220.046	220.05	80.00- 120.00	100.00
9.888	9.888 (0.957)	109	129724			64.77- 124.77	97.33

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene					CAS #: 108-90-7		
10.363	10.363 (1.003)	112	202316	216.255	216.26	80.00- 120.00	100.00
10.363	10.363 (1.003)	114	65595			2.05- 62.05	32.42
10.363	10.363 (1.003)	77	110468			25.53- 85.53	54.60
167 Ethyl Benzene					CAS #: 100-41-4		
10.447	10.447 (1.011)	106	103651	214.931	214.93	80.00- 120.00	100.00
10.447	10.447 (1.011)	91	312804			275.38- 335.38	301.78
169 m,p-Xylene					CAS #: 108-38-3		
10.559	10.559 (1.022)	106	130522	221.881	221.88	80.00- 120.00	100.00
10.559	10.559 (1.022)	91	244313			163.96- 223.96	187.18
171 o-Xylene					CAS #: 95-47-6		
10.909	10.909 (1.056)	106	120725	216.106	216.11	80.00- 120.00	100.00
10.909	10.909 (1.056)	91	242677			178.07- 238.07	201.02
172 Styrene					CAS #: 100-42-5		
10.937	10.937 (1.058)	104	208254	217.031	217.03	80.00- 120.00	100.00
10.937	10.937 (1.058)	78	94142			17.50- 77.50	45.21
174 Bromoform					CAS #: 75-25-2		
11.105	11.105 (1.074)	173	165124	224.482	224.48	80.00- 120.00	100.00
11.105	11.105 (1.074)	171	85424			20.99- 80.99	51.73
175 Cumene					CAS #: 98-82-8		
11.189	11.203 (1.083)	105	371591	212.281	212.28	80.00- 120.00	100.00
11.203	11.203 (1.084)	120	102951			0.00- 57.87	27.71
11.189	11.189 (1.083)	51	37758			0.00- 40.21	10.16
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.483	11.483 (1.111)	83	173593	216.303	216.30	80.00- 120.00	100.00
11.483	11.483 (1.111)	85	116458			36.88- 96.88	67.09
182 Propylbenzene					CAS #: 103-65-1		
11.497	11.497 (1.112)	91	414090	214.796	214.80	80.00- 120.00	100.00
11.497	11.497 (1.112)	120	106441			0.00- 55.56	25.70
11.497	11.497 (1.112)	105	16500			0.00- 34.03	3.98
188 4-Ethyltoluene					CAS #: 622-96-8		
11.581	11.581 (1.120)	105	369475	206.799	206.80	80.00- 120.00	100.00
11.581	11.581 (1.120)	120	114047			0.00- 57.62	30.87
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.623	11.623 (1.125)	105	352982	257.120	257.12	80.00- 120.00	100.00
11.623	11.623 (1.125)	120	173761			23.73- 83.73	49.23

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.860	11.861 (1.148)	105	289185	214.103	214.10	80.00- 120.00	100.00
11.860	11.861 (1.148)	120	139137			17.13- 77.13	48.11
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.056	12.056 (1.167)	146	219892	211.912	211.91	80.00- 120.00	100.00
12.056	12.056 (1.167)	148	143340			33.49- 93.49	65.19
12.056	12.056 (1.167)	111	84177			7.53- 67.53	38.28
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.112	12.112 (1.172)	146	224660	220.324	220.32	80.00- 120.00	100.00
12.112	12.112 (1.172)	148	146188			33.27- 93.27	65.07
12.112	12.112 (1.172)	111	82824			7.29- 67.29	36.87
212 alpha-Chlorotoluene					CAS #: 100-44-7		
12.196	12.196 (1.180)	91	243088	202.846	202.84	80.00- 120.00	100.00
12.210	12.210 (1.181)	126	59991			0.00- 53.95	24.68
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.336	12.336 (1.194)	146	202974	220.784	220.78	80.00- 120.00	100.00
12.336	12.336 (1.194)	148	127624			32.65- 92.65	62.88
12.336	12.336 (1.194)	111	78301			9.40- 69.40	38.58
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
13.176	13.176 (1.275)	180	97207	202.968	202.97	80.00- 120.00	100.00
13.176	13.176 (1.275)	182	93157			63.10- 123.10	95.83
227 Hexachlorobutadiene					CAS #: 87-68-3		
13.232	13.232 (1.280)	225	76710	187.266	187.26	80.00- 120.00	100.00
13.232	13.232 (1.280)	223	48656			33.31- 93.31	63.43
228 Naphthalene					CAS #: 91-20-3		
13.316	13.316 (1.288)	128	23340	30.4690	30.469	80.00- 120.00	100.00(R)
13.316	13.316 (1.288)	127	3070			0.00- 44.56	13.16

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14020604.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msd14.i/06feb17.b/14651201b.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 06-FEB-2017
Calibration Time: 09:15
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

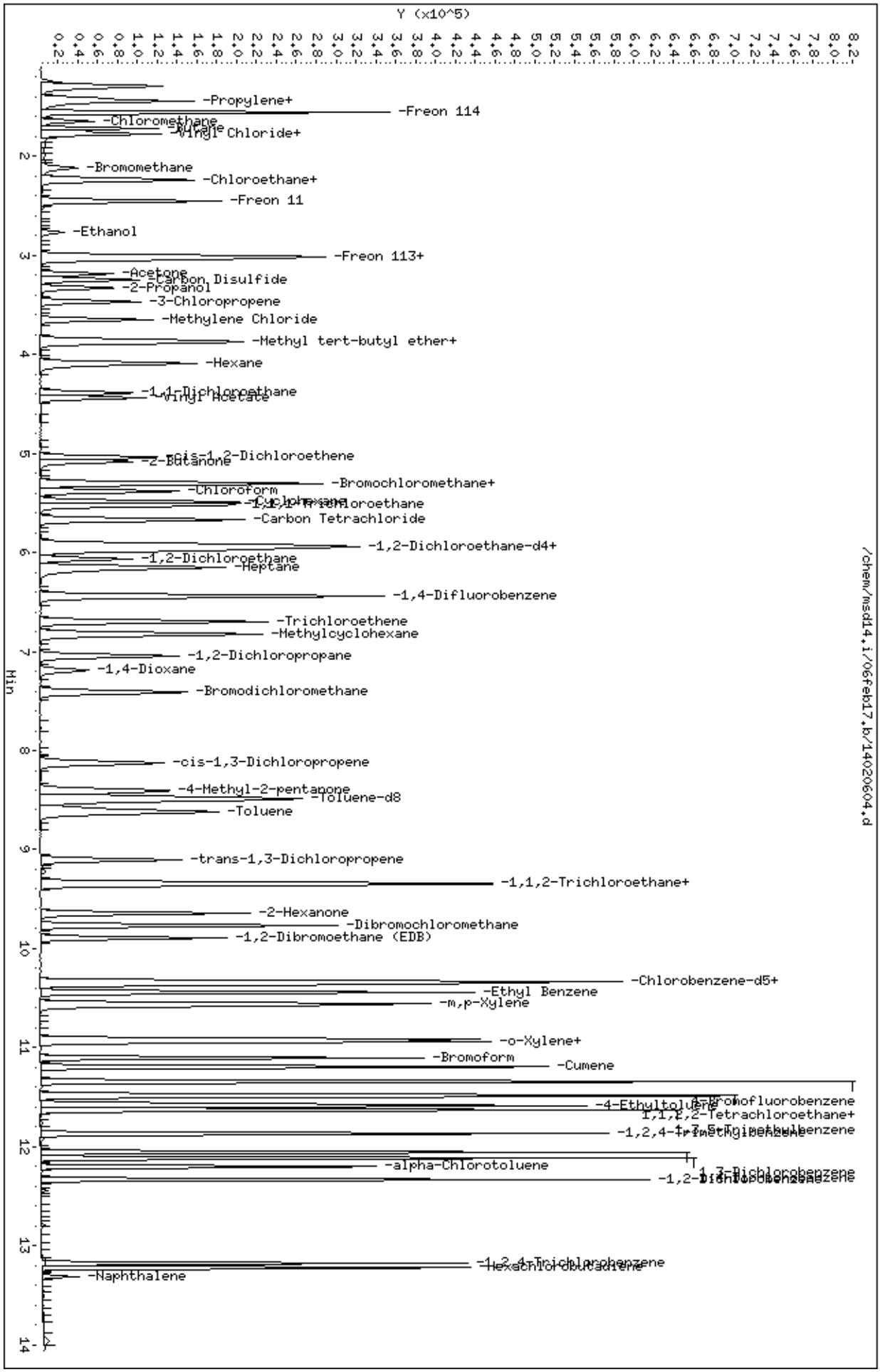
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	81368	48821	113915	85261	4.78
123 1,4-Difluorobenze	344671	206803	482539	358100	3.90
163 Chlorobenzene-d5	321726	193036	450416	325529	1.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.31	4.98	5.64	5.31	0.00
123 1,4-Difluorobenze	6.45	6.12	6.78	6.45	0.00
163 Chlorobenzene-d5	10.34	10.01	10.67	10.34	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/msd14.i/06feb17.b/14020604.d
Date : 06-FEB-2017 10:34
Client ID: LCSD
Sample Info: 50mL #2819-234
Column phase: RTX-624

Instrument: msd14.i
Operator: gd
Column diameter: 0.18



Page 1

MSDA

BFB verification of 176/174 ratio: (181568/180864)*100= 100.39%			
IS/S Std.#:	2819-37	Exp. Date:	3/27/2017
BCM			213,765
1,4-DFB			909,926
CB-d5			849,867

Method TO-15/TO-14			
SOP# 6/83			
Vacuum: NA			
Please check all standards			
Surrogate# 2819-206		Exp. Date:	3/27/2017
Surrogate# NA		Exp. Date:	NA

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

Method: A17Q0116A.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
√	A020201	BFB Tune Check	2819-206	10	36ng	50mL	1.00	jg	jg	2/2/17	0854	jg	Exp. 3/27/17. Apex -1
√	A020202	CCV	2819-200A	13	50ppbv (100ppbv)	100mL	1.00	jg	jg	2/2/17	1010	jg	Exp. 2/11/17;
√	A020203	LCS	2819-232	14	50ppbv (200ppbv)	50mL	1.00	jg	jg	2/2/17	1035	jg	Exp. 4/20/17;
√	A020204	LCSD	2819-232	14	50ppbv (200ppbv)	50mL	1.00	jg	jg	2/2/17	1100	jg	Exp. 4/20/17.
X	A020205	Lab Blank	34185	11	Humid	200mL	1.00	jg	jg	2/2/17	1256	jg	
√	A020206	Lab Blank	34185	11	Humid	200mL	1.00	jg	jg	2/2/17	1442	jg	
√	A020207	1701426-01A	O0403	1	4.9 Hg->5.1 psi	200mL	1.61	jlf	jg	2/2/17	1713	jlf	C:\msdchem
√	A020208	1701426-02A	N1701	2	3.5 Hg->5.1 psi	200mL	1.52	jlf	jg	2/2/17	1740	jlf	C:\msdchem
√	A020209	1701426-03A	SH34265	3	4.3 Hg->5.2 psi	200mL	1.58	jlf	jg	2/2/17	1806	jlf	
√	A020210	1701426-04A	O0156	5	5.7 Hg->5 psi	200mL	1.65	jlf	jg	2/2/17	1833	jlf	
√	A020211	1701438-01A	35144	6	4.0 Hg->5 psi	200mL	1.55	jlf	jg	2/2/17	1859	jlf	
√	A020212	1701438-02A	N0754	7	0 Hg->5 psi	200mL	1.34	jlf	jg	2/2/17	1926	jlf	
√	A020213	1701436-01A	O0331	8	4.5 Hg->5.1 psi	200mL	1.58	jlf	jg	2/2/17	1953	jlf	blue dot Pi:4.9psi Pf:4.2psi
√	A020214	1701436-02A	N0803	10	1 psi->5.1 psi	200mL	1.26	jlf	jg	2/2/17	2019	jlf	
√	A020215	1701437-01A	410	11	2.5 Hg->5 psi	200mL	1.46	jlf	jg	2/2/17	2046	jlf	
√	A020216	1701437-02A	23930	1	0.5 Hg->5 psi	200mL	1.36	jlf	jlf	2/2/17	2222	jlf	
√	A020217	1701387-01A	30853	2	4.3 Hg->4.9 psi	200mL	1.56	jg	jlf	2/2/17	2248	jg	
√	A020218	1701387-02A	35134	3	4.7 Hg->5.1 psi	200mL	1.60	jg	jlf	2/2/17	2315	jg	
√	A020219	1701399A-16A	1L1503	4	4.9 Hg->15 psi	200mL	2.41	jg	jlf	2/2/17	2342	jg	
√	A020220	1701399A-17A	O0834	5	4.7 Hg->15.1 psi	200mL	2.40	jg	jlf	2/3/17	0008	jg	
√	A020221	1701399A-18A	1L1689	6	6.5 Hg->15.2 psi	200mL	2.60	jg	jlf	2/3/17	0034	jg	
√	A020222	1701399A-19A	O0697	7	6.1 Hg->15.4 psi	200mL	2.57	jg	jlf	2/3/17	0101	jg	
√	A020223	1701399A-20A	O0764	8	6.1 Hg->15.1 psi	200mL	2.54	jg	jlf	2/3/17	0128	jg	
√	A020224	1701428B-18A	1L1720	9	5.5 Hg->15.3 psi	200mL	2.50	jg	jlf	2/3/17	0154	jg	
✓	A020225	1701428B-19A	N1929	10	5.5 Hg->14.8 psi	200mL	2.46	jg	jlf	2/3/17	0221	jg	confirmation needed

gm 2/3/17

MSDA

BFB verification of 176/174 ratio: (228736/230016)*100= 99.44%			
IS/S Std.#:	2819-37	Exp. Date:	3/27/2017
BCM			192,825
1,4-DFB			821,788
CB-d5			778,694

