



Air Toxics

Sample Transportation Notice

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

Page 1 of 1

Project Manager Michael Parris

Collected by: (Print and Sign) Michael Parris

Company MBNP

Email Michael.Parris@mbnp.com

Address PO Box 176 City JE State MO Zip 65109

Phone 513 526-3918 Fax \_\_\_\_\_

Project Info:

P.O. # 35P400007

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

Project Name Bridgeton LP

Turn Around Time:  Normal  Rush

Lab Use Only Pressurized by: \_\_\_\_\_

Date: \_\_\_\_\_

Pressurization Gas: \_\_\_\_\_

specify 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)

O1A UA (1411201)

34331

4/8/14

1209 1037

To-15

-30

-7

O2A DA (1411202)

33878

4/8/14

1218 1048

To-15

-30

-7.5

O3A DA (1411203)

5760

4/8/14

1225 1701

To-15

-30

-9

Relinquished by: (signature) Michael Parris Date/Time 4/9/14 0755

Received by: (signature) Emily M. Skelton Date/Time 4/14/14 1055

Relinquished by: (signature) \_\_\_\_\_ Date/Time \_\_\_\_\_

Received by: (signature) \_\_\_\_\_ Date/Time \_\_\_\_\_

Relinquished by: (signature) \_\_\_\_\_ Date/Time \_\_\_\_\_

Received by: (signature) \_\_\_\_\_ Date/Time \_\_\_\_\_

Notes:

Shipped via UPS  
Tracking# 1ZU727890343786587

Shipper Name UPS

Air Bill # \_\_\_\_\_

Temp (°C) NA

Condition Good

Custody Seals Intact?  Yes  No  None

Work Order # 1407238

Lab Use Only

7/28/2014

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

Jefferson City MO 65109

Project Name: Bridgeton LF

Project #:

Workorder #: 1407238

Dear Mr. Dennis Schroeder

The following report includes the data for the above referenced project for sample(s) received on 7/14/2014 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 #: 1407238**

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>	3ESP4000007
<b>FAX:</b>	573-526-3350	<b>PROJECT #</b>	Bridgeton LF
<b>DATE RECEIVED:</b>	07/14/2014	<b>CONTACT:</b>	Brian Whittaker
<b>DATE COMPLETED:</b>	07/28/2014		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	U1 (1411201)	Modified TO-15	8.2 "Hg	5.3 psi
02A	D1 (1411202)	Modified TO-15	7.6 "Hg	5.3 psi
03A	D2 (1411203)	Modified TO-15	9.2 "Hg	5.1 psi
04A	Lab Blank	Modified TO-15	NA	NA
05A	CCV	Modified TO-15	NA	NA
06A	LCS	Modified TO-15	NA	NA
06AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:   
 \_\_\_\_\_  
 Technical Director

DATE: 07/28/14

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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**LABORATORY NARRATIVE**  
**Modified TO-15**  
**Missouri Dept. of Natural Resources**  
**Workorder# 1407238**

Three 6 Liter Summa Canister (100% Certified) samples were received on July 14, 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	</=30% RSD with 2 compounds allowed out to < 40% RSD	</=30% RSD with 4 compounds allowed out to < 40% RSD
Blank and standards	Zero Air	UHP Nitrogen provides a higher purity gas matrix than zero air

**Receiving Notes**

There were no receiving discrepancies.

