



**CHAIN-OF-CUSTODY RECORD**

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FOLSOM, CA 95630-4719  
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Page 1 of 1

Project Manager Dan Norris  
 Collected by: (Print and Sign) Dan Norris  
 Company Missouri DNR Email dan.norris@dnr.mo.gov  
 Address P.O. Box 176 City Jefferson City State Mo Zip 65102  
 Phone 573-526-3915 Fax \_\_\_\_\_

<b>Project Info:</b> P.O. # _____ Project # _____ Project Name <u>Bridgeton Landfill</u>	<b>Turn Around Time:</b> <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush <small>specify</small>	<small>Lab Use Only</small> Pressurized by: _____ Date: _____ Pressurization Gas: _____ N <sub>2</sub> He
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Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum			
						Initial	Final	Receipt	Final (psi)
	D1 (134112)	5365	11/13/13	1038-1535	TO-15	-30	-5		
	D2 (134113)	12936	11/13/13	1045-1630	TO-15	-30	-5		
	U1 (134114)	5788	11/13/13	1101-1609	TO-15	-30	-5		
	<del>DFM (134115)</del>	<del>7563</del>							

Relinquished by: (signature) <u>Dan Norris</u> Date/Time <u>11/14/13 1109</u>	Received by: (signature) _____ Date/Time _____	<b>Notes:</b> <u>Sent via UPS Ground</u> <u>Tracking # 1Z672 788 03</u> <u>4596 7511</u>
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Relinquished by: (signature) _____ Date/Time _____	Received by: (signature) _____ Date/Time _____	

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

12/3/2013

Mr. Dennis Schroeder  
Missouri Dept. of Natural Resources  
2710 West Main

Jefferson City MO 65109

Project Name: Bridgeton Landfill

Project #:

Workorder #: 1311344

Dear Mr. Dennis Schroeder

The following report includes the data for the above referenced project for sample(s) received on 11/19/2013 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kelly Buettner  
Project Manager

**WORK ORDER #: 1311344**

Work Order Summary

<b>CLIENT:</b>	Mr. Dennis Schroeder Missouri Dept. of Natural Resources 2710 West Main Jefferson City, MO 65109	<b>BILL TO:</b>	Accounts Payable Missouri Dept. of Natural Resources P.O Box 176 Jefferson City, MO 65102
<b>PHONE:</b>	573-526-3363	<b>P.O. #</b>	3ESP1301039
<b>FAX:</b>	573-526-3350	<b>PROJECT #</b>	Bridgeton Landfill
<b>DATE RECEIVED:</b>	11/19/2013	<b>CONTACT:</b>	Kelly Buettner
<b>DATE COMPLETED:</b>	12/03/2013		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	D1 (134112)	Modified TO-15	3.5 "Hg	5.2 psi
02A	D2 (134113)	Modified TO-15	2.2 "Hg	5.2 psi
03A	U1 (134114)	Modified TO-15	2.6 "Hg	4.9 psi
04A	Lab Blank	Modified TO-15	NA	NA
04B	Lab Blank	Modified TO-15	NA	NA
05A	CCV	Modified TO-15	NA	NA
05B	CCV	Modified TO-15	NA	NA
06A	LCS	Modified TO-15	NA	NA
06AA	LCSD	Modified TO-15	NA	NA
06B	LCS	Modified TO-15	NA	NA
06BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:   
 Technical Director

DATE: 12/03/13

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-13-6, UT NELAP CA009332013-4, VA NELAP - 460197, WA NELAP - C935  
 Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)  
 Accreditation number: CA300005, Effective date: 10/18/2013, Expiration date: 10/17/2014.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

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**LABORATORY NARRATIVE**  
**Modified TO-15**  
**Missouri Dept. of Natural Resources**  
**Workorder# 1311344**

Three 6 Liter Summa Canister (100% Certified) samples were received on November 19, 2013. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

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

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

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

**Receiving Notes**

There were no receiving discrepancies.

**Analytical Notes**

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

**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

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

**Client Sample ID: D1 (134112)**

**Lab ID#: 1311344-01A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.15	0.53	0.76	2.6
Freon 11	0.15	0.42	0.86	2.4
Ethanol	0.76	2.6 J	1.4	4.8 J
Acetone	0.76	1.1	1.8	2.7
Toluene	0.15	0.22	0.58	0.82

**Client Sample ID: D2 (134113)**

**Lab ID#: 1311344-02A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.15	0.50	0.72	2.5
Freon 11	0.15	0.31	0.82	1.8
Ethanol	0.73	1.8 J	1.4	3.4 J
Acetone	0.73	0.96	1.7	2.3
Benzene	0.15	0.23	0.47	0.73
Toluene	0.15	0.27	0.55	1.0

**Client Sample ID: U1 (134114)**

**Lab ID#: 1311344-03A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.15	0.55	0.72	2.7
Freon 11	0.15	0.46 J	0.82	2.6 J
Ethanol	0.73	2.2 J	1.4	4.1 J
Acetone	0.73	1.2	1.7	2.9
Toluene	0.15	0.18	0.55	0.68