Method TO-15/TO-14			
SOP# 6/83			
Vacuum: NA			
Please check all standards			
Surrogate# 2819-206		Exp. Date:	3/27/2017
Surrogate# NA		Exp. Date:	NA

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

Method: A17Q0116A.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
√	A020301	BFB Tune Check	2819-206	11	36ng	50mL	1.00	jg	jg	2/3/17	0943	jg	Exp. 3/27/17.
√	A020302	CCV	2819-200A	13	50ppbv (100ppbv)	100mL	1.00	jg	jg	2/3/17	1113	jg	Exp. 2/11/17; 0 out
√	A020303	LCS	2819-232	14	50ppbv (200ppbv)	50mL	1.00	jg	jg	2/3/17	1138	jg	Exp. 4/20/17; 0 out
√	A020304	LCSD	2819-232	14	50ppbv (200ppbv)	50mL	1.00	jg	jg	2/3/17	1203	jg	Exp. 4/20/17.
√	A020305	Lab Blank	34185	12	Humid	200mL	1.00	jg	jg	2/3/17	1448	jg	
√	A020306	1701479-01A	23992	8	5 Hg->5 psi	200ml	1.61	jlf	jg	2/3/17	1624	jlf	
√	A020307	1701480-01A	14038	2	0 Hg->5 psi	200ml	1.34	jlf	jg	2/3/17	1651	jlf	blue dot Pi: 4.9psi Pf: 4.5psi
X	A020308	1701480-02A	O0160	3	2.5 Hg->5 psi	200ml	1.46	jlf	jg	2/3/17	1718	jlf	possible carryover
√	A020309	1701487-01A	34341	1	6.5 Hg->4.8 psi	200ml	1.69	jlf	jg	2/3/17	1744	jlf	
√	A020310	1701487-02A	34030	4	7.6 Hg->5 psi	200ml	1.79	jlf	jg	2/3/17	1811	jlf	
C	A020311	17014288-19A	N1929	5	5.5 Hg->14.8 psi	200ml	2.46	jlf	jg	2/3/17	1837	jlf	confirmation
√	A020312	1702003-03A	O0997	6	5.1 Hg->14.9 psi	200ml	2.43	jlf	jg	2/3/17	1904	jlf	E NTC
√	A020313	1702003-02A	N2041	7	2.8 Hg->14.9 psi	200ml	2.22	jlf	jg	2/3/17	1930	jlf	
√	A020314	1701448-01A	8036	9	3.9 Hg->15.1 psi	200ml	2.33	jlf	jg	2/3/17	1957	jlf	

2/3/17

Eurofins Air Toxics, Inc. **MSD-14** **Logbook #2838**

BFB Verification of 176/174 m/z Ratio:	108048/107432 X100 = 100.57%
Method Name:	14651201B

IS/S Std. #:	2819-259	Exp. Date:	5/3/17
BCM	81368		
1,4-DFB	344671		
CB-d5	321726		

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

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 / 132 Method (Circle one): TO-14A/TO-15/TO-17

	Use	File	Lab ID#	Can#/ Standard ID#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	14020601	BFB Tune check	2810-93	50ng	2µL	1.00	gd	2/6/17	0859	gd	Exp. 12/1/17
2	✓	02	CCV 100 ppbv	2819-162A	100 ppbv	50mL				0915		Exp 3/5/17 2 out, No isopentane
3	✓	03	LCS	2819-234	200 ppbv					1005		Exp 4/20/17 1 out
4	✓	04	LCSD							1034		
5	✓	05	TPHg Calib 80 ppmv	2787-40	4000 ppbv	2.5mL				1130		
6	✓	06	Lab Blank	35248	Humid	50mL				1200		
7	✓	07	1701463-01A	01026	2.5Hg-15psi	50mL	2.20			1251	gd	
8	✓	08	Syringe Cert	35248	Humid	2.5mL	1.00			1320		#161101 2.5mL
9	X	09	1701428B-16A	11603	5.7Hg-14.9psi	0.5mL	249			1354		Overdil #161101 2.5mL
10	✓	10	-16A			5mL	24.9			1424		Dil matrix #150305 10mL
11	✓	11	-17A	12373	4.9Hg-15.1psi	5mL	24.2			1500	gd	Dil Matrix
12	✓	12	Syringe Cert	35248	Humid	2.5mL	1.00			1617	gd	<RL ~~#161101~~ 170103 gd 2/6/17 2.5mL
13	✓	13	1701481-01A	N0878	3.0Hg-15psi	25mL	~~5.24~~ 4.48 gd 2/6/17	gd		1643	gd	Dil NTC
14	✓	14	1701432A-03A	34342	4.7Hg-5.4psi	10mL	8.10	gd		1730	gd	Dil Matrix #150305 10mL
15	✓	15	-03AA							1807	gd	Dil Matrix, dup 10mL
16	X	16	-01A	34455	4.1Hg-4.8psi	1.0mL	77.0			1832	gd	overdilute #150305 2.5mL
17	✓	17	-01A			2.0mL	38.5			1924	gd	Dil ~~NTC~~ Matrix 2.5mL gd 2/9/17

gd
Reviewed

2/6/17
Date

Eurofins Air Toxics Inc.

Data file : /var/chem/msd14.i/01dec16.b/14120101.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 01-DEC-2016 11:45
Operator : jg Inst ID: msd14.i
Smp Info : 2.0uL #2810-93; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msd14.i/01dec16.b/bfb20.m
Meth Date : 01-Dec-2016 11:57 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 2 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	
2.745	2.483	0.262	95	379392			100.00- 100.00	100.00
2.745	2.483	0.262	50	70954			8.00- 40.00	18.70
2.745	2.483	0.262	75	169962			30.00- 66.00	44.80
2.745	2.483	0.262	96	24364			5.00- 9.00	6.42
2.745	2.483	0.262	173	2518			0.00- 1.99	0.83
2.745	2.483	0.262	174	304938			50.01- 120.00	80.38
2.745	2.483	0.262	175	22576			4.00- 9.00	7.40
2.745	2.483	0.262	176	295530			93.00- 101.00	96.91
2.745	2.483	0.262	177	20360			5.00- 9.00	6.89

Data File: /chem/msd14.i/01dec16.b/14120101.d

Date : 01-DEC-2016 11:45

Client ID: BFB

Instrument: msd14.i

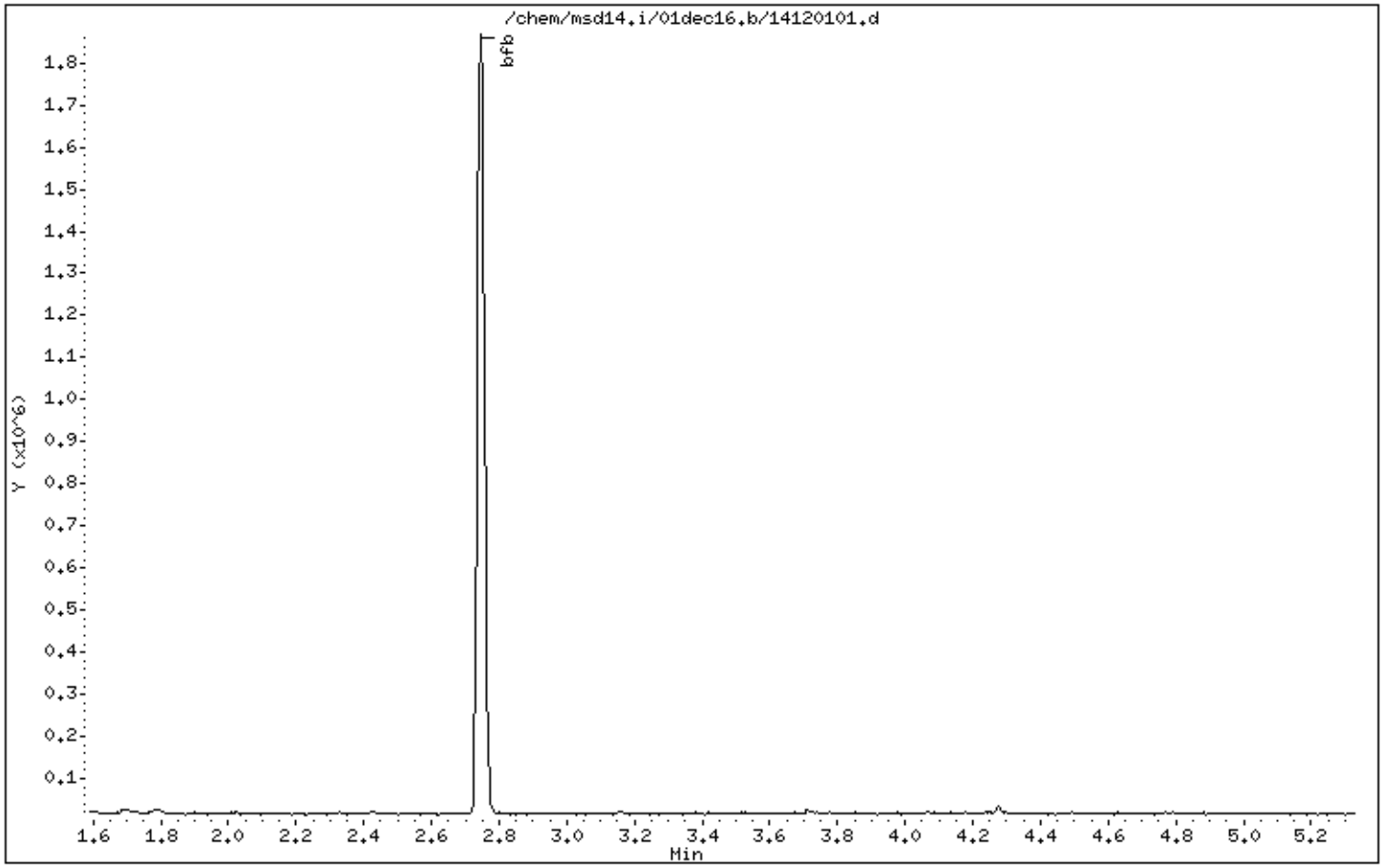
Sample Info: 2.0uL #2810-93; BFB; BFB

Volume Injected (uL): 1.0

Operator: jg

Column phase:

Column diameter: 2.00



Data File: /chem/msd14.i/01dec16.b/14120101.d

Date : 01-DEC-2016 11:45

Client ID: BFB

Instrument: msd14.i

Sample Info: 2.0uL #2810-93; BFB; BFB

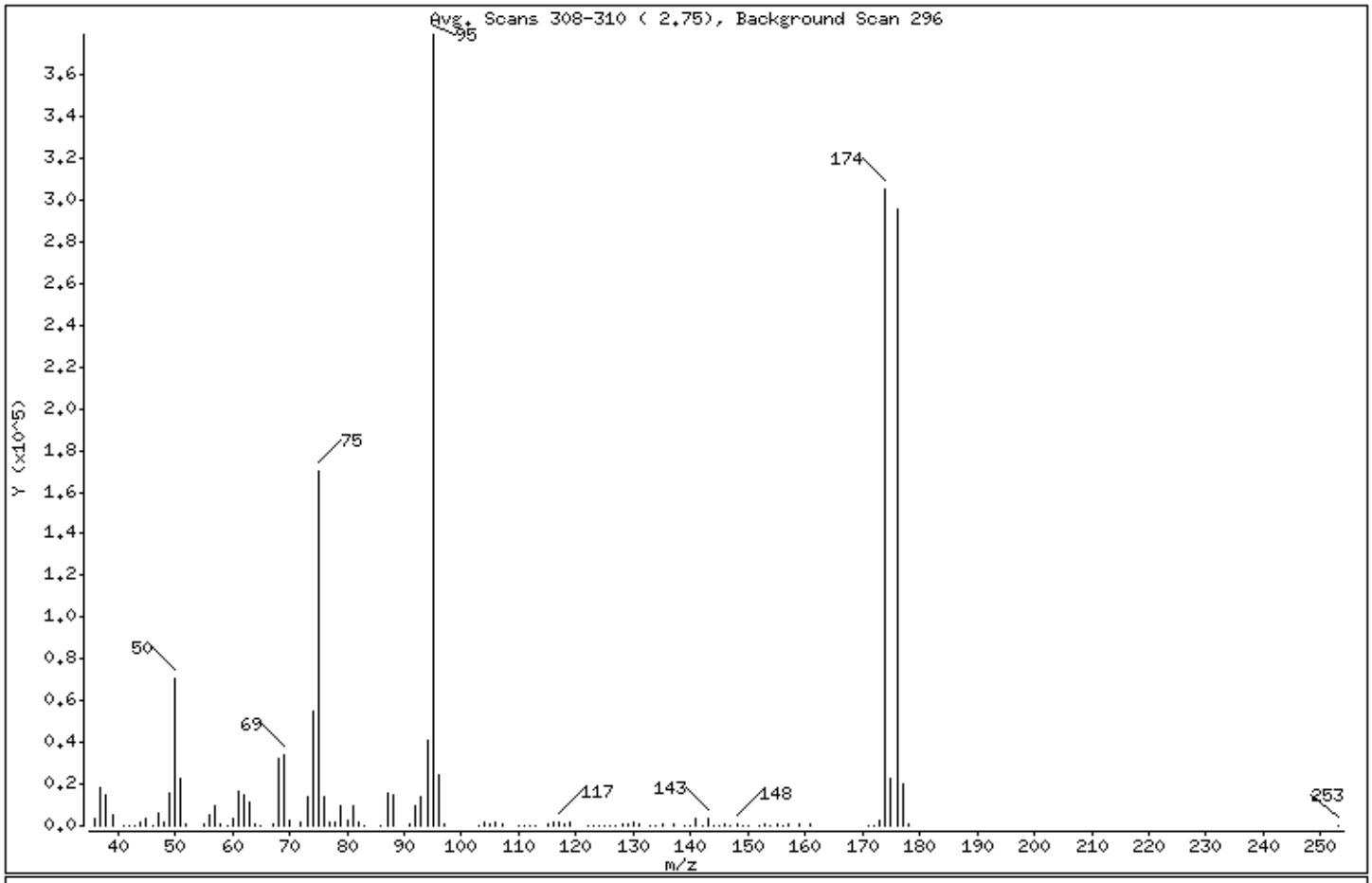
Volume Injected (uL): 1.0

Operator: jg

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	18.70
75	30.00 - 66.00% of mass 95	44.80
96	5.00 - 9.00% of mass 95	6.42
173	Less than 1.99% of mass 174	0.66 (0.83)
174	50.01 - 120.00% of mass 95	80.38
175	4.00 - 9.00% of mass 174	5.95 (7.40)
176	93.00 - 101.00% of mass 174	77.90 (96.91)
177	5.00 - 9.00% of mass 176	5.37 (6.89)