**Analytical Notes**

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

**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: U1 (1411201)**

**Lab ID#: 1407238-01A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.47	0.92	2.3
Freon 11	0.19	0.20	1.0	1.1
Ethanol	0.94	1.8	1.8	3.3
Acetone	0.94	7.0	2.2	17
2-Propanol	0.94	1.1	2.3	2.7
Methylene Chloride	0.37	0.46	1.3	1.6

**Client Sample ID: D1 (1411202)**

**Lab ID#: 1407238-02A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.44	0.90	2.2
Freon 11	0.18	0.22	1.0	1.2
Ethanol	0.91	2.4	1.7	4.5
Acetone	0.91	5.5	2.2	13
Methylene Chloride	0.36	0.46	1.3	1.6
Hexane	0.18	0.17 J	0.64	0.62 J
Toluene	0.18	0.21	0.68	0.80

**Client Sample ID: D2 (1411203)**

**Lab ID#: 1407238-03A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.44	0.96	2.2
Ethanol	0.97	2.6	1.8	4.9
Acetone	0.97	8.6	2.3	20
Methylene Chloride	0.39	0.41	1.3	1.4
2-Butanone (Methyl Ethyl Ketone)	0.97	1.9	2.9	5.6



Air Toxics

Client Sample ID: U1 (1411201)

Lab ID#: 1407238-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v072511	Date of Collection:	7/8/14 4:37:00 PM
Dil. Factor:	1.87	Date of Analysis:	7/25/14 04:36 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.47	0.92	2.3
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	0.20	1.0	1.1
Ethanol	0.94	1.8	1.8	3.3
Freon 113	0.19	Not Detected	1.4	Not Detected
1,1-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Acetone	0.94	7.0	2.2	17
2-Propanol	0.94	1.1	2.3	2.7
Carbon Disulfide	0.94	Not Detected	2.9	Not Detected
3-Chloropropene	0.94	Not Detected	2.9	Not Detected
Methylene Chloride	0.37	0.46	1.3	1.6
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



Air Toxics

Client Sample ID: U1 (1411201)

Lab ID#: 1407238-01A

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

File Name:	v072511	Date of Collection:	7/8/14 4:37:00 PM
Dil. Factor:	1.87	Date of Analysis:	7/25/14 04:36 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

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

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



Air Toxics

Client Sample ID: D1 (1411202)

Lab ID#: 1407238-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v072512	Date of Collection:	7/8/14 4:48:00 PM
Dil. Factor:	1.82	Date of Analysis:	7/25/14 05:25 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.44	0.90	2.2
Freon 114	0.18	Not Detected	1.3	Not Detected
Chloromethane	0.91	Not Detected	1.9	Not Detected
Vinyl Chloride	0.18	Not Detected	0.46	Not Detected
1,3-Butadiene	0.18	Not Detected	0.40	Not Detected
Bromomethane	0.91	Not Detected	3.5	Not Detected
Chloroethane	0.91	Not Detected	2.4	Not Detected
Freon 11	0.18	0.22	1.0	1.2
Ethanol	0.91	2.4	1.7	4.5
Freon 113	0.18	Not Detected	1.4	Not Detected
1,1-Dichloroethene	0.18	Not Detected	0.72	Not Detected
Acetone	0.91	5.5	2.2	13
2-Propanol	0.91	Not Detected	2.2	Not Detected
Carbon Disulfide	0.91	Not Detected	2.8	Not Detected
3-Chloropropene	0.91	Not Detected	2.8	Not Detected
Methylene Chloride	0.36	0.46	1.3	1.6
Methyl tert-butyl ether	0.18	Not Detected	0.66	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.72	Not Detected
Hexane	0.18	0.17 J	0.64	0.62 J
1,1-Dichloroethane	0.18	Not Detected	0.74	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.91	Not Detected	2.7	Not Detected
cis-1,2-Dichloroethene	0.18	Not Detected	0.72	Not Detected
Tetrahydrofuran	0.91	Not Detected	2.7	Not Detected
Chloroform	0.18	Not Detected	0.89	Not Detected
1,1,1-Trichloroethane	0.18	Not Detected	0.99	Not Detected
Cyclohexane	0.18	Not Detected	0.63	Not Detected
Carbon Tetrachloride	0.18	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.91	Not Detected	4.2	Not Detected
Benzene	0.18	Not Detected	0.58	Not Detected
1,2-Dichloroethane	0.18	Not Detected	0.74	Not Detected
Heptane	0.18	Not Detected	0.74	Not Detected
Trichloroethene	0.18	Not Detected	0.98	Not Detected
1,2-Dichloropropane	0.18	Not Detected	0.84	Not Detected
1,4-Dioxane	0.18	Not Detected	0.66	Not Detected
Bromodichloromethane	0.18	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.18	Not Detected	0.83	Not Detected
4-Methyl-2-pentanone	0.18	Not Detected	0.74	Not Detected
Toluene	0.18	0.21	0.68	0.80
trans-1,3-Dichloropropene	0.18	Not Detected	0.83	Not Detected
1,1,2-Trichloroethane	0.18	Not Detected	0.99	Not Detected
Tetrachloroethene	0.18	Not Detected	1.2	Not Detected
2-Hexanone	0.91	Not Detected	3.7	Not Detected