Air Toxics

Client Sample ID: D1 (134112)

Lab ID#: 1311344-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a112512	Date of Collection:	11/13/13 3:35:00 PM
Dil. Factor:	1.53	Date of Analysis:	11/25/13 09:45 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.15	0.53	0.76	2.6
Freon 114	0.15	Not Detected	1.1	Not Detected
Chloromethane	0.76	Not Detected	1.6	Not Detected
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected
1,3-Butadiene	0.15	Not Detected	0.34	Not Detected
Bromomethane	0.76	Not Detected	3.0	Not Detected
Chloroethane	0.76	Not Detected	2.0	Not Detected
Freon 11	0.15	0.42	0.86	2.4
Ethanol	0.76	2.6 J	1.4	4.8 J
Freon 113	0.15	Not Detected	1.2	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.61	Not Detected
Acetone	0.76	1.1	1.8	2.7
2-Propanol	0.76	Not Detected	1.9	Not Detected
Carbon Disulfide	0.76	Not Detected	2.4	Not Detected
3-Chloropropene	0.76	Not Detected UJ	2.4	Not Detected UJ
Methylene Chloride	0.31	Not Detected	1.1	Not Detected
Methyl tert-butyl ether	0.15	Not Detected	0.55	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.61	Not Detected
Hexane	0.15	Not Detected	0.54	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.62	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.76	Not Detected	2.2	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.61	Not Detected
Tetrahydrofuran	0.76	Not Detected	2.2	Not Detected
Chloroform	0.15	Not Detected	0.75	Not Detected
1,1,1-Trichloroethane	0.15	Not Detected	0.83	Not Detected
Cyclohexane	0.15	Not Detected	0.53	Not Detected
Carbon Tetrachloride	0.15	Not Detected	0.96	Not Detected
2,2,4-Trimethylpentane	0.76	Not Detected	3.6	Not Detected
Benzene	0.15	Not Detected	0.49	Not Detected
1,2-Dichloroethane	0.15	Not Detected	0.62	Not Detected
Heptane	0.15	Not Detected	0.63	Not Detected
Trichloroethene	0.15	Not Detected	0.82	Not Detected
1,2-Dichloropropane	0.15	Not Detected	0.71	Not Detected
1,4-Dioxane	0.15	Not Detected	0.55	Not Detected
Bromodichloromethane	0.15	Not Detected	1.0	Not Detected
cis-1,3-Dichloropropene	0.15	Not Detected	0.69	Not Detected
4-Methyl-2-pentanone	0.15	Not Detected	0.63	Not Detected
Toluene	0.15	0.22	0.58	0.82
trans-1,3-Dichloropropene	0.15	Not Detected	0.69	Not Detected
1,1,2-Trichloroethane	0.15	Not Detected	0.83	Not Detected
Tetrachloroethene	0.15	Not Detected	1.0	Not Detected
2-Hexanone	0.76	Not Detected	3.1	Not Detected



Client Sample ID: D1 (134112)

Lab ID#: 1311344-01A

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

File Name:	a112512	Date of Collection:	11/13/13 3:35:00 PM
Dil. Factor:	1.53	Date of Analysis:	11/25/13 09:45 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.15	Not Detected	1.3	Not Detected
1,2-Dibromoethane (EDB)	0.15	Not Detected	1.2	Not Detected
Chlorobenzene	0.15	Not Detected	0.70	Not Detected
Ethyl Benzene	0.15	Not Detected	0.66	Not Detected
m,p-Xylene	0.15	Not Detected	0.66	Not Detected
o-Xylene	0.15	Not Detected	0.66	Not Detected
Styrene	0.15	Not Detected	0.65	Not Detected
Bromoform	0.15	Not Detected	1.6	Not Detected
Cumene	0.15	Not Detected	0.75	Not Detected
1,1,2,2-Tetrachloroethane	0.15	Not Detected	1.0	Not Detected
Propylbenzene	0.15	Not Detected	0.75	Not Detected
4-Ethyltoluene	0.15	Not Detected	0.75	Not Detected
1,3,5-Trimethylbenzene	0.15	Not Detected	0.75	Not Detected
1,2,4-Trimethylbenzene	0.15	Not Detected	0.75	Not Detected
1,3-Dichlorobenzene	0.15	Not Detected	0.92	Not Detected
1,4-Dichlorobenzene	0.15	Not Detected	0.92	Not Detected
alpha-Chlorotoluene	0.15	Not Detected	0.79	Not Detected
1,2-Dichlorobenzene	0.15	Not Detected	0.92	Not Detected
1,2,4-Trichlorobenzene	0.76	Not Detected	5.7	Not Detected
Hexachlorobutadiene	0.76	Not Detected	8.2	Not Detected

J = Estimated value due to bias in the CCV.

