



Air Toxics

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FOLSOM, CA 95630-4719  
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager Michael C. Peris

Collected by: (Print and Sign) Alexis L. Lister

Company NO DON Email Michael.Peris@no.gov

Address PO Box 176 City Tillamook, OR State NO Zip 97142

Phone 503-526-3918 Fax \_\_\_\_\_

Project Info:

P.O. # 353P40007

Project # \_\_\_\_\_

Project Name Budgeton Level III

Turn Around Time:

Normal

Rush

Lab Use Only  
Pressurized by:

Date:

Pressurization Gas:

N<sub>2</sub> He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum		
						Initial	Final	Receipt Final (psi)
01A	01 (1411008)					-30	-35	
02A	02 (1411009)					-30	-5	
03A	03 (1411010)					-30	-5	
04A	04 (1411011)					-30	-5	

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time	Notes:
<u>[Signature]</u>	<u>6-18-14 0730</u>	<u>[Signature]</u>	<u>6/16/14 0730</u>	Shipped via UPS
<u>[Signature]</u>	<u>6/16/14 1245</u>	<u>[Signature]</u>	<u>6/23/14 1130</u>	Tracking #: 1Z672K88034570 7195

Lab Use Only

Shipper Name: UPS Air Bill #: \_\_\_\_\_ Temp (°C): NA Condition: Good Custody Seals Intact?  Yes  No  None Work Order #: 1406407

7/10/2014  
Mr. Dennis Schroeder  
Missouri Dept. of Natural Resources  
2710 West Main

Jefferson City MO 65109

Project Name: Bridgeton LF  
Project #:  
Workorder #: 1406441

Dear Mr. Dennis Schroeder

The following report includes the data for the above referenced project for sample(s) received on 6/25/2014 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: Brian Whittaker at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Brian Whittaker  
Project Manager

**WORK ORDER #: 1406441**

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>	573-526-4428	<b>P.O. #</b>	3ESP400007
<b>FAX:</b>	573-526-3350	<b>PROJECT #</b>	Bridgeton LF
<b>DATE RECEIVED:</b>	06/25/2014	<b>CONTACT:</b>	Brian Whittaker
<b>DATE COMPLETED:</b>	07/10/2014		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	D1 (1411012)	Modified TO-15	8.4 "Hg	5.1 psi
02A	D2 (1411013)	Modified TO-15	8.4 "Hg	5 psi
03A	U1 (1411014)	Modified TO-15	8.2 "Hg	5.2 psi
04A	U2 (1411015)	Modified TO-15	9 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
05B	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
06B	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA
07B	LCS	Modified TO-15	NA	NA
07BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:   
 Technical Director

DATE: 07/10/14

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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 180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563  
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**LABORATORY NARRATIVE**  
**Modified TO-15**  
**Missouri Dept. of Natural Resources**  
**Workorder# 1406441**

Four 6 Liter Summa Canister (100% Certified) samples were received on June 25, 2014. 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 CCV analyses have not been flagged.

Acetone was detected in the laboratory blank analyzed on 7/7/14 at less than 5X the reporting limit. Associated samples analyzed on 7/7/14 that contained Acetone were flagged as indicated.

**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.

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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 (1411012)**

**Lab ID#: 1406441-01A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.48	0.92	2.4
Freon 11	0.19	0.41	1.0	2.3
Ethanol	0.94	5.2	1.8	9.9
Acetone	0.94	4.7 B	2.2	11 B
2-Propanol	0.94	2.2	2.3	5.4

**Client Sample ID: D2 (1411013)**

**Lab ID#: 1406441-02A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.39	0.92	1.9
Freon 11	0.19	0.21	1.0	1.2
Ethanol	0.93	1.7	1.8	3.2
Acetone	0.93	5.5	2.2	13
2-Propanol	0.93	1.7	2.3	4.2

**Client Sample ID: U1 (1411014)**

**Lab ID#: 1406441-03A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.38	0.92	1.9
Freon 11	0.19	0.24	1.0	1.3
Ethanol	0.93	2.2	1.8	4.2
Acetone	0.93	5.3	2.2	12
2-Propanol	0.93	2.4	2.3	5.8
2-Butanone (Methyl Ethyl Ketone)	0.93	1.0	2.7	3.1

**Client Sample ID: U2 (1411015)**

**Lab ID#: 1406441-04A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.42	0.94	2.0

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

**Client Sample ID: U2 (1411015)**

**Lab ID#: 1406441-04A**

Freon 11	0.19	0.21	1.1	1.2
Ethanol	0.96	1.4	1.8	2.6
Acetone	0.96	3.2	2.3	7.6



Air Toxics

Client Sample ID: D1 (1411012)