Data File: /chem/msd14.i/01dec16.b/14120101.d

Date : 01-DEC-2016 11:45

Client ID: BFB

Instrument: msd14.i

Sample Info: 2.0uL #2810-93; BFB; BFB

Volume Injected (uL): 1.0

Operator: jg

Column phase:

Column diameter: 2.00

Data File: 14120101.d
Spectrum: Avg. Scans 308-310 (2.75), Background Scan 296
Location of Maximum: 95.00
Number of points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3110	68.00	32368	106.00	1830	142.00	345
37.00	18152	69.00	33944	107.00	475	143.00	3546
38.00	15028	70.00	2550	110.00	174	144.00	313
39.00	5186	72.00	1782	111.00	322	145.00	321
41.00	28	73.00	13953	112.00	129	146.00	657
42.00	81	74.00	55336	113.00	220	147.00	166
43.00	37	75.00	169920	115.00	470	148.00	871
44.00	1499	76.00	13675	116.00	1512	149.00	227
45.00	3360	77.00	1869	117.00	2006	150.00	378
46.00	93	78.00	1673	118.00	1236	152.00	56
47.00	6133	79.00	9306	119.00	1848	153.00	442
48.00	2175	80.00	2552	122.00	118	154.00	250
49.00	15663	81.00	9269	123.00	55	155.00	824
50.00	70952	82.00	1886	124.00	247	156.00	259
51.00	22568	83.00	407	125.00	121	157.00	629
52.00	945	86.00	173	126.00	144	159.00	540
55.00	1066	87.00	15827	127.00	156	161.00	520
56.00	4995	88.00	15029	128.00	1257	171.00	124
57.00	9555	91.00	869	129.00	602	172.00	216
58.00	670	92.00	9806	130.00	1601	173.00	2518
59.00	68	93.00	13715	131.00	616	174.00	304896
60.00	3240	94.00	41368	133.00	69	175.00	22576
61.00	16353	95.00	379392	134.00	83	176.00	295488
62.00	14949	96.00	24360	135.00	719	177.00	20360
63.00	11335	97.00	787	137.00	640	178.00	509
64.00	1295	103.00	132	139.00	287	253.00	61
65.00	147	104.00	1568	140.00	361		
67.00	772	105.00	568	141.00	3540		

Eurofins Air Toxics Inc.

Data file : /var/chem/msd14.i/02dec16.b/14120201.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 02-DEC-2016 13:52
Operator : jg Inst ID: msd14.i
Smp Info : 2.0uL #2810-93; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msd14.i/02dec16.b/bfb20.m
Meth Date : 02-Dec-2016 14:05 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 2 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	
2.745	2.483	0.262	95	340629			100.00- 100.00	100.00
2.745	2.483	0.262	50	67701			8.00- 40.00	19.88
2.745	2.483	0.262	75	157184			30.00- 66.00	46.15
2.745	2.483	0.262	96	23218			5.00- 9.00	6.82
2.745	2.483	0.262	173	1796			0.00- 1.99	0.65
2.745	2.483	0.262	174	274602			50.01- 120.00	80.62
2.745	2.483	0.262	175	20586			4.00- 9.00	7.50
2.745	2.483	0.262	176	266901			93.00- 101.00	97.20
2.745	2.483	0.262	177	18474			5.00- 9.00	6.92

Data File: /var/chem/msd14.i/02dec16.b/14120201.d

Date : 02-DEC-2016 13:52

Client ID: BFB

Instrument: msd14.i

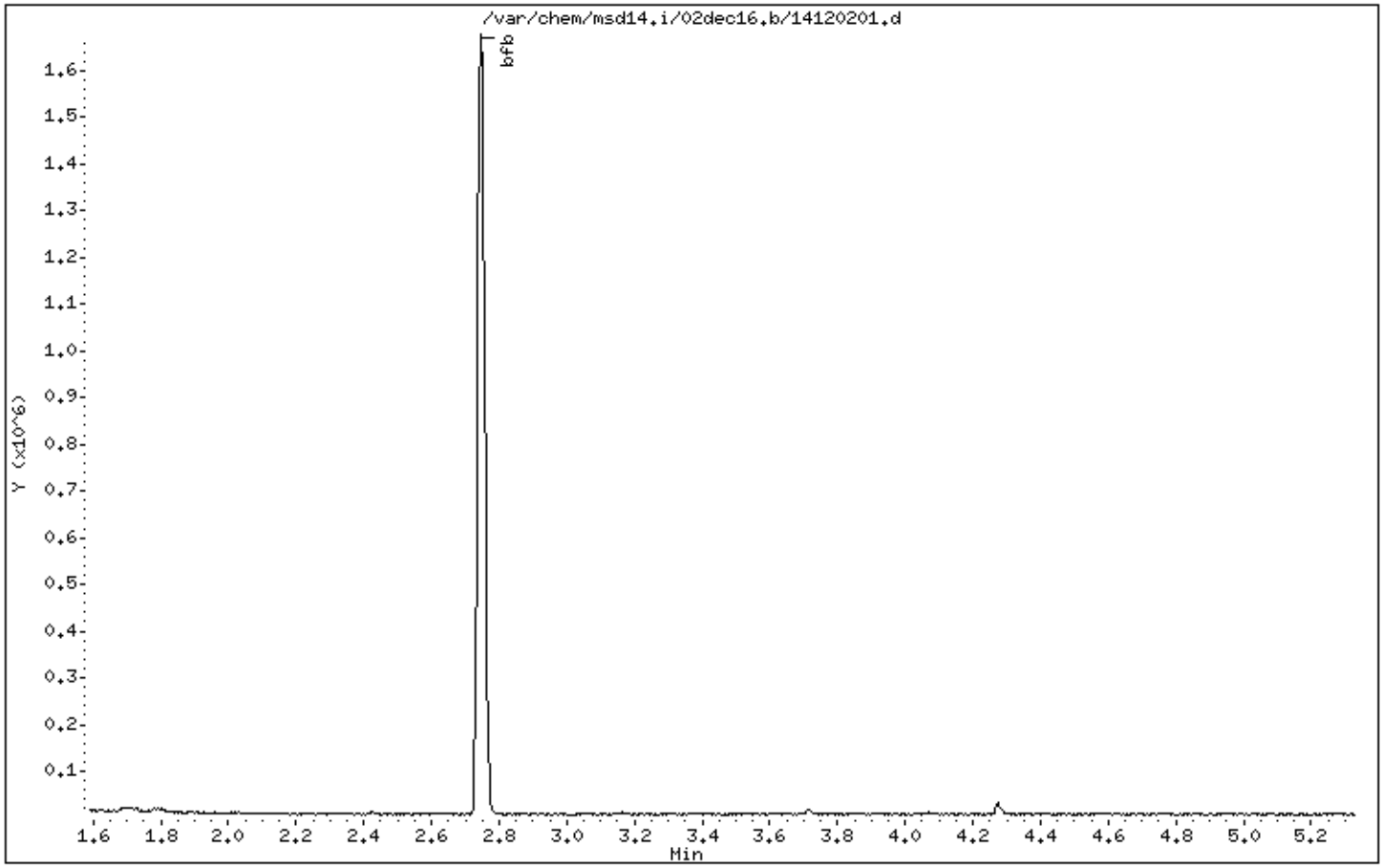
Sample Info: 2.0uL #2810-93; BFB; BFB

Volume Injected (uL): 1.0

Operator: jg

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd14.i/02dec16.b/14120201.d

Date : 02-DEC-2016 13:52

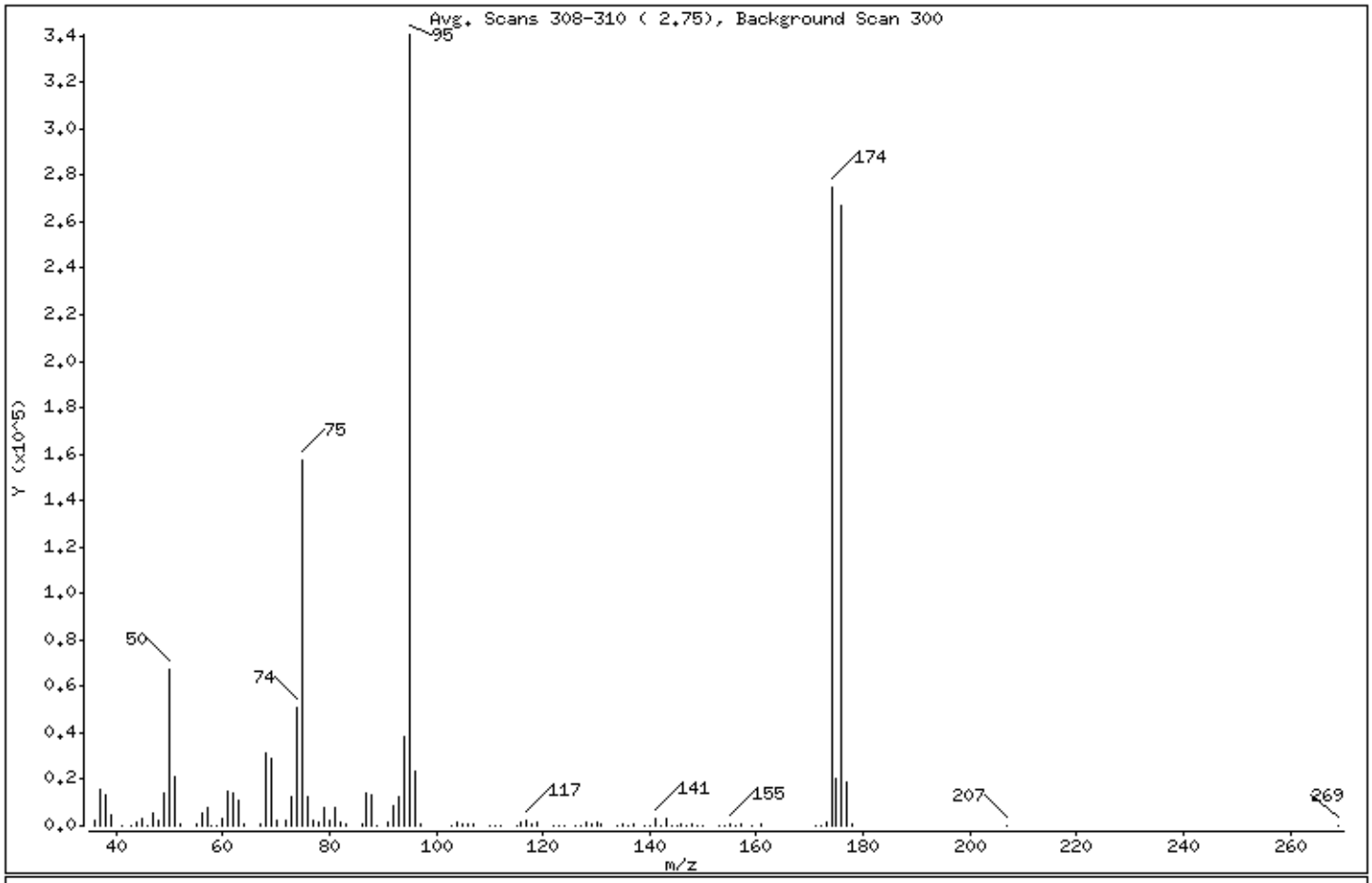
Client ID: BFB Instrument: msd14.i

Sample Info: 2.0uL #2810-93; BFB; BFB

Volume Injected (uL): 1.0 Operator: jg

Column phase: Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	19.88
75	30.00 - 66.00% of mass 95	46.15
96	5.00 - 9.00% of mass 95	6.82
173	Less than 1.99% of mass 174	0.53 (0.65)
174	50.01 - 120.00% of mass 95	80.62
175	4.00 - 9.00% of mass 174	6.04 (7.50)
176	93.00 - 101.00% of mass 174	78.36 (97.20)
177	5.00 - 9.00% of mass 176	5.42 (6.92)

Data File: /var/chem/msd14.i/02dec16.b/14120201.d

Date : 02-DEC-2016 13:52

Client ID: BFB

Instrument: msd14.i

Sample Info: 2.0uL #2810-93; BFB; BFB

Volume Injected (uL): 1.0

Operator: jg

Column phase:

Column diameter: 2.00

Data File: 14120201.d
Spectrum: Avg. Scans 308-310 (2.75), Background Scan 300
Location of Maximum: 95.00
Number of points: 107

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2731	69.00	28792	105.00	539	142.00	377
37.00	15273	70.00	2610	106.00	1041	143.00	3215
38.00	13657	72.00	2197	107.00	433	144.00	231
39.00	5040	73.00	12491	110.00	209	145.00	360
41.00	233	74.00	50512	111.00	316	146.00	526
43.00	70	75.00	157184	112.00	191	147.00	151
44.00	1567	76.00	12167	115.00	359	148.00	1055
45.00	3087	77.00	2136	116.00	1198	149.00	217
46.00	283	78.00	1328	117.00	2492	150.00	379
47.00	5468	79.00	7964	118.00	1001	153.00	183
48.00	2071	80.00	2197	119.00	1705	154.00	185
49.00	14005	81.00	7756	122.00	70	155.00	824
50.00	67696	82.00	1515	123.00	76	156.00	133
51.00	20896	83.00	449	124.00	53	157.00	623
52.00	852	86.00	461	126.00	221	159.00	376
55.00	646	87.00	14210	127.00	128	161.00	448
56.00	5155	88.00	13004	128.00	1246	171.00	179
57.00	7836	89.00	56	129.00	648	172.00	99
58.00	304	91.00	1474	130.00	1447	173.00	1796
59.00	52	92.00	8476	131.00	489	174.00	274560
60.00	3247	93.00	12886	134.00	53	175.00	20584
61.00	14777	94.00	38664	135.00	665	176.00	266880
62.00	14481	95.00	340608	136.00	112	177.00	18472
63.00	10924	96.00	23216	137.00	595	178.00	634
64.00	693	97.00	837	139.00	259	207.00	317
67.00	828	103.00	241	140.00	318	269.00	80
68.00	31272	104.00	1322	141.00	3421		

Eurofins Air Toxics Inc.