UJ = Non-detected compound associated with low bias in the CCV and/or LCS.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	95	70-130





Air Toxics

Client Sample ID: D2 (134113)

Lab ID#: 1311344-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a112513	Date of Collection:	11/13/13 4:30:00 PM
Dil. Factor:	1.46	Date of Analysis:	11/25/13 10:44 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.15	0.50	0.72	2.5
Freon 114	0.15	Not Detected	1.0	Not Detected
Chloromethane	0.73	Not Detected	1.5	Not Detected
Vinyl Chloride	0.15	Not Detected	0.37	Not Detected
1,3-Butadiene	0.15	Not Detected	0.32	Not Detected
Bromomethane	0.73	Not Detected	2.8	Not Detected
Chloroethane	0.73	Not Detected	1.9	Not Detected
Freon 11	0.15	0.31	0.82	1.8
Ethanol	0.73	1.8 J	1.4	3.4 J
Freon 113	0.15	Not Detected	1.1	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.58	Not Detected
Acetone	0.73	0.96	1.7	2.3
2-Propanol	0.73	Not Detected	1.8	Not Detected
Carbon Disulfide	0.73	Not Detected	2.3	Not Detected
3-Chloropropene	0.73	Not Detected UJ	2.3	Not Detected UJ
Methylene Chloride	0.29	Not Detected	1.0	Not Detected
Methyl tert-butyl ether	0.15	Not Detected	0.53	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected
Hexane	0.15	Not Detected	0.51	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.59	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.73	Not Detected	2.2	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected
Tetrahydrofuran	0.73	Not Detected	2.2	Not Detected
Chloroform	0.15	Not Detected	0.71	Not Detected
1,1,1-Trichloroethane	0.15	Not Detected	0.80	Not Detected
Cyclohexane	0.15	Not Detected	0.50	Not Detected
Carbon Tetrachloride	0.15	Not Detected	0.92	Not Detected
2,2,4-Trimethylpentane	0.73	Not Detected	3.4	Not Detected
Benzene	0.15	0.23	0.47	0.73
1,2-Dichloroethane	0.15	Not Detected	0.59	Not Detected
Heptane	0.15	Not Detected	0.60	Not Detected
Trichloroethene	0.15	Not Detected	0.78	Not Detected
1,2-Dichloropropane	0.15	Not Detected	0.67	Not Detected
1,4-Dioxane	0.15	Not Detected	0.53	Not Detected
Bromodichloromethane	0.15	Not Detected	0.98	Not Detected
cis-1,3-Dichloropropene	0.15	Not Detected	0.66	Not Detected
4-Methyl-2-pentanone	0.15	Not Detected	0.60	Not Detected
Toluene	0.15	0.27	0.55	1.0
trans-1,3-Dichloropropene	0.15	Not Detected	0.66	Not Detected
1,1,2-Trichloroethane	0.15	Not Detected	0.80	Not Detected
Tetrachloroethene	0.15	Not Detected	0.99	Not Detected
2-Hexanone	0.73	Not Detected	3.0	Not Detected

Client Sample ID: D2 (134113)

Lab ID#: 1311344-02A

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

File Name:	a112513	Date of Collection:	11/13/13 4:30:00 PM
Dil. Factor:	1.46	Date of Analysis:	11/25/13 10:44 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.15	Not Detected	1.2	Not Detected
1,2-Dibromoethane (EDB)	0.15	Not Detected	1.1	Not Detected
Chlorobenzene	0.15	Not Detected	0.67	Not Detected
Ethyl Benzene	0.15	Not Detected	0.63	Not Detected
m,p-Xylene	0.15	Not Detected	0.63	Not Detected
o-Xylene	0.15	Not Detected	0.63	Not Detected
Styrene	0.15	Not Detected	0.62	Not Detected
Bromoform	0.15	Not Detected	1.5	Not Detected
Cumene	0.15	Not Detected	0.72	Not Detected
1,1,2,2-Tetrachloroethane	0.15	Not Detected	1.0	Not Detected
Propylbenzene	0.15	Not Detected	0.72	Not Detected
4-Ethyltoluene	0.15	Not Detected	0.72	Not Detected
1,3,5-Trimethylbenzene	0.15	Not Detected	0.72	Not Detected
1,2,4-Trimethylbenzene	0.15	Not Detected	0.72	Not Detected
1,3-Dichlorobenzene	0.15	Not Detected	0.88	Not Detected
1,4-Dichlorobenzene	0.15	Not Detected	0.88	Not Detected
alpha-Chlorotoluene	0.15	Not Detected	0.76	Not Detected
1,2-Dichlorobenzene	0.15	Not Detected	0.88	Not Detected
1,2,4-Trichlorobenzene	0.73	Not Detected	5.4	Not Detected
Hexachlorobutadiene	0.73	Not Detected	7.8	Not Detected

J = Estimated value due to bias in the CCV.