Lab ID#: 1406441-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070708	Date of Collection:	6/19/14 6:18:00 PM
Dil. Factor:	1.87	Date of Analysis:	7/7/14 02:49 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.48	0.92	2.4
Freon 114	0.19	Not Detected	1.3	Not Detected
Chloromethane	0.94	Not Detected	1.9	Not Detected
Vinyl Chloride	0.19	Not Detected	0.48	Not Detected
1,3-Butadiene	0.19	Not Detected	0.41	Not Detected
Bromomethane	0.94	Not Detected	3.6	Not Detected
Chloroethane	0.94	Not Detected	2.5	Not Detected
Freon 11	0.19	0.41	1.0	2.3
Ethanol	0.94	5.2	1.8	9.9
Freon 113	0.19	Not Detected	1.4	Not Detected
1,1-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Acetone	0.94	4.7 B	2.2	11 B
2-Propanol	0.94	2.2	2.3	5.4
Carbon Disulfide	0.94	Not Detected	2.9	Not Detected
3-Chloropropene	0.94	Not Detected	2.9	Not Detected
Methylene Chloride	0.37	Not Detected	1.3	Not Detected
Methyl tert-butyl ether	0.19	Not Detected	0.67	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Hexane	0.19	Not Detected	0.66	Not Detected
1,1-Dichloroethane	0.19	Not Detected	0.76	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.94	Not Detected	2.8	Not Detected
cis-1,2-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Tetrahydrofuran	0.94	Not Detected	2.8	Not Detected
Chloroform	0.19	Not Detected	0.91	Not Detected
1,1,1-Trichloroethane	0.19	Not Detected	1.0	Not Detected
Cyclohexane	0.19	Not Detected	0.64	Not Detected
Carbon Tetrachloride	0.19	Not Detected	1.2	Not Detected
2,2,4-Trimethylpentane	0.94	Not Detected	4.4	Not Detected
Benzene	0.19	Not Detected	0.60	Not Detected
1,2-Dichloroethane	0.19	Not Detected	0.76	Not Detected
Heptane	0.19	Not Detected	0.77	Not Detected
Trichloroethene	0.19	Not Detected	1.0	Not Detected
1,2-Dichloropropane	0.19	Not Detected	0.86	Not Detected
1,4-Dioxane	0.19	Not Detected	0.67	Not Detected
Bromodichloromethane	0.19	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.19	Not Detected	0.85	Not Detected
4-Methyl-2-pentanone	0.19	Not Detected	0.77	Not Detected
Toluene	0.19	Not Detected	0.70	Not Detected
trans-1,3-Dichloropropene	0.19	Not Detected	0.85	Not Detected
1,1,2-Trichloroethane	0.19	Not Detected	1.0	Not Detected
Tetrachloroethene	0.19	Not Detected	1.3	Not Detected
2-Hexanone	0.94	Not Detected	3.8	Not Detected





Client Sample ID: D1 (1411012)

Lab ID#: 1406441-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070708	Date of Collection:	6/19/14 6:18:00 PM
Dil. Factor:	1.87	Date of Analysis:	7/7/14 02:49 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.19	Not Detected	1.6	Not Detected
1,2-Dibromoethane (EDB)	0.19	Not Detected	1.4	Not Detected
Chlorobenzene	0.19	Not Detected	0.86	Not Detected
Ethyl Benzene	0.19	Not Detected	0.81	Not Detected
m,p-Xylene	0.19	Not Detected	0.81	Not Detected
o-Xylene	0.19	Not Detected	0.81	Not Detected
Styrene	0.19	Not Detected	0.80	Not Detected
Bromoform	0.19	Not Detected	1.9	Not Detected
Cumene	0.19	Not Detected	0.92	Not Detected
1,1,2,2-Tetrachloroethane	0.19	Not Detected	1.3	Not Detected
Propylbenzene	0.19	Not Detected	0.92	Not Detected
4-Ethyltoluene	0.19	Not Detected	0.92	Not Detected
1,3,5-Trimethylbenzene	0.19	Not Detected	0.92	Not Detected
1,2,4-Trimethylbenzene	0.19	Not Detected	0.92	Not Detected
1,3-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
1,4-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
alpha-Chlorotoluene	0.19	Not Detected	0.97	Not Detected
1,2-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
1,2,4-Trichlorobenzene	0.94	Not Detected	6.9	Not Detected
Hexachlorobutadiene	0.94	Not Detected	10	Not Detected

B = Analyte present in laboratory blank greater than reporting limit.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	104	70-130



Air Toxics

Client Sample ID: D2 (1411013)