Client Sample ID: D1 (1411202)

Lab ID#: 1407238-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v072512	Date of Collection:	7/8/14 4:48:00 PM
Dil. Factor:	1.82	Date of Analysis:	7/25/14 05:25 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.18	Not Detected	1.6	Not Detected
1,2-Dibromoethane (EDB)	0.18	Not Detected	1.4	Not Detected
Chlorobenzene	0.18	Not Detected	0.84	Not Detected
Ethyl Benzene	0.18	Not Detected	0.79	Not Detected
m,p-Xylene	0.18	Not Detected	0.79	Not Detected
o-Xylene	0.18	Not Detected	0.79	Not Detected
Styrene	0.18	Not Detected	0.78	Not Detected
Bromoform	0.18	Not Detected	1.9	Not Detected
Cumene	0.18	Not Detected	0.89	Not Detected
1,1,2,2-Tetrachloroethane	0.18	Not Detected	1.2	Not Detected
Propylbenzene	0.18	Not Detected	0.89	Not Detected
4-Ethyltoluene	0.18	Not Detected	0.89	Not Detected
1,3,5-Trimethylbenzene	0.18	Not Detected	0.89	Not Detected
1,2,4-Trimethylbenzene	0.18	Not Detected	0.89	Not Detected
1,3-Dichlorobenzene	0.18	Not Detected	1.1	Not Detected
1,4-Dichlorobenzene	0.18	Not Detected	1.1	Not Detected
alpha-Chlorotoluene	0.18	Not Detected	0.94	Not Detected
1,2-Dichlorobenzene	0.18	Not Detected	1.1	Not Detected
1,2,4-Trichlorobenzene	0.91	Not Detected	6.8	Not Detected
Hexachlorobutadiene	0.91	Not Detected	9.7	Not Detected

J = Estimated value.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	97	70-130



Air Toxics

Client Sample ID: D2 (1411203)