Data file : /var/chem/msd14.i/19dec16.b/14121901.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 19-DEC-2016 07:56
Operator : jg Inst ID: msd14.i
Smp Info : 2.0uL #2810-93; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msd14.i/19dec16.b/bfb20.m
Meth Date : 19-Dec-2016 08:08 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

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

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

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
2.741	2.483	0.258	95	261290			100.00- 100.00	100.00
2.741	2.483	0.258	50	52802			8.00- 40.00	20.21
2.741	2.483	0.258	75	118845			30.00- 66.00	45.48
2.741	2.483	0.258	96	17384			5.00- 9.00	6.65
2.741	2.483	0.258	173	1139			0.00- 1.99	0.51
2.741	2.483	0.258	174	221418			50.01- 120.00	84.74
2.741	2.483	0.258	175	16335			4.00- 9.00	7.38
2.741	2.483	0.258	176	211584			93.00- 101.00	95.56
2.741	2.483	0.258	177	14443			5.00- 9.00	6.83

Data File: /chem/msd14.i/19dec16.b/14121901.d

Date : 19-DEC-2016 07:56

Client ID: BFB

Instrument: msd14.i

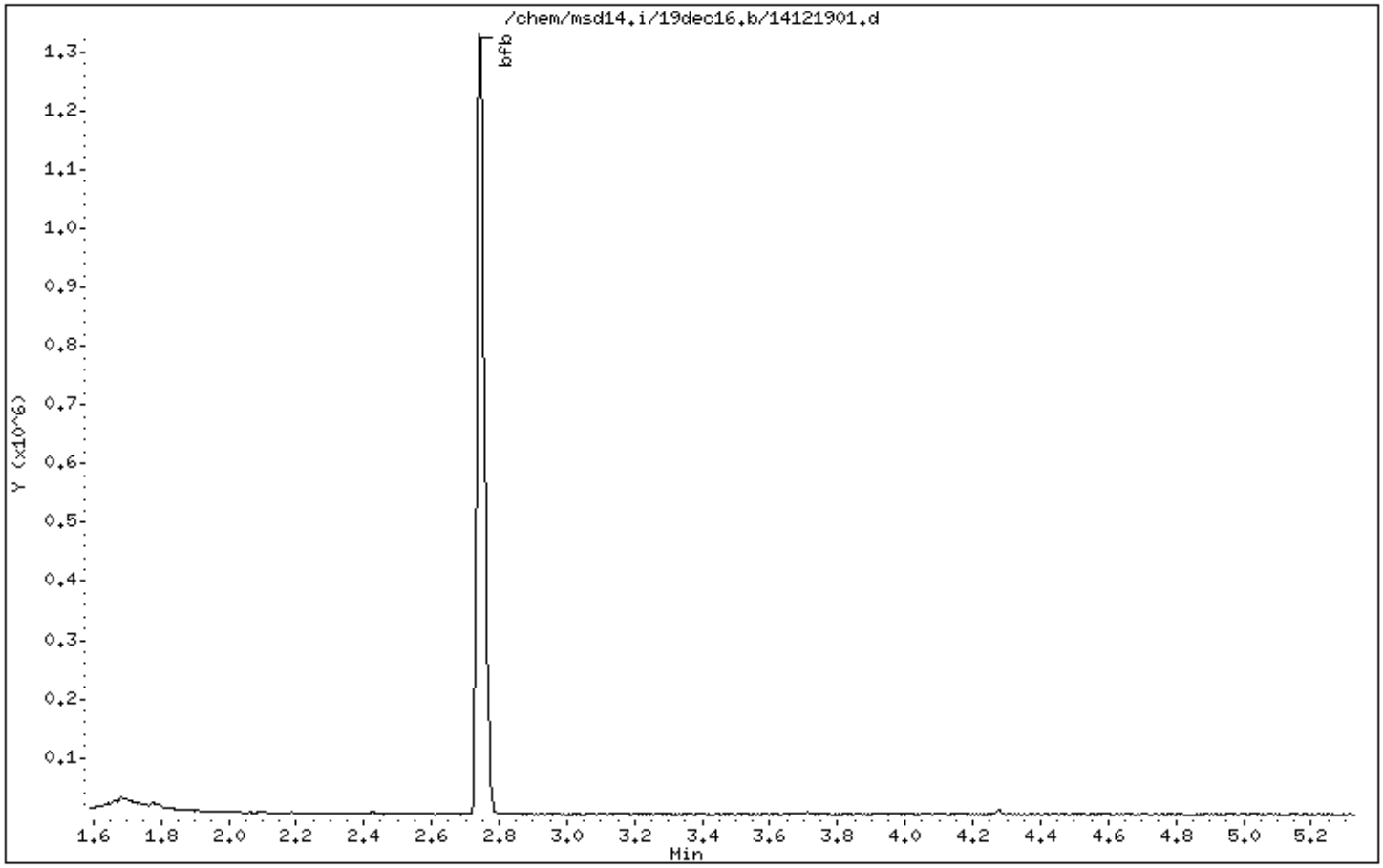
Sample Info: 2.0uL #2810-93; BFB; BFB

Volume Injected (uL): 1.0

Operator: jg

Column phase:

Column diameter: 2.00



Data File: /chem/msd14.i/19dec16.b/14121901.d

Date : 19-DEC-2016 07:56

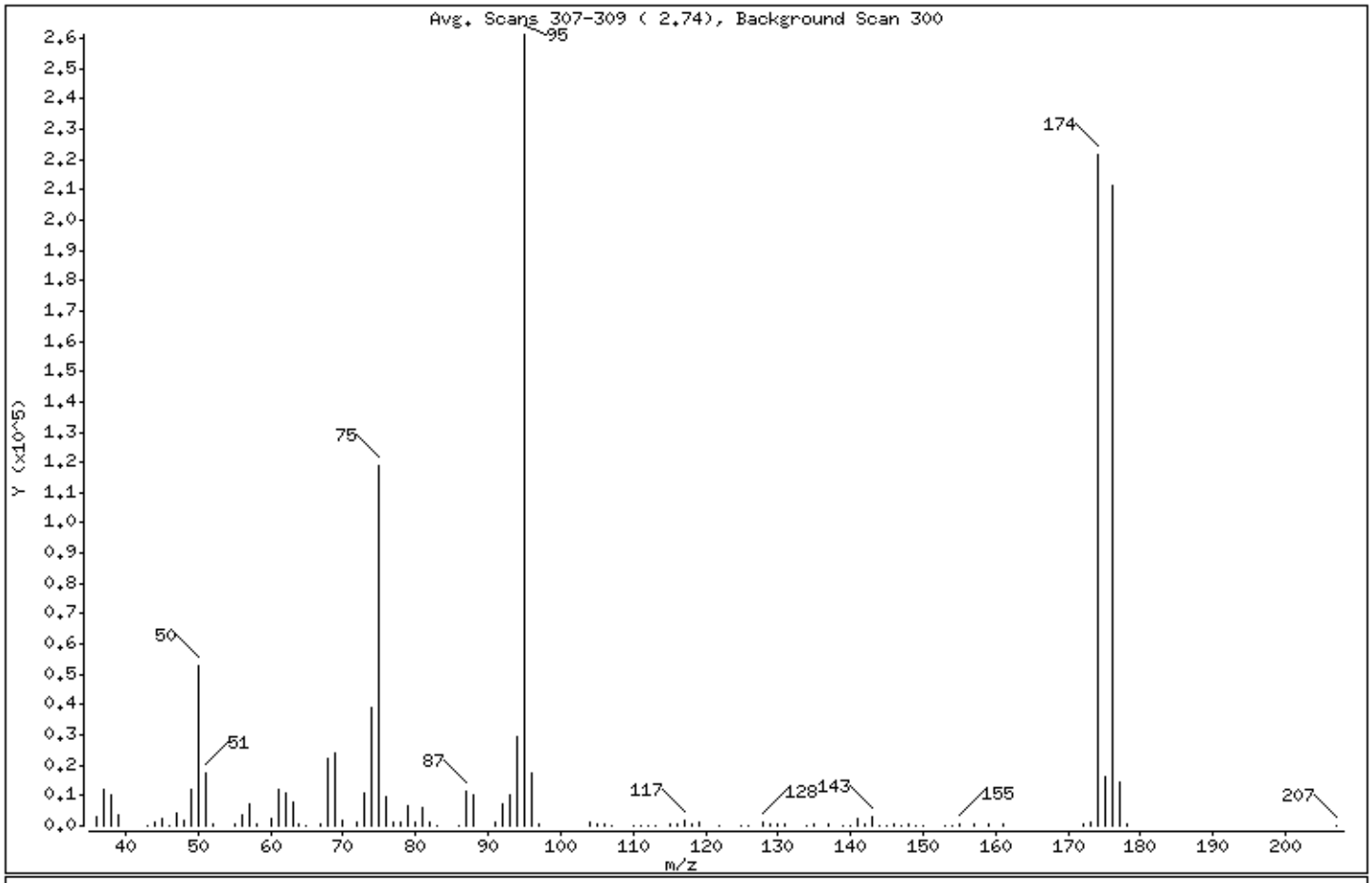
Client ID: BFB Instrument: msd14.i

Sample Info: 2.0uL #2810-93; BFB; BFB

Volume Injected (uL): 1.0 Operator: jg

Column phase: Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	20.21
75	30.00 - 66.00% of mass 95	45.48
96	5.00 - 9.00% of mass 95	6.65
173	Less than 1.99% of mass 174	0.44 (0.51)
174	50.01 - 120.00% of mass 95	84.74
175	4.00 - 9.00% of mass 174	6.25 (7.38)
176	93.00 - 101.00% of mass 174	80.98 (95.56)
177	5.00 - 9.00% of mass 176	5.53 (6.83)

Data File: /chem/msd14.i/19dec16.b/14121901.d

Date : 19-DEC-2016 07:56

Client ID: BFB

Instrument: msd14.i

Sample Info: 2.0uL #2810-93; BFB; BFB

Volume Injected (uL): 1.0

Operator: jg

Column phase:

Column diameter: 2.00

Data File: 14121901.d
Spectrum: Avg. Scans 307-309 (2.74), Background Scan 300
Location of Maximum: 95.00
Number of points: 99

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2709	68.00	22192	104.00	1196	141.00	2680
37.00	12057	69.00	24232	105.00	378	142.00	309
38.00	10503	70.00	1916	106.00	695	143.00	2728
39.00	3838	72.00	1434	107.00	191	144.00	142
43.00	80	73.00	10655	110.00	55	145.00	266
44.00	995	74.00	38840	111.00	245	146.00	577
45.00	2469	75.00	118840	112.00	76	147.00	255
46.00	90	76.00	9556	113.00	128	148.00	884
47.00	4488	77.00	1245	115.00	352	149.00	221
48.00	1572	78.00	1200	116.00	888	150.00	171
49.00	11866	79.00	6318	117.00	1692	153.00	145
50.00	52800	80.00	1464	118.00	788	154.00	209
51.00	17488	81.00	5994	119.00	1318	155.00	507
52.00	621	82.00	1078	122.00	70	157.00	504
55.00	722	83.00	128	125.00	70	159.00	404
56.00	3869	86.00	79	126.00	59	161.00	426
57.00	7248	87.00	11168	128.00	1271	172.00	426
58.00	371	88.00	10126	129.00	365	173.00	1139
60.00	2162	91.00	1029	130.00	872	174.00	221376
61.00	11712	92.00	7126	131.00	527	175.00	16335
62.00	10534	93.00	10282	134.00	64	176.00	211584
63.00	7723	94.00	29552	135.00	469	177.00	14443
64.00	742	95.00	261248	137.00	501	178.00	433
65.00	188	96.00	17384	139.00	65	207.00	159
67.00	693	97.00	618	140.00	165		

Eurofins Air Toxics Inc.