Lab ID#: 1406441-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070818	Date of Collection:	6/19/14 6:24:00 PM
Dil. Factor:	1.86	Date of Analysis:	7/9/14 07:05 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.39	0.92	1.9
Freon 114	0.19	Not Detected	1.3	Not Detected
Chloromethane	0.93	Not Detected	1.9	Not Detected
Vinyl Chloride	0.19	Not Detected	0.48	Not Detected
1,3-Butadiene	0.19	Not Detected	0.41	Not Detected
Bromomethane	0.93	Not Detected	3.6	Not Detected
Chloroethane	0.93	Not Detected	2.4	Not Detected
Freon 11	0.19	0.21	1.0	1.2
Ethanol	0.93	1.7	1.8	3.2
Freon 113	0.19	Not Detected	1.4	Not Detected
1,1-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Acetone	0.93	5.5	2.2	13
2-Propanol	0.93	1.7	2.3	4.2
Carbon Disulfide	0.93	Not Detected	2.9	Not Detected
3-Chloropropene	0.93	Not Detected	2.9	Not Detected
Methylene Chloride	0.37	Not Detected	1.3	Not Detected
Methyl tert-butyl ether	0.19	Not Detected	0.67	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Hexane	0.19	Not Detected	0.66	Not Detected
1,1-Dichloroethane	0.19	Not Detected	0.75	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.93	Not Detected	2.7	Not Detected
cis-1,2-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Tetrahydrofuran	0.93	Not Detected	2.7	Not Detected
Chloroform	0.19	Not Detected	0.91	Not Detected
1,1,1-Trichloroethane	0.19	Not Detected	1.0	Not Detected
Cyclohexane	0.19	Not Detected	0.64	Not Detected
Carbon Tetrachloride	0.19	Not Detected	1.2	Not Detected
2,2,4-Trimethylpentane	0.93	Not Detected	4.3	Not Detected
Benzene	0.19	Not Detected	0.59	Not Detected
1,2-Dichloroethane	0.19	Not Detected	0.75	Not Detected
Heptane	0.19	Not Detected	0.76	Not Detected
Trichloroethene	0.19	Not Detected	1.0	Not Detected
1,2-Dichloropropane	0.19	Not Detected	0.86	Not Detected
1,4-Dioxane	0.19	Not Detected	0.67	Not Detected
Bromodichloromethane	0.19	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.19	Not Detected	0.84	Not Detected
4-Methyl-2-pentanone	0.19	Not Detected	0.76	Not Detected
Toluene	0.19	Not Detected	0.70	Not Detected
trans-1,3-Dichloropropene	0.19	Not Detected	0.84	Not Detected
1,1,2-Trichloroethane	0.19	Not Detected	1.0	Not Detected
Tetrachloroethene	0.19	Not Detected	1.3	Not Detected
2-Hexanone	0.93	Not Detected	3.8	Not Detected

Client Sample ID: D2 (1411013)

Lab ID#: 1406441-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070818	Date of Collection:	6/19/14 6:24:00 PM
Dil. Factor:	1.86	Date of Analysis:	7/9/14 07:05 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.19	Not Detected	1.6	Not Detected
1,2-Dibromoethane (EDB)	0.19	Not Detected	1.4	Not Detected
Chlorobenzene	0.19	Not Detected	0.86	Not Detected
Ethyl Benzene	0.19	Not Detected	0.81	Not Detected
m,p-Xylene	0.19	Not Detected	0.81	Not Detected
o-Xylene	0.19	Not Detected	0.81	Not Detected
Styrene	0.19	Not Detected	0.79	Not Detected
Bromoform	0.19	Not Detected	1.9	Not Detected
Cumene	0.19	Not Detected	0.91	Not Detected
1,1,2,2-Tetrachloroethane	0.19	Not Detected	1.3	Not Detected
Propylbenzene	0.19	Not Detected	0.91	Not Detected
4-Ethyltoluene	0.19	Not Detected	0.91	Not Detected
1,3,5-Trimethylbenzene	0.19	Not Detected	0.91	Not Detected
1,2,4-Trimethylbenzene	0.19	Not Detected	0.91	Not Detected
1,3-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
1,4-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
alpha-Chlorotoluene	0.19	Not Detected	0.96	Not Detected
1,2-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
1,2,4-Trichlorobenzene	0.93	Not Detected	6.9	Not Detected
Hexachlorobutadiene	0.93	Not Detected	9.9	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	87	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	104	70-130



Air Toxics

Client Sample ID: U1 (1411014)