Lab ID#: 1407238-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v072513	Date of Collection:	7/8/14 5:01:00 PM
Dil. Factor:	1.94	Date of Analysis:	7/25/14 06:27 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.44	0.96	2.2
Freon 114	0.19	Not Detected	1.4	Not Detected
Chloromethane	0.97	Not Detected	2.0	Not Detected
Vinyl Chloride	0.19	Not Detected	0.50	Not Detected
1,3-Butadiene	0.19	Not Detected	0.43	Not Detected
Bromomethane	0.97	Not Detected	3.8	Not Detected
Chloroethane	0.97	Not Detected	2.6	Not Detected
Freon 11	0.19	Not Detected	1.1	Not Detected
Ethanol	0.97	2.6	1.8	4.9
Freon 113	0.19	Not Detected	1.5	Not Detected
1,1-Dichloroethene	0.19	Not Detected	0.77	Not Detected
Acetone	0.97	8.6	2.3	20
2-Propanol	0.97	Not Detected	2.4	Not Detected
Carbon Disulfide	0.97	Not Detected	3.0	Not Detected
3-Chloropropene	0.97	Not Detected	3.0	Not Detected
Methylene Chloride	0.39	0.41	1.3	1.4
Methyl tert-butyl ether	0.19	Not Detected	0.70	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.77	Not Detected
Hexane	0.19	Not Detected	0.68	Not Detected
1,1-Dichloroethane	0.19	Not Detected	0.78	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.97	1.9	2.9	5.6
cis-1,2-Dichloroethene	0.19	Not Detected	0.77	Not Detected
Tetrahydrofuran	0.97	Not Detected	2.9	Not Detected
Chloroform	0.19	Not Detected	0.95	Not Detected
1,1,1-Trichloroethane	0.19	Not Detected	1.0	Not Detected
Cyclohexane	0.19	Not Detected	0.67	Not Detected
Carbon Tetrachloride	0.19	Not Detected	1.2	Not Detected
2,2,4-Trimethylpentane	0.97	Not Detected	4.5	Not Detected
Benzene	0.19	Not Detected	0.62	Not Detected
1,2-Dichloroethane	0.19	Not Detected	0.78	Not Detected
Heptane	0.19	Not Detected	0.80	Not Detected
Trichloroethene	0.19	Not Detected	1.0	Not Detected
1,2-Dichloropropane	0.19	Not Detected	0.90	Not Detected
1,4-Dioxane	0.19	Not Detected	0.70	Not Detected
Bromodichloromethane	0.19	Not Detected	1.3	Not Detected
cis-1,3-Dichloropropene	0.19	Not Detected	0.88	Not Detected
4-Methyl-2-pentanone	0.19	Not Detected	0.79	Not Detected
Toluene	0.19	Not Detected	0.73	Not Detected
trans-1,3-Dichloropropene	0.19	Not Detected	0.88	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	0.97	Not Detected	4.0	Not Detected



Air Toxics

Client Sample ID: D2 (1411203)

Lab ID#: 1407238-03A

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

<b>File Name:</b>	<b>v072513</b>	<b>Date of Collection:</b> 7/8/14 5:01:00 PM
<b>Dil. Factor:</b>	<b>1.94</b>	<b>Date of Analysis:</b> 7/25/14 06:27 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	1.5	Not Detected
Chlorobenzene	0.19	Not Detected	0.89	Not Detected
Ethyl Benzene	0.19	Not Detected	0.84	Not Detected
m,p-Xylene	0.19	Not Detected	0.84	Not Detected
o-Xylene	0.19	Not Detected	0.84	Not Detected
Styrene	0.19	Not Detected	0.83	Not Detected
Bromoform	0.19	Not Detected	2.0	Not Detected
Cumene	0.19	Not Detected	0.95	Not Detected
1,1,2,2-Tetrachloroethane	0.19	Not Detected	1.3	Not Detected
Propylbenzene	0.19	Not Detected	0.95	Not Detected
4-Ethyltoluene	0.19	Not Detected	0.95	Not Detected
1,3,5-Trimethylbenzene	0.19	Not Detected	0.95	Not Detected
1,2,4-Trimethylbenzene	0.19	Not Detected	0.95	Not Detected
1,3-Dichlorobenzene	0.19	Not Detected	1.2	Not Detected
1,4-Dichlorobenzene	0.19	Not Detected	1.2	Not Detected
alpha-Chlorotoluene	0.19	Not Detected	1.0	Not Detected
1,2-Dichlorobenzene	0.19	Not Detected	1.2	Not Detected
1,2,4-Trichlorobenzene	0.97	Not Detected	7.2	Not Detected
Hexachlorobutadiene	0.97	Not Detected	10	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	95	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1407238-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v072505	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/25/14 12:19 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#: 1407238-04A

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

<b>File Name:</b>	<b>v072505</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 7/25/14 12:19 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	96	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	96	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 1407238-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v072502	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/25/14 10:13 AM