UJ = Non-detected compound associated with low bias in the CCV and/or LCS.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	93	70-130



Air Toxics

Client Sample ID: U1 (134114)

Lab ID#: 1311344-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a112606	Date of Collection:	11/13/13 4:09:00 PM
Dil. Factor:	1.46	Date of Analysis:	11/26/13 01:53 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.15	0.55	0.72	2.7
Freon 114	0.15	Not Detected	1.0	Not Detected
Chloromethane	0.73	Not Detected	1.5	Not Detected
Vinyl Chloride	0.15	Not Detected	0.37	Not Detected
1,3-Butadiene	0.15	Not Detected	0.32	Not Detected
Bromomethane	0.73	Not Detected	2.8	Not Detected
Chloroethane	0.73	Not Detected	1.9	Not Detected
Freon 11	0.15	0.46 J	0.82	2.6 J
Ethanol	0.73	2.2 J	1.4	4.1 J
Freon 113	0.15	Not Detected	1.1	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.58	Not Detected
Acetone	0.73	1.2	1.7	2.9
2-Propanol	0.73	Not Detected	1.8	Not Detected
Carbon Disulfide	0.73	Not Detected	2.3	Not Detected
3-Chloropropene	0.73	Not Detected	2.3	Not Detected
Methylene Chloride	0.29	Not Detected	1.0	Not Detected
Methyl tert-butyl ether	0.15	Not Detected	0.53	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected
Hexane	0.15	Not Detected	0.51	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.59	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.73	Not Detected	2.2	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected
Tetrahydrofuran	0.73	Not Detected	2.2	Not Detected
Chloroform	0.15	Not Detected	0.71	Not Detected
1,1,1-Trichloroethane	0.15	Not Detected	0.80	Not Detected
Cyclohexane	0.15	Not Detected	0.50	Not Detected
Carbon Tetrachloride	0.15	Not Detected	0.92	Not Detected
2,2,4-Trimethylpentane	0.73	Not Detected	3.4	Not Detected
Benzene	0.15	Not Detected	0.47	Not Detected
1,2-Dichloroethane	0.15	Not Detected	0.59	Not Detected
Heptane	0.15	Not Detected	0.60	Not Detected
Trichloroethene	0.15	Not Detected	0.78	Not Detected
1,2-Dichloropropane	0.15	Not Detected	0.67	Not Detected
1,4-Dioxane	0.15	Not Detected	0.53	Not Detected
Bromodichloromethane	0.15	Not Detected	0.98	Not Detected
cis-1,3-Dichloropropene	0.15	Not Detected	0.66	Not Detected
4-Methyl-2-pentanone	0.15	Not Detected	0.60	Not Detected
Toluene	0.15	0.18	0.55	0.68
trans-1,3-Dichloropropene	0.15	Not Detected	0.66	Not Detected
1,1,2-Trichloroethane	0.15	Not Detected	0.80	Not Detected
Tetrachloroethene	0.15	Not Detected	0.99	Not Detected
2-Hexanone	0.73	Not Detected	3.0	Not Detected



Client Sample ID: U1 (134114)

Lab ID#: 1311344-03A

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

<b>File Name:</b>	<b>a112606</b>	<b>Date of Collection:</b>	<b>11/13/13 4:09:00 PM</b>
<b>Dil. Factor:</b>	<b>1.46</b>	<b>Date of Analysis:</b>	<b>11/26/13 01:53 PM</b>

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Dibromochloromethane	0.15	Not Detected	1.2	Not Detected
1,2-Dibromoethane (EDB)	0.15	Not Detected	1.1	Not Detected
Chlorobenzene	0.15	Not Detected	0.67	Not Detected
Ethyl Benzene	0.15	Not Detected	0.63	Not Detected
m,p-Xylene	0.15	Not Detected	0.63	Not Detected
o-Xylene	0.15	Not Detected	0.63	Not Detected
Styrene	0.15	Not Detected	0.62	Not Detected
Bromoform	0.15	Not Detected	1.5	Not Detected
Cumene	0.15	Not Detected	0.72	Not Detected
1,1,2,2-Tetrachloroethane	0.15	Not Detected	1.0	Not Detected
Propylbenzene	0.15	Not Detected	0.72	Not Detected
4-Ethyltoluene	0.15	Not Detected	0.72	Not Detected
1,3,5-Trimethylbenzene	0.15	Not Detected	0.72	Not Detected
1,2,4-Trimethylbenzene	0.15	Not Detected	0.72	Not Detected
1,3-Dichlorobenzene	0.15	Not Detected	0.88	Not Detected
1,4-Dichlorobenzene	0.15	Not Detected	0.88	Not Detected
alpha-Chlorotoluene	0.15	Not Detected	0.76	Not Detected
1,2-Dichlorobenzene	0.15	Not Detected	0.88	Not Detected
1,2,4-Trichlorobenzene	0.73	Not Detected UJ	5.4	Not Detected UJ
Hexachlorobutadiene	0.73	Not Detected	7.8	Not Detected

J = Estimated value due to bias in the CCV.

UJ = Non-detected compound associated with low bias in the CCV and/or LCS.