Lab ID#: 1406441-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070819	Date of Collection:	6/19/14 6:35:00 PM
Dil. Factor:	1.86	Date of Analysis:	7/9/14 08:00 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.38	0.92	1.9
Freon 114	0.19	Not Detected	1.3	Not Detected
Chloromethane	0.93	Not Detected	1.9	Not Detected
Vinyl Chloride	0.19	Not Detected	0.48	Not Detected
1,3-Butadiene	0.19	Not Detected	0.41	Not Detected
Bromomethane	0.93	Not Detected	3.6	Not Detected
Chloroethane	0.93	Not Detected	2.4	Not Detected
Freon 11	0.19	0.24	1.0	1.3
Ethanol	0.93	2.2	1.8	4.2
Freon 113	0.19	Not Detected	1.4	Not Detected
1,1-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Acetone	0.93	5.3	2.2	12
2-Propanol	0.93	2.4	2.3	5.8
Carbon Disulfide	0.93	Not Detected	2.9	Not Detected
3-Chloropropene	0.93	Not Detected	2.9	Not Detected
Methylene Chloride	0.37	Not Detected	1.3	Not Detected
Methyl tert-butyl ether	0.19	Not Detected	0.67	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Hexane	0.19	Not Detected	0.66	Not Detected
1,1-Dichloroethane	0.19	Not Detected	0.75	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.93	1.0	2.7	3.1
cis-1,2-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Tetrahydrofuran	0.93	Not Detected	2.7	Not Detected
Chloroform	0.19	Not Detected	0.91	Not Detected
1,1,1-Trichloroethane	0.19	Not Detected	1.0	Not Detected
Cyclohexane	0.19	Not Detected	0.64	Not Detected
Carbon Tetrachloride	0.19	Not Detected	1.2	Not Detected
2,2,4-Trimethylpentane	0.93	Not Detected	4.3	Not Detected
Benzene	0.19	Not Detected	0.59	Not Detected
1,2-Dichloroethane	0.19	Not Detected	0.75	Not Detected
Heptane	0.19	Not Detected	0.76	Not Detected
Trichloroethene	0.19	Not Detected	1.0	Not Detected
1,2-Dichloropropane	0.19	Not Detected	0.86	Not Detected
1,4-Dioxane	0.19	Not Detected	0.67	Not Detected
Bromodichloromethane	0.19	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.19	Not Detected	0.84	Not Detected
4-Methyl-2-pentanone	0.19	Not Detected	0.76	Not Detected
Toluene	0.19	Not Detected	0.70	Not Detected
trans-1,3-Dichloropropene	0.19	Not Detected	0.84	Not Detected
1,1,2-Trichloroethane	0.19	Not Detected	1.0	Not Detected
Tetrachloroethene	0.19	Not Detected	1.3	Not Detected
2-Hexanone	0.93	Not Detected	3.8	Not Detected



Client Sample ID: U1 (1411014)

Lab ID#: 1406441-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070819	Date of Collection:	6/19/14 6:35:00 PM
Dil. Factor:	1.86	Date of Analysis:	7/9/14 08:00 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.19	Not Detected	1.6	Not Detected
1,2-Dibromoethane (EDB)	0.19	Not Detected	1.4	Not Detected
Chlorobenzene	0.19	Not Detected	0.86	Not Detected
Ethyl Benzene	0.19	Not Detected	0.81	Not Detected
m,p-Xylene	0.19	Not Detected	0.81	Not Detected
o-Xylene	0.19	Not Detected	0.81	Not Detected
Styrene	0.19	Not Detected	0.79	Not Detected
Bromoform	0.19	Not Detected	1.9	Not Detected
Cumene	0.19	Not Detected	0.91	Not Detected
1,1,2,2-Tetrachloroethane	0.19	Not Detected	1.3	Not Detected
Propylbenzene	0.19	Not Detected	0.91	Not Detected
4-Ethyltoluene	0.19	Not Detected	0.91	Not Detected
1,3,5-Trimethylbenzene	0.19	Not Detected	0.91	Not Detected
1,2,4-Trimethylbenzene	0.19	Not Detected	0.91	Not Detected
1,3-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
1,4-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
alpha-Chlorotoluene	0.19	Not Detected	0.96	Not Detected
1,2-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
1,2,4-Trichlorobenzene	0.93	Not Detected	6.9	Not Detected
Hexachlorobutadiene	0.93	Not Detected	9.9	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	105	70-130



Air Toxics

Client Sample ID: U2 (1411015)