Compound	%Recovery
Freon 12	96
Freon 114	102
Chloromethane	110
Vinyl Chloride	104
1,3-Butadiene	103
Bromomethane	97
Chloroethane	101
Freon 11	101
Ethanol	81
Freon 113	106
1,1-Dichloroethene	97
Acetone	99
2-Propanol	103
Carbon Disulfide	98
3-Chloropropene	96
Methylene Chloride	95
Methyl tert-butyl ether	98
trans-1,2-Dichloroethene	100
Hexane	99
1,1-Dichloroethane	101
2-Butanone (Methyl Ethyl Ketone)	102
cis-1,2-Dichloroethene	100
Tetrahydrofuran	104
Chloroform	97
1,1,1-Trichloroethane	96
Cyclohexane	95
Carbon Tetrachloride	78
2,2,4-Trimethylpentane	101
Benzene	101
1,2-Dichloroethane	105
Heptane	100
Trichloroethene	101
1,2-Dichloropropane	100
1,4-Dioxane	102
Bromodichloromethane	97
cis-1,3-Dichloropropene	102
4-Methyl-2-pentanone	110
Toluene	103
trans-1,3-Dichloropropene	104
1,1,2-Trichloroethane	100
Tetrachloroethene	110
2-Hexanone	106

Client Sample ID: CCV

Lab ID#: 1407238-05A

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

<b>File Name:</b>	<b>v072502</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 7/25/14 10:13 AM

<b>Compound</b>	<b>%Recovery</b>
Dibromochloromethane	109
1,2-Dibromoethane (EDB)	106
Chlorobenzene	105
Ethyl Benzene	106
m,p-Xylene	106
o-Xylene	106
Styrene	103
Bromoform	111
Cumene	112
1,1,2,2-Tetrachloroethane	107
Propylbenzene	112
4-Ethyltoluene	109
1,3,5-Trimethylbenzene	103
1,2,4-Trimethylbenzene	96
1,3-Dichlorobenzene	112
1,4-Dichlorobenzene	103
alpha-Chlorotoluene	110
1,2-Dichlorobenzene	111
1,2,4-Trichlorobenzene	103
Hexachlorobutadiene	115

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	104	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1407238-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v072503	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/25/14 10:53 AM

Compound	%Recovery	Method Limits
Freon 12	95	70-130
Freon 114	101	70-130
Chloromethane	109	70-130
Vinyl Chloride	101	70-130
1,3-Butadiene	99	70-130
Bromomethane	94	70-130
Chloroethane	100	70-130
Freon 11	99	70-130
Ethanol	82	70-130
Freon 113	116	70-130
1,1-Dichloroethene	106	70-130
Acetone	98	70-130
2-Propanol	97	70-130
Carbon Disulfide	88	70-130
3-Chloropropene	85	70-130
Methylene Chloride	102	70-130
Methyl tert-butyl ether	98	70-130
trans-1,2-Dichloroethene	85	70-130
Hexane	100	70-130
1,1-Dichloroethane	102	70-130
2-Butanone (Methyl Ethyl Ketone)	101	70-130
cis-1,2-Dichloroethene	110	70-130
Tetrahydrofuran	102	70-130
Chloroform	98	70-130
1,1,1-Trichloroethane	93	70-130
Cyclohexane	96	70-130
Carbon Tetrachloride	62 Q	70-130
2,2,4-Trimethylpentane	101	70-130
Benzene	98	70-130
1,2-Dichloroethane	99	70-130
Heptane	99	70-130
Trichloroethene	97	70-130
1,2-Dichloropropane	95	70-130
1,4-Dioxane	102	70-130
Bromodichloromethane	96	70-130
cis-1,3-Dichloropropene	100	70-130
4-Methyl-2-pentanone	107	70-130
Toluene	98	70-130
trans-1,3-Dichloropropene	91	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	105	70-130
2-Hexanone	103	70-130



Client Sample ID: LCS

Lab ID#: 1407238-06A

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

<b>File Name:</b>	<b>v072503</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 7/25/14 10:53 AM