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

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	99	70-130

Client Sample ID: Lab Blank

Lab ID#: 1311344-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a112505	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	11/25/13 01:06 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.10	Not Detected	0.49	Not Detected
Freon 114	0.10	Not Detected	0.70	Not Detected
Chloromethane	0.50	Not Detected	1.0	Not Detected
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
1,3-Butadiene	0.10	Not Detected	0.22	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.10	Not Detected	0.56	Not Detected
Ethanol	0.50	Not Detected	0.94	Not Detected
Freon 113	0.10	Not Detected	0.77	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Acetone	0.50	Not Detected	1.2	Not Detected
2-Propanol	0.50	Not Detected	1.2	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
3-Chloropropene	0.50	Not Detected UJ	1.6	Not Detected UJ
Methylene Chloride	0.20	Not Detected	0.69	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Hexane	0.10	Not Detected	0.35	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.10	Not Detected	0.49	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Cyclohexane	0.10	Not Detected	0.34	Not Detected
Carbon Tetrachloride	0.10	Not Detected	0.63	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.10	Not Detected	0.32	Not Detected
1,2-Dichloroethane	0.10	Not Detected	0.40	Not Detected
Heptane	0.10	Not Detected	0.41	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
1,2-Dichloropropane	0.10	Not Detected	0.46	Not Detected
1,4-Dioxane	0.10	Not Detected	0.36	Not Detected
Bromodichloromethane	0.10	Not Detected	0.67	Not Detected
cis-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
4-Methyl-2-pentanone	0.10	Not Detected	0.41	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
trans-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
1,1,2-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected
2-Hexanone	0.50	Not Detected	2.0	Not Detected

Client Sample ID: Lab Blank

Lab ID#: 1311344-04A

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

<b>File Name:</b>	<b>a112505</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 11/25/13 01:06 PM

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

UJ = Non-detected compound associated with low bias in the CCV and/or LCS.

**Container Type: NA - Not Applicable**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	93	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1311344-04B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a112605	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	11/26/13 12:54 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.10	Not Detected	0.49	Not Detected
Freon 114	0.10	Not Detected	0.70	Not Detected
Chloromethane	0.50	Not Detected	1.0	Not Detected
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
1,3-Butadiene	0.10	Not Detected	0.22	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.10	Not Detected	0.56	Not Detected
Ethanol	0.50	Not Detected	0.94	Not Detected
Freon 113	0.10	Not Detected	0.77	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Acetone	0.50	Not Detected	1.2	Not Detected
2-Propanol	0.50	Not Detected	1.2	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
3-Chloropropene	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.20	Not Detected	0.69	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Hexane	0.10	Not Detected	0.35	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.10	Not Detected	0.49	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Cyclohexane	0.10	Not Detected	0.34	Not Detected
Carbon Tetrachloride	0.10	Not Detected	0.63	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.10	Not Detected	0.32	Not Detected
1,2-Dichloroethane	0.10	Not Detected	0.40	Not Detected
Heptane	0.10	Not Detected	0.41	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
1,2-Dichloropropane	0.10	Not Detected	0.46	Not Detected
1,4-Dioxane	0.10	Not Detected	0.36	Not Detected
Bromodichloromethane	0.10	Not Detected	0.67	Not Detected
cis-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
4-Methyl-2-pentanone	0.10	Not Detected	0.41	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
trans-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
1,1,2-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected
2-Hexanone	0.50	Not Detected	2.0	Not Detected

Client Sample ID: Lab Blank

Lab ID#: 1311344-04B

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

<b>File Name:</b>	<b>a112605</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 11/26/13 12:54 PM

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

UJ = Non-detected compound associated with low bias in the CCV and/or LCS.

**Container Type: NA - Not Applicable**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130





Air Toxics

Client Sample ID: CCV

Lab ID#: 1311344-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a112502	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/25/13 10:19 AM

Compound	%Recovery
Freon 12	110
Freon 114	101
Chloromethane	110
Vinyl Chloride	107
1,3-Butadiene	106
Bromomethane	138 Q
Chloroethane	116
Freon 11	129
Ethanol	135 Q
Freon 113	104
1,1-Dichloroethene	94
Acetone	87
2-Propanol	80
Carbon Disulfide	94
3-Chloropropene	68 Q
Methylene Chloride	82
Methyl tert-butyl ether	75
trans-1,2-Dichloroethene	84
Hexane	81
1,1-Dichloroethane	92
2-Butanone (Methyl Ethyl Ketone)	82
cis-1,2-Dichloroethene	77
Tetrahydrofuran	103
Chloroform	89
1,1,1-Trichloroethane	84
Cyclohexane	76
Carbon Tetrachloride	100
2,2,4-Trimethylpentane	83
Benzene	118
1,2-Dichloroethane	122
Heptane	115
Trichloroethene	98
1,2-Dichloropropane	116
1,4-Dioxane	95
Bromodichloromethane	115
cis-1,3-Dichloropropene	94
4-Methyl-2-pentanone	103
Toluene	102
trans-1,3-Dichloropropene	86
1,1,2-Trichloroethane	90
Tetrachloroethene	88
2-Hexanone	85



Air Toxics

Client Sample ID: CCV

Lab ID#: 1311344-05A

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

File Name:	a112502	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/25/13 10:19 AM