Data file : /var/chem/msda.i/16jan17.b/a011601.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 16-JAN-2017 12:22
Operator : gd Inst ID: msda.i
Smp Info : 50ml 2819-206;BFB;BFB
Misc Info : 36ng
Comment :
Method : /var/chem/msda.i/16jan17.b/bfb60.m
Meth Date : 16-Jan-2017 12:45 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 5 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

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

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

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.739	9.862	-0.123	95	304272			100.00- 100.00	100.00
9.739	9.862	-0.123	50	59068			8.00- 40.00	19.41
9.739	9.862	-0.123	75	134352			30.00- 66.00	44.16
9.739	9.862	-0.123	96	20071			5.00- 9.00	6.60
9.739	9.862	-0.123	173	554			0.00- 1.99	0.22
9.739	9.862	-0.123	174	252266			50.01- 120.00	82.91
9.739	9.862	-0.123	175	19741			4.00- 9.00	7.83
9.739	9.862	-0.123	176	245379			93.01- 100.99	97.27
9.739	9.862	-0.123	177	15467			5.00- 9.00	6.30

Data File: /var/chem/msda.i/16jan17.b/a011601.d

Date : 16-JAN-2017 12:22

Client ID: BFB

Instrument: msda.i

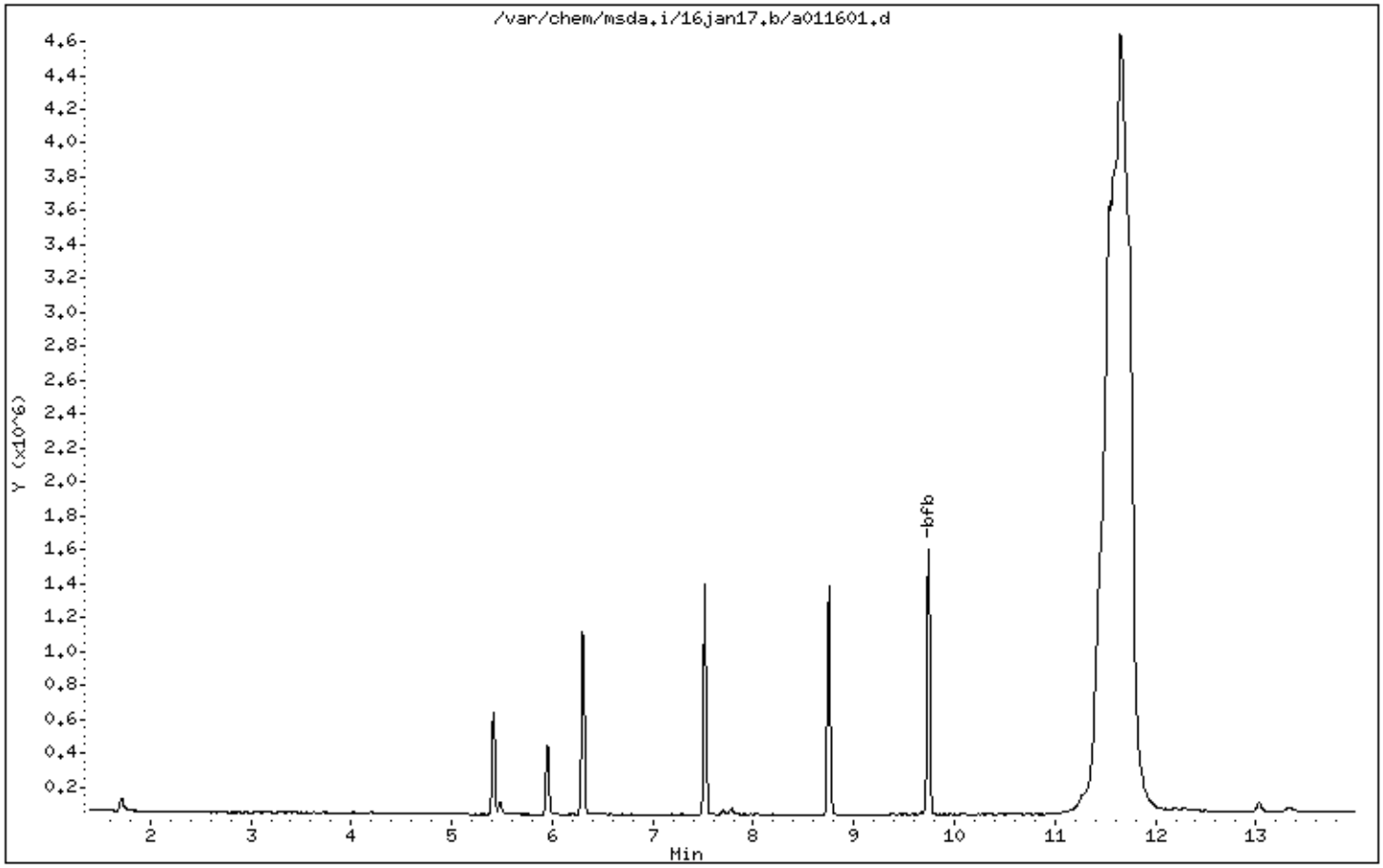
Sample Info: 50ml 2819-206;BFB;BFB

Volume Injected (uL): 1.0

Operator: gd

Column phase:

Column diameter: 2.00



Data File: /var/chem/msda.i/16jan17.b/a011601.d

Date : 16-JAN-2017 12:22

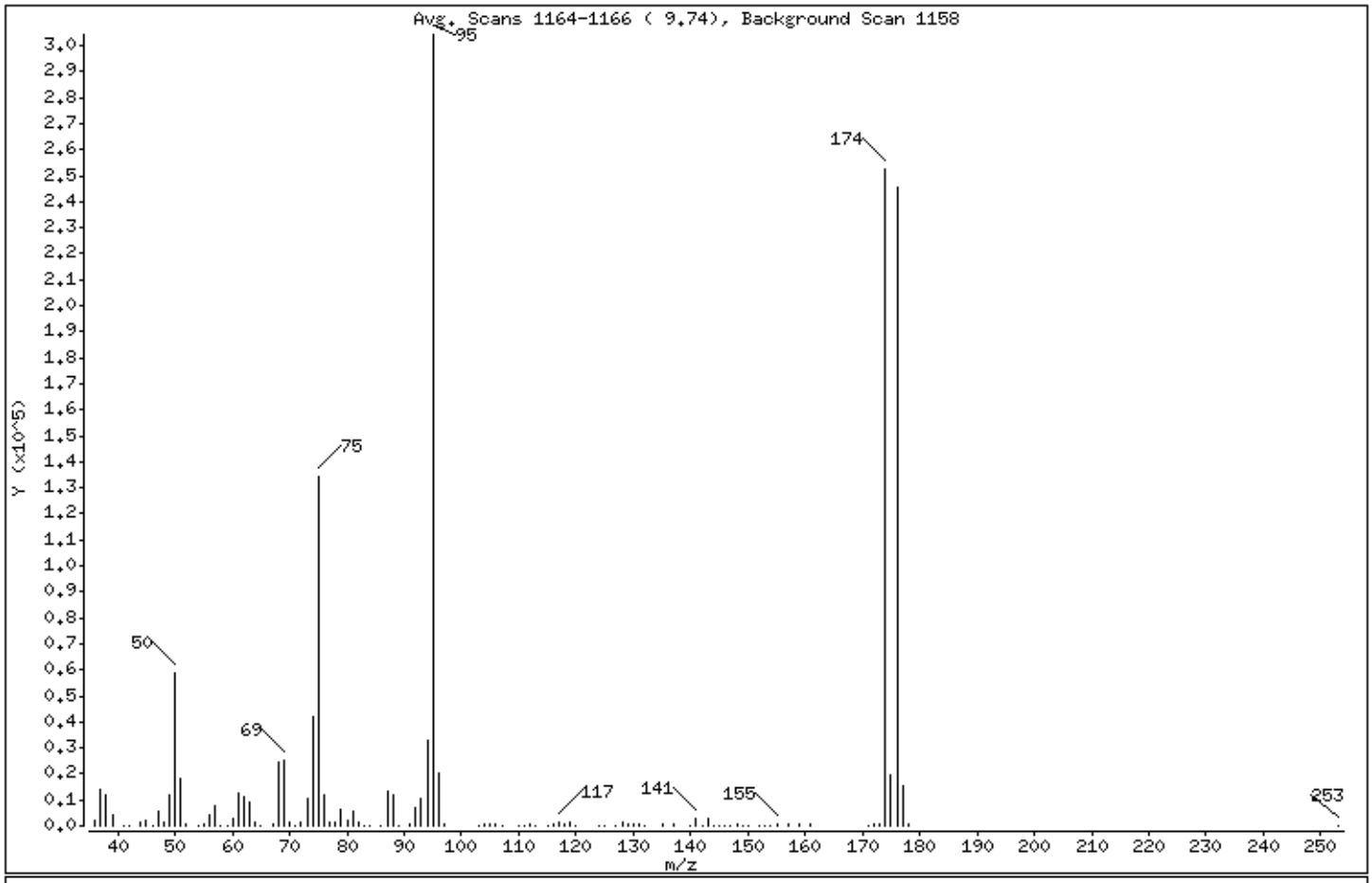
Client ID: BFB Instrument: msda.i

Sample Info: 50ml 2819-206;BFB;BFB

Volume Injected (uL): 1.0 Operator: gd

Column phase: Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	19.41
75	30.00 - 66.00% of mass 95	44.16
96	5.00 - 9.00% of mass 95	6.60
173	Less than 1.99% of mass 174	0.18 (0.22)
174	50.01 - 120.00% of mass 95	82.91
175	4.00 - 9.00% of mass 174	6.49 (7.83)
176	93.01 - 100.99% of mass 174	80.64 (97.27)
177	5.00 - 9.00% of mass 176	5.08 (6.30)

Data File: /var/chem/msda.i/16jan17.b/a011601.d

Date : 16-JAN-2017 12:22

Client ID: BFB

Instrument: msda.i

Sample Info: 50ml 2819-206;BFB;BFB

Volume Injected (uL): 1.0

Operator: gd

Column phase:

Column diameter: 2.00

Data File: a011601.d
Spectrum: Avg. Scans 1164-1166 (9.74), Background Scan 1158
Location of Maximum: 95.00
Number of points: 108

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2211	68.00	24224	103.00	292	143.00	2683
37.00	13845	69.00	25080	104.00	1020	144.00	250
38.00	11687	70.00	1667	105.00	432	145.00	298
39.00	4445	71.00	317	106.00	986	146.00	315
41.00	76	72.00	1124	107.00	245	147.00	231
42.00	266	73.00	10226	110.00	299	148.00	705
44.00	1478	74.00	42024	111.00	142	149.00	279
45.00	2216	75.00	134336	112.00	446	150.00	238
46.00	298	76.00	11881	113.00	326	152.00	108
47.00	5260	77.00	1522	115.00	287	153.00	286
48.00	1493	78.00	1058	116.00	756	154.00	246
49.00	11854	79.00	6154	117.00	1565	155.00	835
50.00	59064	80.00	1880	118.00	954	157.00	632
51.00	18408	81.00	5871	119.00	1174	159.00	410
52.00	715	82.00	1392	120.00	110	161.00	620
54.00	124	83.00	203	124.00	206	171.00	51
55.00	958	84.00	88	125.00	247	172.00	365
56.00	3944	86.00	268	127.00	145	173.00	554
57.00	7361	87.00	13189	128.00	1187	174.00	252224
58.00	238	88.00	12034	129.00	674	175.00	19736
59.00	53	89.00	75	130.00	883	176.00	245376
60.00	3144	91.00	761	131.00	527	177.00	15467
61.00	12699	92.00	7322	132.00	74	178.00	464
62.00	11075	93.00	10800	135.00	466	253.00	182
63.00	9134	94.00	32880	137.00	481		
64.00	1064	95.00	304256	140.00	122		
65.00	52	96.00	20064	141.00	2795		
67.00	702	97.00	487	142.00	315		

Eurofins Air Toxics Inc.

Data file : /chem/msda.i/02feb17.b/a020201.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 02-FEB-2017 08:54
Operator : jg Inst ID: msda.i
Smp Info : 50ml 2819-206;BFB;BFB
Misc Info : 36ng
Comment :
Method : /var/chem/msda.i/02feb17.b/bfb60.m
Meth Date : 02-Feb-2017 09:17 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

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

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

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.739	9.862	-0.123	95	245504			100.00- 100.00	100.00
9.739	9.862	-0.123	50	50312			8.00- 40.00	20.49
9.739	9.862	-0.123	75	109720			30.00- 66.00	44.69
9.739	9.862	-0.123	96	15390			5.00- 9.00	6.27
9.739	9.862	-0.123	173	1870			0.00- 1.99	1.03
9.739	9.862	-0.123	174	180864			50.01- 120.00	73.67
9.739	9.862	-0.123	175	12957			4.00- 9.00	7.16
9.739	9.862	-0.123	176	181568			93.01- 100.99	100.39
9.739	9.862	-0.123	177	11093			5.00- 9.00	6.11