<b>Compound</b>	<b>%Recovery</b>	<b>Method Limits</b>
Dibromochloromethane	104	70-130
1,2-Dibromoethane (EDB)	99	70-130
Chlorobenzene	98	70-130
Ethyl Benzene	99	70-130
m,p-Xylene	101	70-130
o-Xylene	98	70-130
Styrene	98	70-130
Bromoform	103	70-130
Cumene	108	70-130
1,1,2,2-Tetrachloroethane	99	70-130
Propylbenzene	108	70-130
4-Ethyltoluene	109	70-130
1,3,5-Trimethylbenzene	100	70-130
1,2,4-Trimethylbenzene	96	70-130
1,3-Dichlorobenzene	103	70-130
1,4-Dichlorobenzene	97	70-130
alpha-Chlorotoluene	112	70-130
1,2-Dichlorobenzene	101	70-130
1,2,4-Trichlorobenzene	92	70-130
Hexachlorobutadiene	97	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	98	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	104	70-130



Air Toxics

Client Sample ID: LCS D

Lab ID#: 1407238-06AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v072504	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/25/14 11:31 AM

Compound	%Recovery	Method Limits
Freon 12	94	70-130
Freon 114	100	70-130
Chloromethane	107	70-130
Vinyl Chloride	100	70-130
1,3-Butadiene	96	70-130
Bromomethane	95	70-130
Chloroethane	97	70-130
Freon 11	99	70-130
Ethanol	81	70-130
Freon 113	114	70-130
1,1-Dichloroethene	103	70-130
Acetone	94	70-130
2-Propanol	97	70-130
Carbon Disulfide	87	70-130
3-Chloropropene	86	70-130
Methylene Chloride	99	70-130
Methyl tert-butyl ether	96	70-130
trans-1,2-Dichloroethene	84	70-130
Hexane	99	70-130
1,1-Dichloroethane	99	70-130
2-Butanone (Methyl Ethyl Ketone)	99	70-130
cis-1,2-Dichloroethene	108	70-130
Tetrahydrofuran	100	70-130
Chloroform	96	70-130
1,1,1-Trichloroethane	94	70-130
Cyclohexane	98	70-130
Carbon Tetrachloride	61 Q	70-130
2,2,4-Trimethylpentane	101	70-130
Benzene	98	70-130
1,2-Dichloroethane	100	70-130
Heptane	99	70-130
Trichloroethene	96	70-130
1,2-Dichloropropane	95	70-130
1,4-Dioxane	100	70-130
Bromodichloromethane	95	70-130
cis-1,3-Dichloropropene	100	70-130
4-Methyl-2-pentanone	107	70-130
Toluene	98	70-130
trans-1,3-Dichloropropene	92	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	106	70-130
2-Hexanone	103	70-130

Client Sample ID: LCSD

Lab ID#: 1407238-06AA

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

<b>File Name:</b>	<b>v072504</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 7/25/14 11:31 AM

<b>Compound</b>	<b>%Recovery</b>	<b>Method Limits</b>
Dibromochloromethane	104	70-130
1,2-Dibromoethane (EDB)	98	70-130
Chlorobenzene	99	70-130
Ethyl Benzene	102	70-130
m,p-Xylene	103	70-130
o-Xylene	99	70-130
Styrene	103	70-130
Bromoform	105	70-130
Cumene	110	70-130
1,1,2,2-Tetrachloroethane	100	70-130
Propylbenzene	107	70-130
4-Ethyltoluene	105	70-130
1,3,5-Trimethylbenzene	99	70-130
1,2,4-Trimethylbenzene	93	70-130
1,3-Dichlorobenzene	103	70-130
1,4-Dichlorobenzene	95	70-130
alpha-Chlorotoluene	111	70-130
1,2-Dichlorobenzene	102	70-130
1,2,4-Trichlorobenzene	91	70-130
Hexachlorobutadiene	97	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	95	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	105	70-130