Compound	%Recovery
Dibromochloromethane	96
1,2-Dibromoethane (EDB)	89
Chlorobenzene	87
Ethyl Benzene	84
m,p-Xylene	82
o-Xylene	79
Styrene	79
Bromoform	92
Cumene	84
1,1,2,2-Tetrachloroethane	95
Propylbenzene	90
4-Ethyltoluene	84
1,3,5-Trimethylbenzene	93
1,2,4-Trimethylbenzene	88
1,3-Dichlorobenzene	91
1,4-Dichlorobenzene	93
alpha-Chlorotoluene	96
1,2-Dichlorobenzene	90
1,2,4-Trichlorobenzene	70
Hexachlorobutadiene	77

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	114	70-130
4-Bromofluorobenzene	103	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 1311344-05B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a112602	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/26/13 10:28 AM

Compound	%Recovery
Freon 12	108
Freon 114	101
Chloromethane	110
Vinyl Chloride	108
1,3-Butadiene	108
Bromomethane	137 Q
Chloroethane	116
Freon 11	132 Q
Ethanol	138 Q
Freon 113	102
1,1-Dichloroethene	96
Acetone	89
2-Propanol	86
Carbon Disulfide	95
3-Chloropropene	94
Methylene Chloride	84
Methyl tert-butyl ether	79
trans-1,2-Dichloroethene	85
Hexane	84
1,1-Dichloroethane	94
2-Butanone (Methyl Ethyl Ketone)	86
cis-1,2-Dichloroethene	81
Tetrahydrofuran	112
Chloroform	90
1,1,1-Trichloroethane	85
Cyclohexane	82
Carbon Tetrachloride	98
2,2,4-Trimethylpentane	86
Benzene	109
1,2-Dichloroethane	115
Heptane	108
Trichloroethene	94
1,2-Dichloropropane	107
1,4-Dioxane	93
Bromodichloromethane	108
cis-1,3-Dichloropropene	93
4-Methyl-2-pentanone	100
Toluene	96
trans-1,3-Dichloropropene	87
1,1,2-Trichloroethane	88
Tetrachloroethene	87
2-Hexanone	86



Air Toxics

Client Sample ID: CCV

Lab ID#: 1311344-05B

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

File Name:	a112602	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/26/13 10:28 AM

Compound	%Recovery
Dibromochloromethane	95
1,2-Dibromoethane (EDB)	89
Chlorobenzene	86
Ethyl Benzene	83
m,p-Xylene	82
o-Xylene	80
Styrene	78
Bromoform	91
Cumene	83
1,1,2,2-Tetrachloroethane	94
Propylbenzene	87
4-Ethyltoluene	81
1,3,5-Trimethylbenzene	90
1,2,4-Trimethylbenzene	85
1,3-Dichlorobenzene	86
1,4-Dichlorobenzene	89
alpha-Chlorotoluene	95
1,2-Dichlorobenzene	87
1,2,4-Trichlorobenzene	69 Q
Hexachlorobutadiene	74

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	103	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1311344-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a112503	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/25/13 11:21 AM

Compound	%Recovery	Method Limits
Freon 12	109	70-130
Freon 114	100	70-130
Chloromethane	112	70-130
Vinyl Chloride	109	70-130
1,3-Butadiene	109	70-130
Bromomethane	132 Q	70-130
Chloroethane	122	70-130
Freon 11	134 Q	70-130
Ethanol	134 Q	70-130
Freon 113	119	70-130
1,1-Dichloroethene	114	70-130
Acetone	90	70-130
2-Propanol	84	70-130
Carbon Disulfide	104	70-130
3-Chloropropene	98	70-130
Methylene Chloride	92	70-130
Methyl tert-butyl ether	78	70-130
trans-1,2-Dichloroethene	89	70-130
Hexane	85	70-130
1,1-Dichloroethane	95	70-130
2-Butanone (Methyl Ethyl Ketone)	88	70-130
cis-1,2-Dichloroethene	83	70-130
Tetrahydrofuran	111	70-130
Chloroform	91	70-130
1,1,1-Trichloroethane	86	70-130
Cyclohexane	84	70-130
Carbon Tetrachloride	107	70-130
2,2,4-Trimethylpentane	87	70-130
Benzene	119	70-130
1,2-Dichloroethane	122	70-130
Heptane	119	70-130
Trichloroethene	100	70-130
1,2-Dichloropropane	115	70-130
1,4-Dioxane	105	70-130
Bromodichloromethane	122	70-130
cis-1,3-Dichloropropene	95	70-130
4-Methyl-2-pentanone	111	70-130
Toluene	105	70-130
trans-1,3-Dichloropropene	87	70-130
1,1,2-Trichloroethane	92	70-130
Tetrachloroethene	90	70-130
2-Hexanone	96	70-130

Client Sample ID: LCS

Lab ID#: 1311344-06A

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

<b>File Name:</b>	<b>a112503</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 11/25/13 11:21 AM