Data File: /chem/msda.i/02feb17.b/a020201.d

Date : 02-FEB-2017 08:54

Client ID: BFB

Instrument: msda.i

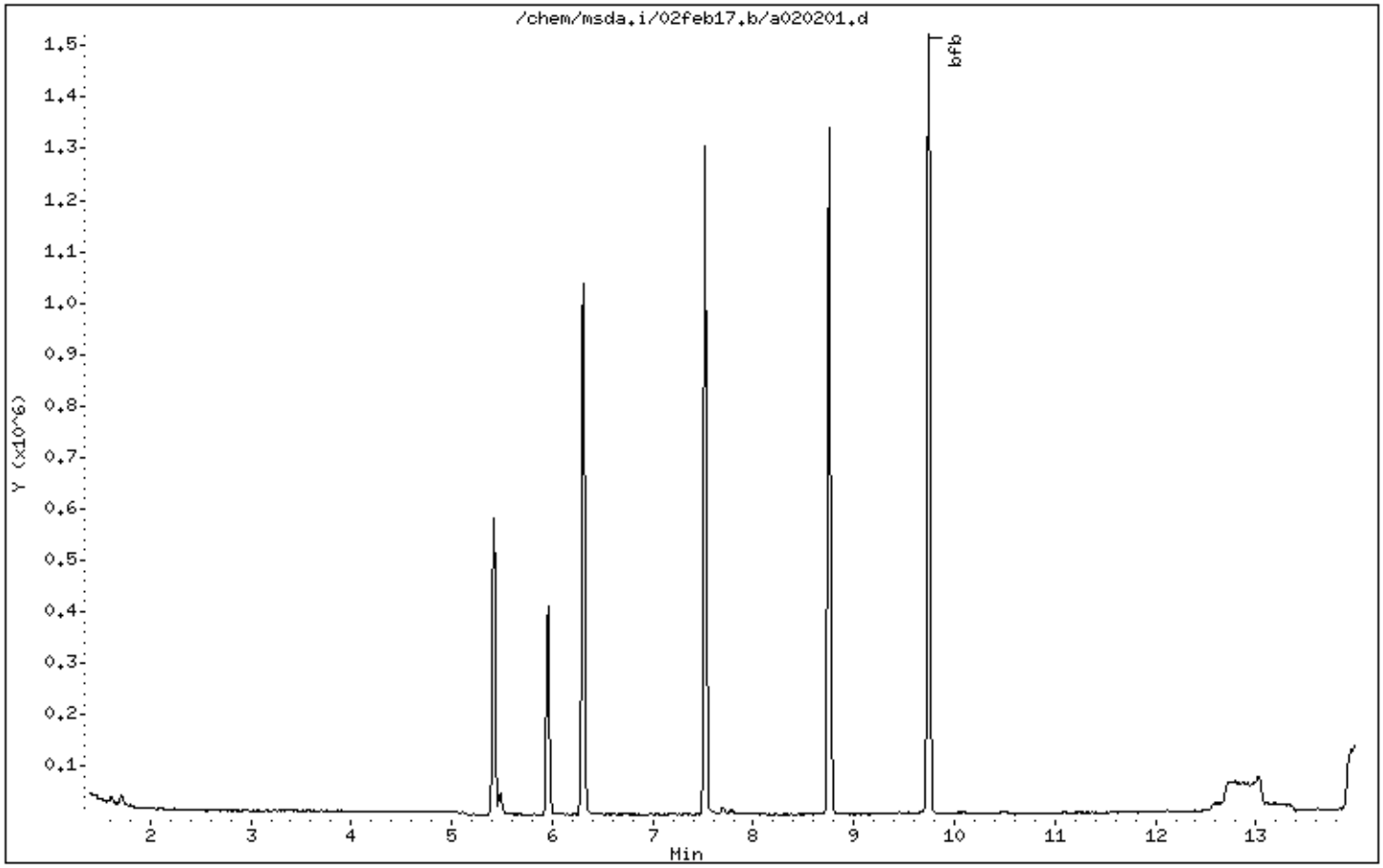
Sample Info: 50ml 2819-206;BFB;BFB

Volume Injected (uL): 1.0

Operator: jg

Column phase:

Column diameter: 2.00



Data File: /chem/msda.i/02feb17.b/a020201.d

Date : 02-FEB-2017 08:54

Client ID: BFB

Instrument: msda.i

Sample Info: 50ml 2819-206;BFB;BFB

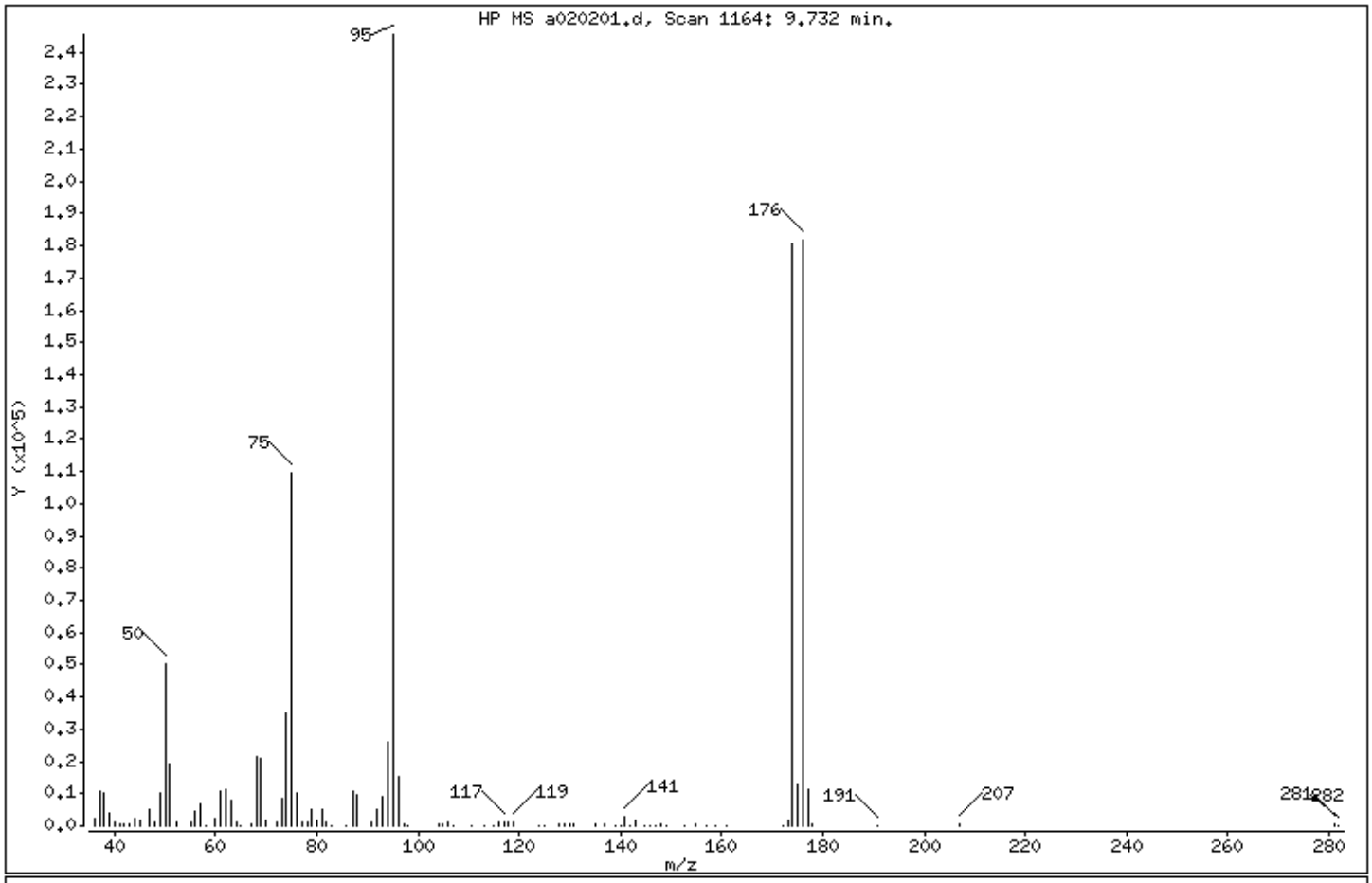
Volume Injected (uL): 1.0

Operator: jg

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	20.49
75	30.00 - 66.00% of mass 95	44.69
96	5.00 - 9.00% of mass 95	6.27
173	Less than 1.99% of mass 174	0.76 (1.03)
174	50.01 - 120.00% of mass 95	73.67
175	4.00 - 9.00% of mass 174	5.28 (7.16)
176	93.01 - 100.99% of mass 174	73.96 (100.39)
177	5.00 - 9.00% of mass 176	4.52 (6.11)

Data File: /chem/msda.i/02feb17.b/a020201.d

Date : 02-FEB-2017 08:54

Client ID: BFB

Instrument: msda.i

Sample Info: 50ml 2819-206;BFB;BFB

Volume Injected (uL): 1.0

Operator: jg

Column phase:

Column diameter: 2.00

Data File: a020201.d
Spectrum: HP MS a020201.d, Scan 1164: 9.732 min.
Location of Maximum: 95.00
Number of points: 98

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2027	65.00	164	96.00	15390	141.70	153
37.00	10856	66.90	749	97.10	561	142.90	1763
38.00	9959	68.00	21336	98.10	184	144.80	195
39.00	4047	69.00	21104	104.00	667	145.90	278
39.90	1401	70.00	1838	104.90	493	146.80	248
41.00	805	72.00	1143	106.00	850	147.90	560
42.00	410	73.00	8533	107.10	238	149.00	205
43.00	663	74.00	34904	110.70	207	152.80	168
44.00	2510	75.00	109720	113.00	228	154.90	545
45.00	1963	76.00	10265	114.90	246	156.90	280
47.00	4939	77.10	1198	116.00	848	158.90	252
48.00	1401	78.00	957	117.00	1132	160.80	199
49.00	10016	78.90	4887	117.90	979	172.00	238
50.00	50312	80.00	1712	118.80	1103	173.10	1870
51.00	19040	80.90	5285	123.90	233	174.00	180864
52.10	925	81.90	1247	125.00	157	175.00	12957
55.00	1293	83.00	270	127.90	676	175.90	181568
56.00	4372	85.90	270	128.90	386	177.00	11093
57.00	6744	87.00	10705	129.90	654	177.90	330
58.20	268	88.00	9867	130.80	408	190.80	155
60.00	2223	90.90	913	134.90	399	207.00	446
61.00	10711	92.00	5170	137.00	409	281.10	642
62.00	11119	93.00	9198	139.10	163	281.90	175
63.00	8103	94.00	26232	139.90	180		
64.00	1026	95.00	245504	140.90	2579		

Eurofins Air Toxics Inc.

Data file : /var/chem/msda.i/03feb17.b/a020301.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 03-FEB-2017 09:43
Operator : jg Inst ID: msda.i
Smp Info : 50ml 2819-206;BFB;BFB
Misc Info : 36ng
Comment :
Method : /var/chem/msda.i/03feb17.b/bfb60.m
Meth Date : 03-Feb-2017 10:06 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		
9.746	9.862	-0.116	95	271338			100.00- 100.00	100.00
9.746	9.862	-0.116	50	57501			8.00- 40.00	21.19
9.746	9.862	-0.116	75	121885			30.00- 66.00	44.92
9.746	9.862	-0.116	96	17869			5.00- 9.00	6.59
9.746	9.862	-0.116	173	1796			0.00- 1.99	0.78
9.746	9.862	-0.116	174	230058			50.01- 120.00	84.79
9.746	9.862	-0.116	175	17498			4.00- 9.00	7.61
9.746	9.862	-0.116	176	228757			93.01- 100.99	99.43
9.746	9.862	-0.116	177	14018			5.00- 9.00	6.13

Data File: /chem/msda.i/03feb17.b/a020301.d

Date : 03-FEB-2017 09:43

Client ID: BFB

Instrument: msda.i

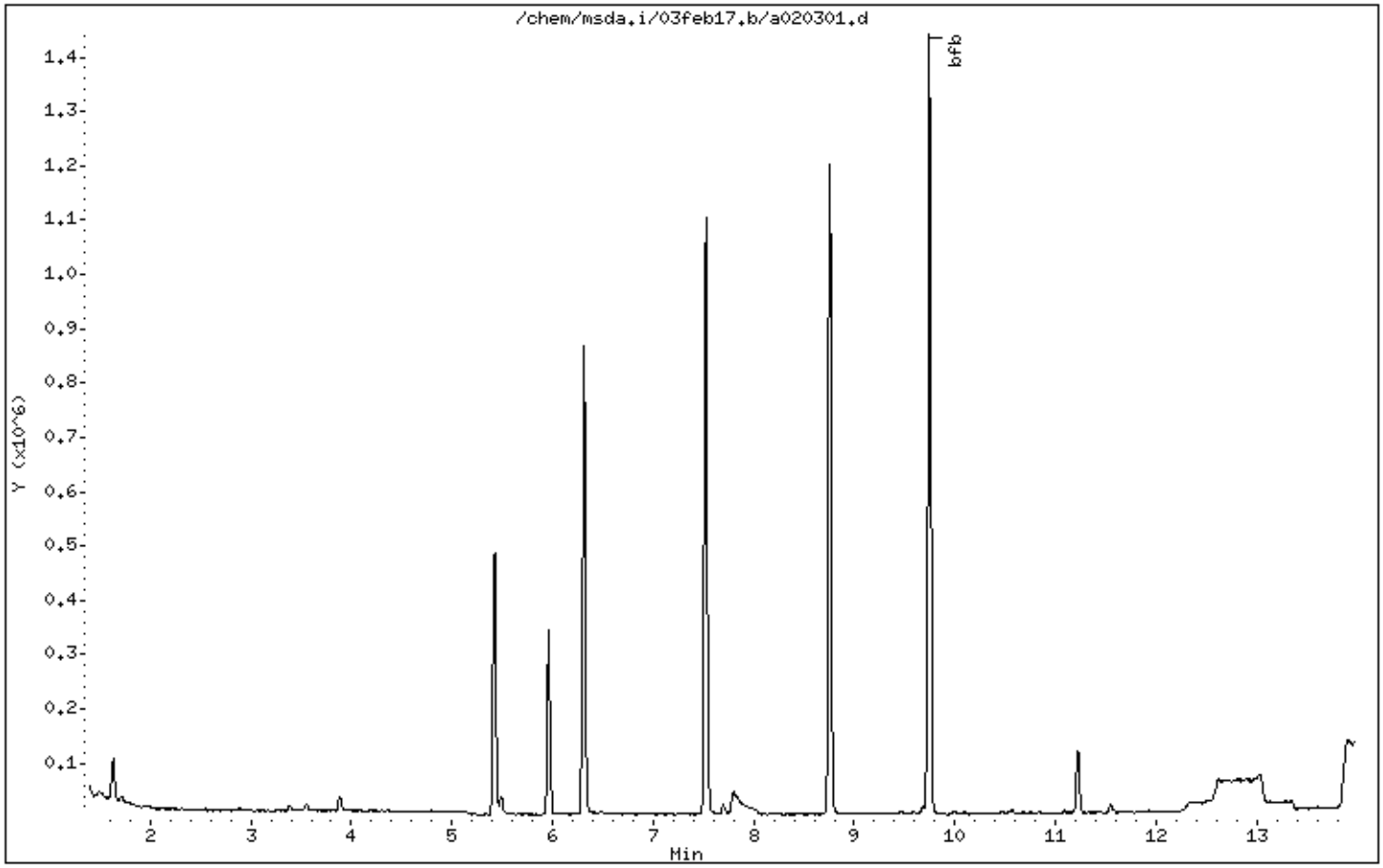
Sample Info: 50ml 2819-206;BFB;BFB

Volume Injected (uL): 1.0

Operator: jg

Column phase:

Column diameter: 2.00



Data File: /chem/msda.i/03feb17.b/a020301.d

Date : 03-FEB-2017 09:43

Client ID: BFB

Instrument: msda.i

Sample Info: 50ml 2819-206;BFB;BFB

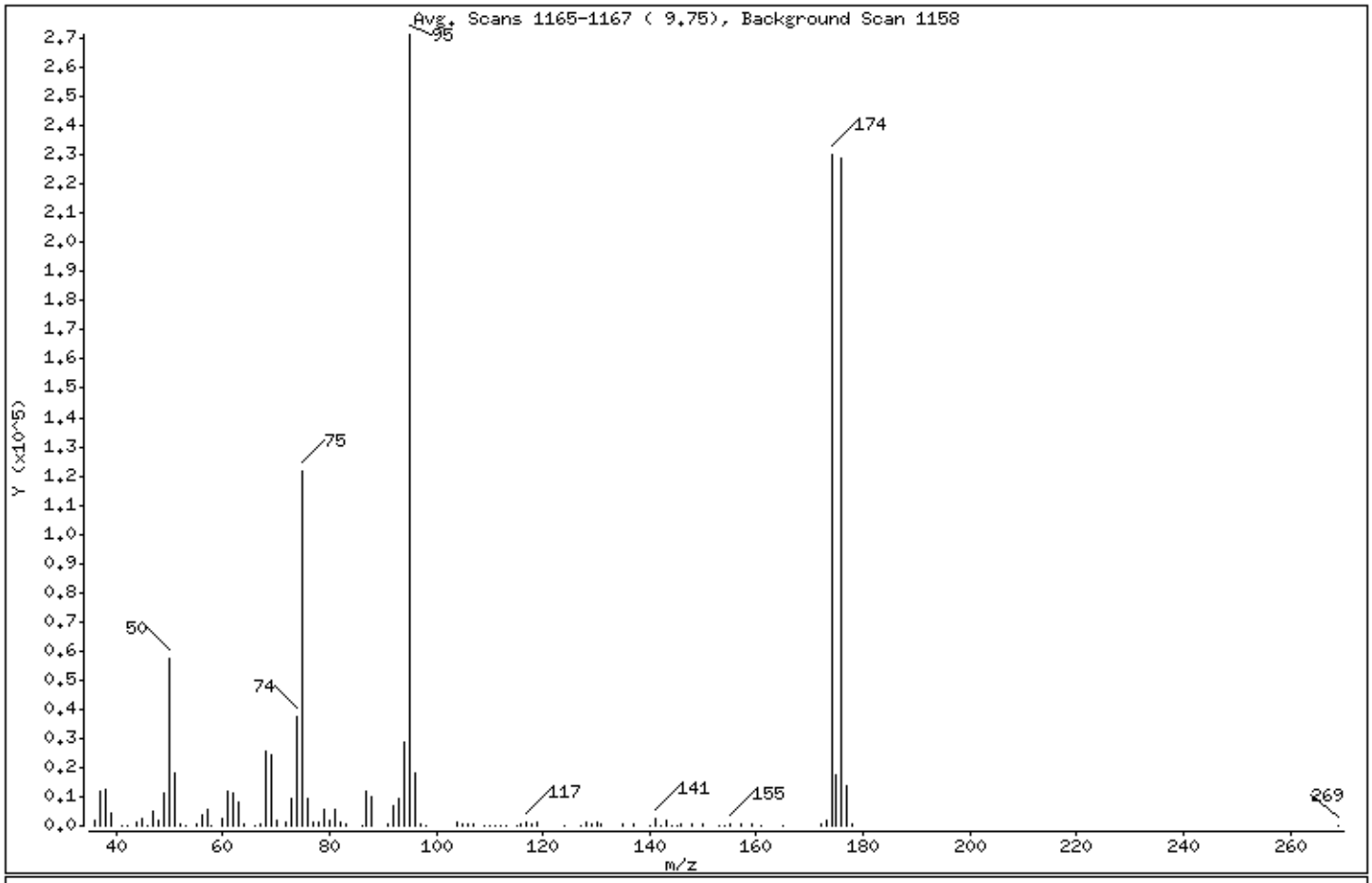
Volume Injected (uL): 1.0

Operator: jg

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	21.19
75	30.00 - 66.00% of mass 95	44.92
96	5.00 - 9.00% of mass 95	6.59
173	Less than 1.99% of mass 174	0.66 (0.78)
174	50.01 - 120.00% of mass 95	84.79
175	4.00 - 9.00% of mass 174	6.45 (7.61)
176	93.01 - 100.99% of mass 174	84.31 (99.43)
177	5.00 - 9.00% of mass 176	5.17 (6.13)

Data File: /chem/msda.i/03feb17.b/a020301.d

Date : 03-FEB-2017 09:43

Client ID: BFB

Instrument: msda.i

Sample Info: 50ml 2819-206;BFB;BFB

Volume Injected (uL): 1.0

Operator: jg

Column phase:

Column diameter: 2.00

Data File: a020301.d
Spectrum: Avg. Scans 1165-1167 (9.75), Background Scan 1158
Location of Maximum: 95.00
Number of points: 99

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1941	66.00	58	96.00	17864	140.00	223
37.00	11879	67.00	850	97.00	744	141.00	2342
38.00	12163	68.00	25296	98.00	152	142.00	264
39.00	4162	69.00	24040	104.00	1144	143.00	2071
41.00	41	70.00	1845	105.00	427	144.00	295
42.00	34	72.00	1093	106.00	909	145.00	273
44.00	1048	73.00	9267	107.00	337	146.00	349
45.00	2359	74.00	37712	109.00	50	148.00	524
46.00	198	75.00	121880	110.00	72	150.00	322
47.00	5066	76.00	9091	111.00	130	153.00	239
48.00	1600	77.00	1238	112.00	113	154.00	227
49.00	11225	78.00	1163	113.00	245	155.00	506
50.00	57496	79.00	5350	115.00	118	157.00	496
51.00	18024	80.00	1613	116.00	777	159.00	443
52.00	730	81.00	5531	117.00	1392	161.00	106
53.00	171	82.00	1173	118.00	827	165.00	111
55.00	764	83.00	332	119.00	1144	172.00	434
56.00	3544	86.00	145	124.00	229	173.00	1796
57.00	5848	87.00	11877	127.00	228	174.00	230016
58.00	291	88.00	10171	128.00	1033	175.00	17496
60.00	2220	91.00	836	129.00	435	176.00	228736
61.00	11856	92.00	6844	130.00	1011	177.00	14018
62.00	11020	93.00	9357	131.00	456	178.00	626
63.00	8360	94.00	28776	135.00	335	269.00	55
64.00	764	95.00	271296	137.00	662		

Eurofins Air Toxics Inc.

Data file : /var/chem/msd14.i/06feb17.b/14020601.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 06-FEB-2017 08:59
Operator : gd Inst ID: msd14.i
Smp Info : 2.0uL #2810-93; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msd14.i/06feb17.b/bfb20.m
Meth Date : 06-Feb-2017 09:11 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	
2.719	2.483	0.236	95	125752			100.00- 100.00	100.00
2.719	2.483	0.236	50	23981			8.00- 40.00	19.07
2.719	2.483	0.236	75	57920			30.00- 66.00	46.06
2.719	2.483	0.236	96	9084			5.00- 9.00	7.22
2.719	2.483	0.236	173	592			0.00- 1.99	0.55
2.719	2.483	0.236	174	107437			50.01- 120.00	85.44
2.719	2.483	0.236	175	8127			4.00- 9.00	7.56
2.719	2.483	0.236	176	108053			93.00- 101.00	100.57
2.719	2.483	0.236	177	7542			5.00- 9.00	6.98