Lab ID#: 1406441-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070820	Date of Collection:	6/19/14 6:43:00 PM
Dil. Factor:	1.91	Date of Analysis:	7/9/14 08:49 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.42	0.94	2.0
Freon 114	0.19	Not Detected	1.3	Not Detected
Chloromethane	0.96	Not Detected	2.0	Not Detected
Vinyl Chloride	0.19	Not Detected	0.49	Not Detected
1,3-Butadiene	0.19	Not Detected	0.42	Not Detected
Bromomethane	0.96	Not Detected	3.7	Not Detected
Chloroethane	0.96	Not Detected	2.5	Not Detected
Freon 11	0.19	0.21	1.1	1.2
Ethanol	0.96	1.4	1.8	2.6
Freon 113	0.19	Not Detected	1.5	Not Detected
1,1-Dichloroethene	0.19	Not Detected	0.76	Not Detected
Acetone	0.96	3.2	2.3	7.6
2-Propanol	0.96	Not Detected	2.3	Not Detected
Carbon Disulfide	0.96	Not Detected	3.0	Not Detected
3-Chloropropene	0.96	Not Detected	3.0	Not Detected
Methylene Chloride	0.38	Not Detected	1.3	Not Detected
Methyl tert-butyl ether	0.19	Not Detected	0.69	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.76	Not Detected
Hexane	0.19	Not Detected	0.67	Not Detected
1,1-Dichloroethane	0.19	Not Detected	0.77	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.96	Not Detected	2.8	Not Detected
cis-1,2-Dichloroethene	0.19	Not Detected	0.76	Not Detected
Tetrahydrofuran	0.96	Not Detected	2.8	Not Detected
Chloroform	0.19	Not Detected	0.93	Not Detected
1,1,1-Trichloroethane	0.19	Not Detected	1.0	Not Detected
Cyclohexane	0.19	Not Detected	0.66	Not Detected
Carbon Tetrachloride	0.19	Not Detected	1.2	Not Detected
2,2,4-Trimethylpentane	0.96	Not Detected	4.5	Not Detected
Benzene	0.19	Not Detected	0.61	Not Detected
1,2-Dichloroethane	0.19	Not Detected	0.77	Not Detected
Heptane	0.19	Not Detected	0.78	Not Detected
Trichloroethene	0.19	Not Detected	1.0	Not Detected
1,2-Dichloropropane	0.19	Not Detected	0.88	Not Detected
1,4-Dioxane	0.19	Not Detected	0.69	Not Detected
Bromodichloromethane	0.19	Not Detected	1.3	Not Detected
cis-1,3-Dichloropropene	0.19	Not Detected	0.87	Not Detected
4-Methyl-2-pentanone	0.19	Not Detected	0.78	Not Detected
Toluene	0.19	Not Detected	0.72	Not Detected
trans-1,3-Dichloropropene	0.19	Not Detected	0.87	Not Detected
1,1,2-Trichloroethane	0.19	Not Detected	1.0	Not Detected
Tetrachloroethene	0.19	Not Detected	1.3	Not Detected
2-Hexanone	0.96	Not Detected	3.9	Not Detected



Client Sample ID: U2 (1411015)

Lab ID#: 1406441-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070820	Date of Collection:	6/19/14 6:43:00 PM
Dil. Factor:	1.91	Date of Analysis:	7/9/14 08:49 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.19	Not Detected	1.6	Not Detected
1,2-Dibromoethane (EDB)	0.19	Not Detected	1.5	Not Detected
Chlorobenzene	0.19	Not Detected	0.88	Not Detected
Ethyl Benzene	0.19	Not Detected	0.83	Not Detected
m,p-Xylene	0.19	Not Detected	0.83	Not Detected
o-Xylene	0.19	Not Detected	0.83	Not Detected
Styrene	0.19	Not Detected	0.81	Not Detected
Bromoform	0.19	Not Detected	2.0	Not Detected
Cumene	0.19	Not Detected	0.94	Not Detected
1,1,2,2-Tetrachloroethane	0.19	Not Detected	1.3	Not Detected
Propylbenzene	0.19	Not Detected	0.94	Not Detected
4-Ethyltoluene	0.19	Not Detected	0.94	Not Detected
1,3,5-Trimethylbenzene	0.19	Not Detected	0.94	Not Detected
1,2,4-Trimethylbenzene	0.19	Not Detected	0.94	Not Detected
1,3-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
1,4-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
alpha-Chlorotoluene	0.19	Not Detected	0.99	Not Detected
1,2-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
1,2,4-Trichlorobenzene	0.96	Not Detected	7.1	Not Detected
Hexachlorobutadiene	0.96	Not Detected	10	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	108	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1406441-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070707	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/7/14 01:56 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.10	Not Detected	0.49	Not Detected
Freon 114	0.10	Not Detected	0.70	Not Detected
Chloromethane	0.50	Not Detected	1.0	Not Detected
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
1,3-Butadiene	0.10	Not Detected	0.22	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.10	Not Detected	0.56	Not Detected
Ethanol	0.50	Not Detected	0.94	Not Detected
Freon 113	0.10	Not Detected	0.77	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Acetone	0.50	0.84	1.2	2.0
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#: 1406441-05A

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

File Name:	v070707	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/7/14 01:56 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

**Container Type: NA - Not Applicable**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	84	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	108	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1406441-05B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070808	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/8/14 02:38 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#: 1406441-05B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070808	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/8/14 02:38 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

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	83	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	105	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 1406441-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070703	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/7/14 10:03 AM

Compound	%Recovery
Freon 12	82
Freon 114	94
Chloromethane	77
Vinyl Chloride	80
1,3-Butadiene	73
Bromomethane	88
Chloroethane	80
Freon 11	80
Ethanol	78
Freon 113	90
1,1-Dichloroethene	86
Acetone	75
2-Propanol	81
Carbon Disulfide	87
3-Chloropropene	91
Methylene Chloride	82
Methyl tert-butyl ether	84
trans-1,2-Dichloroethene	90
Hexane	75
1,1-Dichloroethane	79
2-Butanone (Methyl Ethyl Ketone)	90
cis-1,2-Dichloroethene	86
Tetrahydrofuran	76
Chloroform	84
1,1,1-Trichloroethane	83
Cyclohexane	84
Carbon Tetrachloride	89
2,2,4-Trimethylpentane	77
Benzene	91
1,2-Dichloroethane	87
Heptane	83
Trichloroethene	95
1,2-Dichloropropane	85
1,4-Dioxane	94
Bromodichloromethane	91
cis-1,3-Dichloropropene	93
4-Methyl-2-pentanone	88
Toluene	95
trans-1,3-Dichloropropene	98
1,1,2-Trichloroethane	90
Tetrachloroethene	100
2-Hexanone	91