<b>Compound</b>	<b>%Recovery</b>	<b>Method Limits</b>
Dibromochloromethane	103	70-130
1,2-Dibromoethane (EDB)	92	70-130
Chlorobenzene	89	70-130
Ethyl Benzene	87	70-130
m,p-Xylene	84	70-130
o-Xylene	79	70-130
Styrene	81	70-130
Bromoform	98	70-130
Cumene	88	70-130
1,1,2,2-Tetrachloroethane	95	70-130
Propylbenzene	92	70-130
4-Ethyltoluene	85	70-130
1,3,5-Trimethylbenzene	88	70-130
1,2,4-Trimethylbenzene	79	70-130
1,3-Dichlorobenzene	86	70-130
1,4-Dichlorobenzene	86	70-130
alpha-Chlorotoluene	95	70-130
1,2-Dichlorobenzene	85	70-130
1,2,4-Trichlorobenzene	63 Q	70-130
Hexachlorobutadiene	66 Q	70-130

Q = Exceeds Quality Control limits.

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	116	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: LCS D

Lab ID#: 1311344-06AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a112504	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	11/25/13 12:05 PM

Compound	%Recovery	Method Limits
Freon 12	109	70-130
Freon 114	100	70-130
Chloromethane	113	70-130
Vinyl Chloride	110	70-130
1,3-Butadiene	109	70-130
Bromomethane	134 Q	70-130
Chloroethane	121	70-130
Freon 11	136 Q	70-130
Ethanol	134 Q	70-130
Freon 113	124	70-130
1,1-Dichloroethene	120	70-130
Acetone	91	70-130
2-Propanol	85	70-130
Carbon Disulfide	104	70-130
3-Chloropropene	99	70-130
Methylene Chloride	93	70-130
Methyl tert-butyl ether	79	70-130
trans-1,2-Dichloroethene	92	70-130
Hexane	87	70-130
1,1-Dichloroethane	96	70-130
2-Butanone (Methyl Ethyl Ketone)	92	70-130
cis-1,2-Dichloroethene	84	70-130
Tetrahydrofuran	116	70-130
Chloroform	94	70-130
1,1,1-Trichloroethane	89	70-130
Cyclohexane	86	70-130
Carbon Tetrachloride	109	70-130
2,2,4-Trimethylpentane	90	70-130
Benzene	115	70-130
1,2-Dichloroethane	119	70-130
Heptane	115	70-130
Trichloroethene	97	70-130
1,2-Dichloropropane	112	70-130
1,4-Dioxane	100	70-130
Bromodichloromethane	118	70-130
cis-1,3-Dichloropropene	91	70-130
4-Methyl-2-pentanone	108	70-130
Toluene	100	70-130
trans-1,3-Dichloropropene	84	70-130
1,1,2-Trichloroethane	89	70-130
Tetrachloroethene	89	70-130
2-Hexanone	94	70-130

Client Sample ID: LCSD

Lab ID#: 1311344-06AA

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

<b>File Name:</b>	<b>a112504</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 11/25/13 12:05 PM</b>

Compound	%Recovery	Method Limits
Dibromochloromethane	100	70-130
1,2-Dibromoethane (EDB)	91	70-130
Chlorobenzene	88	70-130
Ethyl Benzene	86	70-130
m,p-Xylene	84	70-130
o-Xylene	80	70-130
Styrene	80	70-130
Bromoform	95	70-130
Cumene	87	70-130
1,1,2,2-Tetrachloroethane	93	70-130
Propylbenzene	92	70-130
4-Ethyltoluene	86	70-130
1,3,5-Trimethylbenzene	89	70-130
1,2,4-Trimethylbenzene	82	70-130
1,3-Dichlorobenzene	87	70-130
1,4-Dichlorobenzene	88	70-130
alpha-Chlorotoluene	95	70-130
1,2-Dichlorobenzene	87	70-130
1,2,4-Trichlorobenzene	66 Q	70-130
Hexachlorobutadiene	69 Q	70-130

Q = Exceeds Quality Control limits.

**Container Type: NA - Not Applicable**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	114	70-130
4-Bromofluorobenzene	100	70-130





Air Toxics

Client Sample ID: LCS

Lab ID#: 1311344-06B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a112603	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/26/13 11:27 AM

Compound	%Recovery	Method Limits
Freon 12	115	70-130
Freon 114	107	70-130
Chloromethane	118	70-130
Vinyl Chloride	116	70-130
1,3-Butadiene	117	70-130
Bromomethane	142 Q	70-130
Chloroethane	124	70-130
Freon 11	144 Q	70-130
Ethanol	145 Q	70-130
Freon 113	124	70-130
1,1-Dichloroethene	120	70-130
Acetone	95	70-130
2-Propanol	91	70-130
Carbon Disulfide	107	70-130
3-Chloropropene	105	70-130
Methylene Chloride	98	70-130
Methyl tert-butyl ether	84	70-130
trans-1,2-Dichloroethene	93	70-130
Hexane	92	70-130
1,1-Dichloroethane	98	70-130
2-Butanone (Methyl Ethyl Ketone)	92	70-130
cis-1,2-Dichloroethene	87	70-130
Tetrahydrofuran	95	70-130
Chloroform	96	70-130
1,1,1-Trichloroethane	91	70-130
Cyclohexane	87	70-130
Carbon Tetrachloride	112	70-130
2,2,4-Trimethylpentane	93	70-130
Benzene	112	70-130
1,2-Dichloroethane	114	70-130
Heptane	114	70-130
Trichloroethene	96	70-130
1,2-Dichloropropane	110	70-130
1,4-Dioxane	99	70-130
Bromodichloromethane	116	70-130
cis-1,3-Dichloropropene	92	70-130
4-Methyl-2-pentanone	108	70-130
Toluene	99	70-130
trans-1,3-Dichloropropene	86	70-130
1,1,2-Trichloroethane	86	70-130
Tetrachloroethene	84	70-130
2-Hexanone	86	70-130