Data File: /var/chem/msd14.i/06feb17.b/14020601.d

Date : 06-FEB-2017 08:59

Client ID: BFB

Instrument: msd14.i

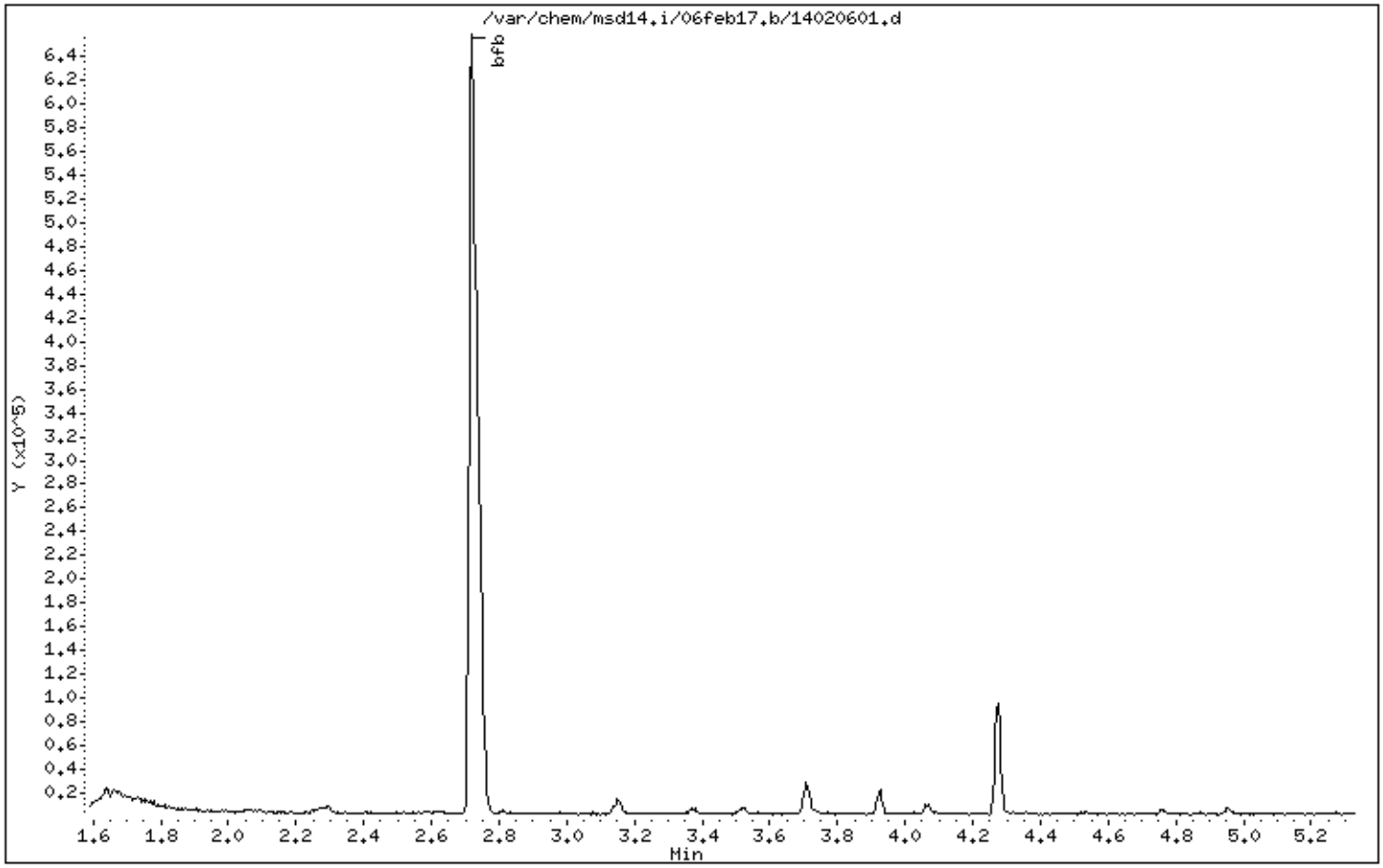
Sample Info: 2.0uL #2810-93; BFB; BFB

Volume Injected (uL): 1.0

Operator: gd

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd14.i/06feb17.b/14020601.d

Date : 06-FEB-2017 08:59

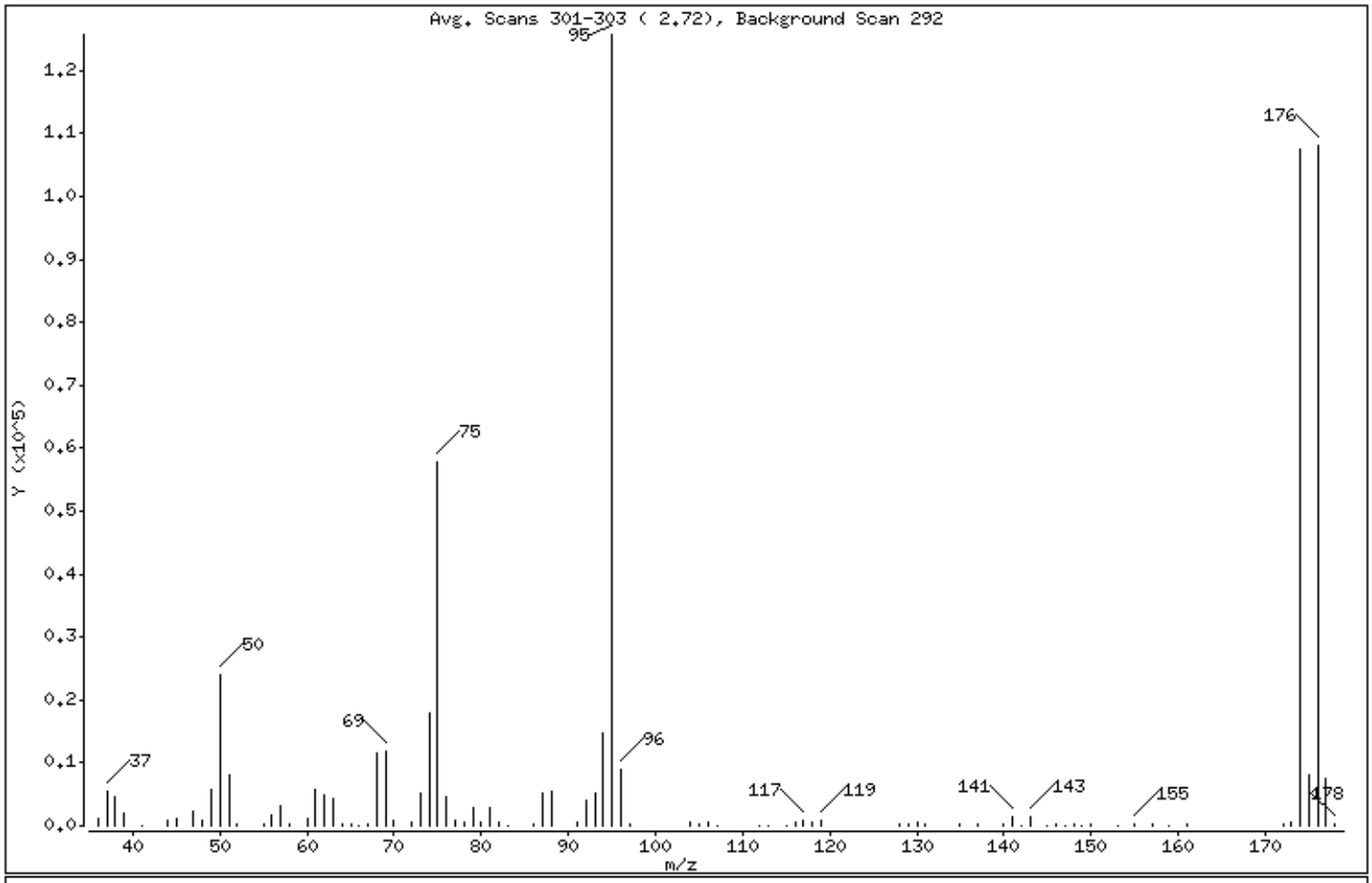
Client ID: BFB Instrument: msd14.i

Sample Info: 2.0uL #2810-93; BFB; BFB

Volume Injected (uL): 1.0 Operator: gd

Column phase: Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	19.07
75	30.00 - 66.00% of mass 95	46.06
96	5.00 - 9.00% of mass 95	7.22
173	Less than 1.99% of mass 174	0.47 (0.55)
174	50.01 - 120.00% of mass 95	85.44
175	4.00 - 9.00% of mass 174	6.46 (7.56)
176	93.00 - 101.00% of mass 174	85.93 (100.57)
177	5.00 - 9.00% of mass 176	6.00 (6.98)

Data File: /var/chem/msd14.i/06feb17.b/14020601.d

Date : 06-FEB-2017 08:59

Client ID: BFB

Instrument: msd14.i

Sample Info: 2.0uL #2810-93; BFB; BFB

Volume Injected (uL): 1.0

Operator: gd

Column phase:

Column diameter: 2.00

Data File: 14020601.d
Spectrum: Avg. Scans 301-303 (2.72), Background Scan 292
Location of Maximum: 95.00
Number of points: 89

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1051	66.00	57	94.00	14839	142.00	61
37.00	5405	67.00	372	95.00	125752	143.00	1515
38.00	4506	68.00	11464	96.00	9084	145.00	67
39.00	2067	69.00	11789	97.00	423	146.00	188
41.00	51	70.00	994	104.00	460	147.00	124
44.00	906	72.00	702	105.00	222	148.00	408
45.00	1209	73.00	5337	106.00	512	149.00	104
47.00	2428	74.00	17952	107.00	70	150.00	152
48.00	843	75.00	57920	112.00	55	153.00	66
49.00	5678	76.00	4628	113.00	135	155.00	240
50.00	23976	77.00	895	115.00	58	157.00	147
51.00	8136	78.00	620	116.00	478	159.00	74
52.00	352	79.00	2999	117.00	795	161.00	218
55.00	423	80.00	672	118.00	602	172.00	233
56.00	1818	81.00	2777	119.00	742	173.00	592
57.00	3105	82.00	666	128.00	403	174.00	107432
58.00	216	83.00	65	129.00	214	175.00	8127
60.00	1211	86.00	309	130.00	524	176.00	108048
61.00	5736	87.00	5212	131.00	259	177.00	7542
62.00	4852	88.00	5464	135.00	217	178.00	174
63.00	4464	91.00	501	137.00	241		
64.00	347	92.00	4005	140.00	154		
65.00	216	93.00	5065	141.00	1470		

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

Air Toxics LTD.

Chain-of-Custody Record

Contact Person Terry Taylor
Company Anderson Mulholland & Associates, Inc.
Address 2700 Winchester, Suite 417 City Purchase State NY Zip 10577
Phone 914-251-0400, x 309 FAX
Collected By: (Signature)

Project Information:
P.O. #
Project #
Project Name BMS VI Invest.
Buildings 8,13, 5, 18, and 30

Turn Around Time:
[X] Normal
[ ] Rush
Specify

Pressurized by:
Date:
Press. Gas: N2 He

Lab I.D.	Field Sample I.D.	Canister I.D.	Date & Time	Analysis Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
~~11A~~	B18IA-3-012117	34320	1/21/17:1810	TO-15, MeOH, CH_4	29 "Hg	6		
12A	B18IA-4-012117	N1591	1/21/17:1812	TO-15, MeOH, CH_4	29.5 "Hg	6		
~~13A~~	B8IA-2-012317	N1726	1/23/17:1223	TO-15, MeOH, CH_4	29 "Hg	8		
~~14A~~	B8IA-2D-012317	N0416	1/23/17:1223	TO-15, MeOH, CH_4	29 "Hg	9		
~~15A~~	B8AA-012317	0φ316	1/23/17:0920	TO-15, MeOH, CH_4	29 "Hg	3		
16A	B8SS-2-012417	1L1603	1/24/17:1535	TO-15, MeOH, CH_4	30 "Hg	5		
17A	B8SS-2D-012417	12373	1/24/17:1535	TO-15, MeOH, CH_4	29 "Hg	5		
18A	B18SS-1-012617	1L1720	1/26/17:1730	TO-15, MeOH, CH_4	30 "Hg	5		
~~19A~~	~~B18SS-1DUP-012617~~				"Hg			
~~20A~~ 19A	B18SS-1DUP-012617	N1929	1/26/17:1730	TO-15, MeOH, CH_4	30 "Hg	6		

V.V 1/30/17

V.V 1/30/17

Relinquished By: (Signature) Date/Time 1-27-17 1400
Received By: (Signature) Date/Time Fed EX
Relinquished By: (Signature) Date/Time
Received By: (Signature) Date/Time 1/30/17 0920
Relinquished By: (Signature) Date/Time
Received By: (Signature) Date/Time

Notes:
FedEX Tracking No. 7782 9053 0772

Shipper Name	Air Bill #	Opened By	Temp ©	Condition	Custody Seals	Work Order #
Fed Ex		EATL	N/A	Good	Yes No (None)	1701428

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SAMPLE RECEIPT SUMMARY

WORKORDER 1701428B

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: 02/10/17
Date Completed: 2/9/17
Date Received: 1/30/17
PO#:
Project#: BMS VI

Total $: $ 520.00
Logged By: JV

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
16A	B8SS-2-012417	TO-15	1/24/2017	5.7 "Hg	$125.00
17A	B8SS-2D-012417	TO-15	1/24/2017	4.9 "Hg	$125.00
18A	B18SS-1-012617	TO-15	1/26/2017	5.5 "Hg	$125.00
19A	B18SS-1Dup-012617	TO-15	1/26/2017	5.5 "Hg	$125.00
20A	Lab Blank	TO-15	NA	NA	$0.00
20B	Lab Blank	TO-15	NA	NA	$0.00
21A	CCV	TO-15	NA	NA	$0.00
21B	CCV	TO-15	NA	NA	$0.00
22A	LCS	TO-15	NA	NA	$0.00
22AA	LCSD	TO-15	NA	NA	$0.00
22B	LCS	TO-15	NA	NA	$0.00
22BB	LCSD	TO-15	NA	NA	$0.00

Misc. ChargeseCVP (4) @ $5.00 each. $20.00

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

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

Analysis Code: TO-14A

TERMS:

Reporting Method: TO-15 + Naph

Other Records

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

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

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

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

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

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

Compound List

TO-15 + Naph

CAS Number	Compound	Detection Limit ppbv	Type
75-71-8	Freon 12	0.50	
76-14-2	Freon 114	0.50	
75-35-4	1,1-Dichloroethene	0.50	
67-64-1	Acetone	5.0	
67-63-0	2-Propanol	2.0	
75-15-0	Carbon Disulfide	2.0	
107-05-1	3-Chloropropene	2.0	
75-09-2	Methylene Chloride	5.0	
1634-04-4	Methyl tert-butyl ether	2.0	
156-60-5	trans-1,2-Dichloroethene	0.50	
110-54-3	Hexane	0.50	
75-34-3	1,1-Dichloroethane	0.50	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	2.0	
156-59-2	cis-1,2-Dichloroethene	0.50	
109-99-9	Tetrahydrofuran	0.50	
67-66-3	Chloroform	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	
110-82-7	Cyclohexane	0.50	
56-23-5	Carbon Tetrachloride	0.50	
540-84-1	2,2,4-Trimethylpentane	0.50	
71-43-2	Benzene	0.50	
107-06-2	1,2-Dichloroethane	0.50	
142-82-5	Heptane	0.50	
79-01-6	Trichloroethene	0.50	
78-87-5	1,2-Dichloropropane	0.50	
123-91-1	1,4-Dioxane	2.0	
75-27-4	Bromodichloromethane	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	
108-10-1	4-Methyl-2-pentanone	0.50	
108-88-3	Toluene	0.50	
10061-02-6	trans-1,3-Dichloropropene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
591-78-6	2-Hexanone	2.0	
124-48-1	Dibromochloromethane	0.50	
106-93-4	1,2-Dibromoethane (EDB)	0.50	
108-90-7	Chlorobenzene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
100-42-5	Styrene	0.50	
75-25-2	Bromoform	0.50	
98-82-8	Cumene	0.50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	
103-65-1	Propylbenzene	0.50	
622-96-8	4-Ethyltoluene	0.50	

Compound List

TO-15 + Naph

CAS Number	Compound	Detection Limit ppbv	Type
108-67-8	1,3,5-Trimethylbenzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	
100-44-7	alpha-Chlorotoluene	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	
120-82-1	1,2,4-Trichlorobenzene	2.0	
87-68-3	Hexachlorobutadiene	2.0	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
91-20-3	Naphthalene	1.0	
74-87-3	Chloromethane	5.0	
75-01-4	Vinyl Chloride	0.50	
106-99-0	1,3-Butadiene	0.50	
74-83-9	Bromomethane	5.0	
75-00-3	Chloroethane	2.0	
75-69-4	Freon 11	0.50	
64-17-5	Ethanol	2.0	
76-13-1	Freon 113	0.50	

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 02/23/16
Workorder # 1701428B	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: MJD 2/2/17	S2: gd 2/3/17	S3: gd 2/6/17	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				
NA	NA	NA			Manual Integrations included and approved				
✓	✓	✓		✓	Chain of Custody verified for special comments (add comments below)				
	NA	NA			Non-standard Target sublist verified (MDL, LOD, RL, control limits, etc.)				

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

1 flag to MDL; QA QC S3 – 2 out CCV, ~~0~~ 1 out LCS gd 2/6/17 1 flag MDL

2 out CCV, 0 out LCS, 1 flag to MDL

A1	A2	A3	A4	D	Section 2 – Sample Analysis				
					Initials/Date	A1: 2/3/17	A2: gd 2/3/17	A3: gd 2/6/17	A4:
✓	✓	✓		✓	IS/Surr Recoveries, Dilution Factors, Load Volumes, leg(s) of instrument, Initial/Final Pressures, and Canister #s Verified				
NA	NA			NA	a) Tedlar Bag IDs verified against COC b) Tedlar Bag ID confirmed with loading sequence/leg(s) of instrument				
NA	NA	✓		✓	Manual Integrations/Bag or Can Dilution Forms/Re-pressurization Forms/Bag-Can Transfer Forms present (circle all that apply)				
✓	✓	✓			12/24 Hr clock time & Hold Time met for all samples				
	NA			✓	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: 18A & 19A full load 19A needs confirmation

Re: 13A & 19A FD did NOT dup confirm 19A file: a020311

A3: 16A, 19A Dil matrix

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction	Technical Review Needed? Circle one: Yes/No		T:	
						Initials/Instrument/ Date	D1: SS 2/9/17	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: QC exceedances; flag MDL; 16A & 17A Dil UTC;

A	3T	Section 4- Atlas Data Entry	Lumen verified and included in folder	Circle one: Yes/No
		Initials/Date: SS 2/9/17	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