Client Sample ID: CCV

Lab ID#: 1406441-06A

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

File Name:	v070703	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/7/14 10:03 AM

Compound	%Recovery
Dibromochloromethane	108
1,2-Dibromoethane (EDB)	96
Chlorobenzene	96
Ethyl Benzene	98
m,p-Xylene	104
o-Xylene	110
Styrene	108
Bromoform	122
Cumene	104
1,1,2,2-Tetrachloroethane	92
Propylbenzene	105
4-Ethyltoluene	122
1,3,5-Trimethylbenzene	113
1,2,4-Trimethylbenzene	127
1,3-Dichlorobenzene	116
1,4-Dichlorobenzene	116
alpha-Chlorotoluene	106
1,2-Dichlorobenzene	107
1,2,4-Trichlorobenzene	139 Q
Hexachlorobutadiene	120

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	85	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	114	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 1406441-06B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070805	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/14 12:17 PM

Compound	%Recovery
Freon 12	78
Freon 114	89
Chloromethane	72
Vinyl Chloride	77
1,3-Butadiene	70
Bromomethane	85
Chloroethane	79
Freon 11	78
Ethanol	75
Freon 113	85
1,1-Dichloroethene	81
Acetone	70
2-Propanol	77
Carbon Disulfide	81
3-Chloropropene	83
Methylene Chloride	78
Methyl tert-butyl ether	80
trans-1,2-Dichloroethene	83
Hexane	71
1,1-Dichloroethane	75
2-Butanone (Methyl Ethyl Ketone)	79
cis-1,2-Dichloroethene	78
Tetrahydrofuran	73
Chloroform	78
1,1,1-Trichloroethane	77
Cyclohexane	79
Carbon Tetrachloride	83
2,2,4-Trimethylpentane	73
Benzene	80
1,2-Dichloroethane	76
Heptane	75
Trichloroethene	85
1,2-Dichloropropane	77
1,4-Dioxane	83
Bromodichloromethane	82
cis-1,3-Dichloropropene	82
4-Methyl-2-pentanone	78
Toluene	81
trans-1,3-Dichloropropene	85
1,1,2-Trichloroethane	80
Tetrachloroethene	89
2-Hexanone	77



Air Toxics

Client Sample ID: CCV

Lab ID#: 1406441-06B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070805	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/14 12:17 PM

Compound	%Recovery
Dibromochloromethane	93
1,2-Dibromoethane (EDB)	84
Chlorobenzene	83
Ethyl Benzene	86
m,p-Xylene	88
o-Xylene	90
Styrene	89
Bromoform	101
Cumene	86
1,1,2,2-Tetrachloroethane	79
Propylbenzene	87
4-Ethyltoluene	98
1,3,5-Trimethylbenzene	92
1,2,4-Trimethylbenzene	100
1,3-Dichlorobenzene	96
1,4-Dichlorobenzene	94
alpha-Chlorotoluene	86
1,2-Dichlorobenzene	91
1,2,4-Trichlorobenzene	121
Hexachlorobutadiene	107

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	120	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1406441-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070705	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/7/14 11:56 AM

Compound	%Recovery	Method Limits
Freon 12	85	70-130
Freon 114	96	70-130
Chloromethane	76	70-130
Vinyl Chloride	83	70-130
1,3-Butadiene	74	70-130
Bromomethane	94	70-130
Chloroethane	88	70-130
Freon 11	88	70-130
Ethanol	80	70-130
Freon 113	107	70-130
1,1-Dichloroethene	100	70-130
Acetone	76	70-130
2-Propanol	82	70-130
Carbon Disulfide	82	70-130
3-Chloropropene	94	70-130
Methylene Chloride	95	70-130
Methyl tert-butyl ether	88	70-130
trans-1,2-Dichloroethene	80	70-130
Hexane	80	70-130
1,1-Dichloroethane	84	70-130
2-Butanone (Methyl Ethyl Ketone)	92	70-130
cis-1,2-Dichloroethene	101	70-130
Tetrahydrofuran	79	70-130
Chloroform	90	70-130
1,1,1-Trichloroethane	87	70-130
Cyclohexane	90	70-130
Carbon Tetrachloride	87	70-130
2,2,4-Trimethylpentane	80	70-130
Benzene	94	70-130
1,2-Dichloroethane	88	70-130
Heptane	87	70-130
Trichloroethene	97	70-130
1,2-Dichloropropane	87	70-130
1,4-Dioxane	99	70-130
Bromodichloromethane	97	70-130
cis-1,3-Dichloropropene	98	70-130
4-Methyl-2-pentanone	92	70-130
Toluene	93	70-130
trans-1,3-Dichloropropene	88	70-130
1,1,2-Trichloroethane	89	70-130
Tetrachloroethene	101	70-130
2-Hexanone	91	70-130