Client Sample ID: LCS

Lab ID#: 1311344-06B

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

<b>File Name:</b>	<b>a112603</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 11/26/13 11:27 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	95	70-130
1,2-Dibromoethane (EDB)	86	70-130
Chlorobenzene	83	70-130
Ethyl Benzene	83	70-130
m,p-Xylene	80	70-130
o-Xylene	80	70-130
Styrene	78	70-130
Bromoform	125	70-130
Cumene	84	70-130
1,1,2,2-Tetrachloroethane	91	70-130
Propylbenzene	83	70-130
4-Ethyltoluene	85	70-130
1,3,5-Trimethylbenzene	75	70-130
1,2,4-Trimethylbenzene	71	70-130
1,3-Dichlorobenzene	81	70-130
1,4-Dichlorobenzene	82	70-130
alpha-Chlorotoluene	90	70-130
1,2-Dichlorobenzene	81	70-130
1,2,4-Trichlorobenzene	62 Q	70-130
Hexachlorobutadiene	60 Q	70-130

Q = Exceeds Quality Control limits.

**Container Type: NA - Not Applicable**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	111	70-130
4-Bromofluorobenzene	102	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1311344-06BB

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a112604	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/26/13 12:03 PM

Compound	%Recovery	Method Limits
Freon 12	110	70-130
Freon 114	102	70-130
Chloromethane	114	70-130
Vinyl Chloride	111	70-130
1,3-Butadiene	110	70-130
Bromomethane	137 Q	70-130
Chloroethane	121	70-130
Freon 11	139 Q	70-130
Ethanol	136 Q	70-130
Freon 113	132 Q	70-130
1,1-Dichloroethene	121	70-130
Acetone	96	70-130
2-Propanol	90	70-130
Carbon Disulfide	105	70-130
3-Chloropropene	104	70-130
Methylene Chloride	94	70-130
Methyl tert-butyl ether	81	70-130
trans-1,2-Dichloroethene	90	70-130
Hexane	89	70-130
1,1-Dichloroethane	96	70-130
2-Butanone (Methyl Ethyl Ketone)	92	70-130
cis-1,2-Dichloroethene	84	70-130
Tetrahydrofuran	93	70-130
Chloroform	95	70-130
1,1,1-Trichloroethane	90	70-130
Cyclohexane	86	70-130
Carbon Tetrachloride	108	70-130
2,2,4-Trimethylpentane	90	70-130
Benzene	111	70-130
1,2-Dichloroethane	116	70-130
Heptane	112	70-130
Trichloroethene	96	70-130
1,2-Dichloropropane	109	70-130
1,4-Dioxane	99	70-130
Bromodichloromethane	116	70-130
cis-1,3-Dichloropropene	92	70-130
4-Methyl-2-pentanone	106	70-130
Toluene	100	70-130
trans-1,3-Dichloropropene	83	70-130
1,1,2-Trichloroethane	86	70-130
Tetrachloroethene	82	70-130
2-Hexanone	86	70-130

Client Sample ID: LCSD

Lab ID#: 1311344-06BB

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

<b>File Name:</b>	<b>a112604</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 11/26/13 12:03 PM</b>

<b>Compound</b>	<b>%Recovery</b>	<b>Method Limits</b>
Dibromochloromethane	93	70-130
1,2-Dibromoethane (EDB)	86	70-130
Chlorobenzene	83	70-130
Ethyl Benzene	85	70-130
m,p-Xylene	79	70-130
o-Xylene	83	70-130
Styrene	81	70-130
Bromoform	125	70-130
Cumene	87	70-130
1,1,2,2-Tetrachloroethane	93	70-130
Propylbenzene	86	70-130
4-Ethyltoluene	88	70-130
1,3,5-Trimethylbenzene	79	70-130
1,2,4-Trimethylbenzene	76	70-130
1,3-Dichlorobenzene	84	70-130
1,4-Dichlorobenzene	87	70-130
alpha-Chlorotoluene	96	70-130
1,2-Dichlorobenzene	88	70-130
1,2,4-Trichlorobenzene	63 Q	70-130
Hexachlorobutadiene	66 Q	70-130

Q = Exceeds Quality Control limits.

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	127	70-130
Toluene-d8	114	70-130
4-Bromofluorobenzene	106	70-130