Client Sample ID: LCS

Lab ID#: 1406441-07A

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

<b>File Name:</b>	<b>v070705</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 7/7/14 11:56 AM

<b>Compound</b>	<b>%Recovery</b>	<b>Method Limits</b>
Dibromochloromethane	110	70-130
1,2-Dibromoethane (EDB)	96	70-130
Chlorobenzene	92	70-130
Ethyl Benzene	97	70-130
m,p-Xylene	98	70-130
o-Xylene	100	70-130
Styrene	101	70-130
Bromoform	120	70-130
Cumene	99	70-130
1,1,2,2-Tetrachloroethane	87	70-130
Propylbenzene	98	70-130
4-Ethyltoluene	108	70-130
1,3,5-Trimethylbenzene	96	70-130
1,2,4-Trimethylbenzene	105	70-130
1,3-Dichlorobenzene	105	70-130
1,4-Dichlorobenzene	100	70-130
alpha-Chlorotoluene	102	70-130
1,2-Dichlorobenzene	100	70-130
1,2,4-Trichlorobenzene	126	70-130
Hexachlorobutadiene	107	70-130

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	83	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	113	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1406441-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070706	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/7/14 01:13 PM

Compound	%Recovery	Method Limits
Freon 12	88	70-130
Freon 114	98	70-130
Chloromethane	80	70-130
Vinyl Chloride	85	70-130
1,3-Butadiene	77	70-130
Bromomethane	99	70-130
Chloroethane	90	70-130
Freon 11	91	70-130
Ethanol	85	70-130
Freon 113	114	70-130
1,1-Dichloroethene	107	70-130
Acetone	82	70-130
2-Propanol	87	70-130
Carbon Disulfide	87	70-130
3-Chloropropene	97	70-130
Methylene Chloride	100	70-130
Methyl tert-butyl ether	91	70-130
trans-1,2-Dichloroethene	84	70-130
Hexane	82	70-130
1,1-Dichloroethane	87	70-130
2-Butanone (Methyl Ethyl Ketone)	96	70-130
cis-1,2-Dichloroethene	104	70-130
Tetrahydrofuran	81	70-130
Chloroform	94	70-130
1,1,1-Trichloroethane	90	70-130
Cyclohexane	96	70-130
Carbon Tetrachloride	89	70-130
2,2,4-Trimethylpentane	83	70-130
Benzene	94	70-130
1,2-Dichloroethane	87	70-130
Heptane	86	70-130
Trichloroethene	99	70-130
1,2-Dichloropropane	86	70-130
1,4-Dioxane	101	70-130
Bromodichloromethane	97	70-130
cis-1,3-Dichloropropene	99	70-130
4-Methyl-2-pentanone	91	70-130
Toluene	93	70-130
trans-1,3-Dichloropropene	88	70-130
1,1,2-Trichloroethane	87	70-130
Tetrachloroethene	101	70-130
2-Hexanone	89	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1406441-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070706	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/7/14 01:13 PM

Compound	%Recovery	Method Limits
Dibromochloromethane	110	70-130
1,2-Dibromoethane (EDB)	95	70-130
Chlorobenzene	90	70-130
Ethyl Benzene	95	70-130
m,p-Xylene	95	70-130
o-Xylene	96	70-130
Styrene	99	70-130
Bromoform	118	70-130
Cumene	94	70-130
1,1,2,2-Tetrachloroethane	86	70-130
Propylbenzene	94	70-130
4-Ethyltoluene	106	70-130
1,3,5-Trimethylbenzene	96	70-130
1,2,4-Trimethylbenzene	102	70-130
1,3-Dichlorobenzene	100	70-130
1,4-Dichlorobenzene	100	70-130
alpha-Chlorotoluene	100	70-130
1,2-Dichlorobenzene	97	70-130
1,2,4-Trichlorobenzene	127	70-130
Hexachlorobutadiene	103	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	85	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	123	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1406441-07B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070806	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/14 01:07 PM

Compound	%Recovery	Method Limits
Freon 12	81	70-130
Freon 114	91	70-130
Chloromethane	73	70-130
Vinyl Chloride	79	70-130
1,3-Butadiene	70	70-130
Bromomethane	90	70-130
Chloroethane	82	70-130
Freon 11	82	70-130
Ethanol	77	70-130
Freon 113	102	70-130
1,1-Dichloroethene	95	70-130
Acetone	72	70-130
2-Propanol	79	70-130
Carbon Disulfide	77	70-130
3-Chloropropene	84	70-130
Methylene Chloride	90	70-130
Methyl tert-butyl ether	82	70-130
trans-1,2-Dichloroethene	73	70-130
Hexane	76	70-130
1,1-Dichloroethane	78	70-130
2-Butanone (Methyl Ethyl Ketone)	88	70-130
cis-1,2-Dichloroethene	93	70-130
Tetrahydrofuran	75	70-130
Chloroform	84	70-130
1,1,1-Trichloroethane	80	70-130
Cyclohexane	83	70-130
Carbon Tetrachloride	81	70-130
2,2,4-Trimethylpentane	77	70-130
Benzene	87	70-130
1,2-Dichloroethane	80	70-130
Heptane	80	70-130
Trichloroethene	91	70-130
1,2-Dichloropropane	80	70-130
1,4-Dioxane	91	70-130
Bromodichloromethane	90	70-130
cis-1,3-Dichloropropene	92	70-130
4-Methyl-2-pentanone	84	70-130
Toluene	87	70-130
trans-1,3-Dichloropropene	80	70-130
1,1,2-Trichloroethane	80	70-130
Tetrachloroethene	93	70-130
2-Hexanone	81	70-130

Client Sample ID: LCS

Lab ID#: 1406441-07B

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

<b>File Name:</b>	<b>v070806</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 7/8/14 01:07 PM</b>

<b>Compound</b>	<b>%Recovery</b>	<b>Method Limits</b>
Dibromochloromethane	98	70-130
1,2-Dibromoethane (EDB)	85	70-130
Chlorobenzene	84	70-130
Ethyl Benzene	88	70-130
m,p-Xylene	87	70-130
o-Xylene	91	70-130
Styrene	92	70-130
Bromoform	108	70-130
Cumene	90	70-130
1,1,2,2-Tetrachloroethane	80	70-130
Propylbenzene	90	70-130
4-Ethyltoluene	99	70-130
1,3,5-Trimethylbenzene	88	70-130
1,2,4-Trimethylbenzene	95	70-130
1,3-Dichlorobenzene	95	70-130
1,4-Dichlorobenzene	91	70-130
alpha-Chlorotoluene	92	70-130
1,2-Dichlorobenzene	88	70-130
1,2,4-Trichlorobenzene	112	70-130
Hexachlorobutadiene	96	70-130

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	84	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	114	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1406441-07BB

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070807	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/14 01:49 PM

Compound	%Recovery	Method Limits
Freon 12	80	70-130
Freon 114	90	70-130
Chloromethane	73	70-130
Vinyl Chloride	78	70-130
1,3-Butadiene	68 Q	70-130
Bromomethane	90	70-130
Chloroethane	82	70-130
Freon 11	82	70-130
Ethanol	80	70-130
Freon 113	103	70-130
1,1-Dichloroethene	96	70-130
Acetone	74	70-130
2-Propanol	77	70-130
Carbon Disulfide	78	70-130
3-Chloropropene	88	70-130
Methylene Chloride	90	70-130
Methyl tert-butyl ether	83	70-130
trans-1,2-Dichloroethene	77	70-130
Hexane	76	70-130
1,1-Dichloroethane	78	70-130
2-Butanone (Methyl Ethyl Ketone)	89	70-130
cis-1,2-Dichloroethene	96	70-130
Tetrahydrofuran	75	70-130
Chloroform	85	70-130
1,1,1-Trichloroethane	82	70-130
Cyclohexane	86	70-130
Carbon Tetrachloride	82	70-130
2,2,4-Trimethylpentane	76	70-130
Benzene	86	70-130
1,2-Dichloroethane	78	70-130
Heptane	78	70-130
Trichloroethene	91	70-130
1,2-Dichloropropane	80	70-130
1,4-Dioxane	92	70-130
Bromodichloromethane	90	70-130
cis-1,3-Dichloropropene	90	70-130
4-Methyl-2-pentanone	83	70-130
Toluene	85	70-130
trans-1,3-Dichloropropene	82	70-130
1,1,2-Trichloroethane	82	70-130
Tetrachloroethene	96	70-130
2-Hexanone	82	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1406441-07BB

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v070807	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/8/14 01:49 PM

Compound	%Recovery	Method Limits
Dibromochloromethane	101	70-130
1,2-Dibromoethane (EDB)	88	70-130
Chlorobenzene	85	70-130
Ethyl Benzene	87	70-130
m,p-Xylene	86	70-130
o-Xylene	88	70-130
Styrene	88	70-130
Bromoform	109	70-130
Cumene	86	70-130
1,1,2,2-Tetrachloroethane	80	70-130
Propylbenzene	85	70-130
4-Ethyltoluene	92	70-130
1,3,5-Trimethylbenzene	84	70-130
1,2,4-Trimethylbenzene	89	70-130
1,3-Dichlorobenzene	91	70-130
1,4-Dichlorobenzene	89	70-130
alpha-Chlorotoluene	88	70-130
1,2-Dichlorobenzene	87	70-130
1,2,4-Trichlorobenzene	114	70-130
Hexachlorobutadiene	88	70-130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	116	70-130