



Air Toxics

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager

Michael Perris

Collected by: (Print and Sign)

Michael Perris

Company

NO DNR

Email *Michael.perris@dhr.nm.gov*

Address

PO Box 176

City *Leavenworth* State *NO* Zip *65502*

Phone

(543) 526 3918

Fax

Project Info:

P.O. #

3ESP400007

Project #

Project Name

Project Name

Turn Around Time:

☒ Normal

☐ Rush

Lab Use Only Pressurized by:

Date:

Pressurization Gas:

specify N₂ 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

b1 (1523335)

34502

6/9/15

1025-1510

To-15

-30

-8

02A

b2 (1523336)

23986

6/9/15

1035-1550

To-15

-30

-8

03A

u1 (1523337)

13863

6/9/15

1045-1540

To-15

-21.5

-6

Manufactured vacuum

33944

DO NOT ANALYZE

-25

Relinquished by: (signature)

Date/Time

Received by: (signature)

Date/Time

Notes:

Relinquished by: (signature)

Date/Time

Received by: (signature)

Date/Time

Relinquished by: (signature)

Date/Time

Received by: (signature)

Date/Time

Notes:

Lab Shipper Name

Air Bill #

Temp (°C)

Condition

Custody Seals Intact?

Work Order #

Use Only

UPS

N/A

Good

☒ Yes

☐ No

☐ None

1506296

*Shipped via UPS
Tracking # 1Z672785034439107*

6/29/2015

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

Jefferson City MO 65109

Project Name: Bridgeton LF

Project #:

Workorder #: 1506296

Dear Mr. Dennis Schroeder

The following report includes the data for the above referenced project for sample(s) received on 6/16/2015 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

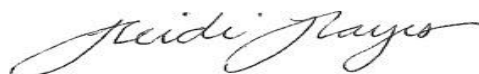
WORK ORDER #: 1506296

Work Order Summary

CLIENT:	Mr. Dennis Schroeder Missouri Dept. of Natural Resources 2710 West Main Jefferson City, MO 65109	BILL TO:	Accounts Payable Missouri Dept. of Natural Resources P.O Box 176 Jefferson City, MO 65102
PHONE:	573-526-4428	P.O. #	3ESP4000007
FAX:	573-526-3350	PROJECT #	Bridgeton LF
DATE RECEIVED:	06/16/2015	CONTACT:	Brian Whittaker
DATE COMPLETED:	06/29/2015		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	D1 (152335)	Modified TO-15	8 "Hg	5.1 psi
02A	D2 (152336)	Modified TO-15	7.3 "Hg	5 psi
03A	U1 (152337)	Modified TO-15	6.9 "Hg	5 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: 06/29/15

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

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

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

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
Missouri Dept. of Natural Resources
Workorder# 1506296

Three 6 Liter Summa Canister (100% Certified) samples were received on June 16, 2015. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

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

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

Requirement	TO-15	ATL Modifications
Initial Calibration	$\leq 30\%$ 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

The Chain of Custody (COC) information for sample D2 (152336) did not match the entry on the sample tag with regard to sample identification. The information on the COC was used to process and report the sample.

Analytical Notes

Due to the MDL study performed on instrument MSD-V, the reporting limit for alpha-Chlorotoluene was raised from 0.10 ppbv to 0.50 ppbv.

The Relative Percent Difference (RPD) of the LCS/LCSD exceeded acceptance limits for Vinyl chloride, 1,3-Butadiene, and 2-Propanol.

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 (152335)

Lab ID#: 1506296-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.44	0.91	2.2
Freon 11	0.18	0.24	1.0	1.3
Ethanol	0.92	6.2	1.7	12
Acetone	0.92	5.1	2.2	12
Hexane	0.18	0.18 J	0.65	0.62 J
Toluene	0.18	0.26	0.69	0.98

Client Sample ID: D2 (152336)

Lab ID#: 1506296-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.46	0.88	2.3
Freon 11	0.18	0.25	0.99	1.4
Ethanol	0.88	5.9	1.7	11
Acetone	0.88	5.5	2.1	13
Hexane	0.18	0.18	0.62	0.63
2-Butanone (Methyl Ethyl Ketone)	0.88	0.98	2.6	2.9
Benzene	0.18	0.34	0.56	1.1
Toluene	0.18	0.47	0.67	1.8

Client Sample ID: U1 (152337)

Lab ID#: 1506296-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.40	0.86	2.0
1,3-Butadiene	0.17	0.25	0.38	0.56
Freon 11	0.17	0.23	0.98	1.3
Ethanol	0.87	5.3	1.6	10
Acetone	0.87	5.7	2.1	14
Methylene Chloride	0.35	0.35	1.2	1.2
Hexane	0.17	0.30	0.61	1.0
2-Butanone (Methyl Ethyl Ketone)	0.87	0.93	2.6	2.7
Benzene	0.17	0.61	0.56	2.0

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

Client Sample ID: U1 (152337)

Lab ID#: 1506296-03A

Heptane	0.17	0.17 J	0.71	0.70 J
Toluene	0.17	0.76	0.66	2.9



Air Toxics

Client Sample ID: D1 (152335)

Lab ID#: 1506296-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061807	Date of Collection:	6/9/15 3:10:00 PM
Dil. Factor:	1.84	Date of Analysis:	6/18/15 12:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.44	0.91	2.2
Freon 114	0.18	Not Detected	1.3	Not Detected
Chloromethane	0.92	Not Detected	1.9	Not Detected
Vinyl Chloride	0.18	Not Detected	0.47	Not Detected
1,3-Butadiene	0.18	Not Detected	0.41	Not Detected
Bromomethane	0.92	Not Detected	3.6	Not Detected
Chloroethane	0.92	Not Detected	2.4	Not Detected
Freon 11	0.18	0.24	1.0	1.3
Ethanol	0.92	6.2	1.7	12
Freon 113	0.18	Not Detected	1.4	Not Detected
1,1-Dichloroethene	0.18	Not Detected	0.73	Not Detected
Acetone	0.92	5.1	2.2	12
2-Propanol	0.92	Not Detected	2.3	Not Detected
Carbon Disulfide	0.92	Not Detected	2.9	Not Detected
3-Chloropropene	0.92	Not Detected	2.9	Not Detected
Methylene Chloride	0.37	Not Detected	1.3	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.66	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.73	Not Detected
Hexane	0.18	0.18 J	0.65	0.62 J
1,1-Dichloroethane	0.18	Not Detected	0.74	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.92	Not Detected	2.7	Not Detected
cis-1,2-Dichloroethene	0.18	Not Detected	0.73	Not Detected
Tetrahydrofuran	0.92	Not Detected	2.7	Not Detected
Chloroform	0.18	Not Detected	0.90	Not Detected
1,1,1-Trichloroethane	0.18	Not Detected	1.0	Not Detected
Cyclohexane	0.18	Not Detected	0.63	Not Detected
Carbon Tetrachloride	0.18	Not Detected	1.2	Not Detected
2,2,4-Trimethylpentane	0.92	Not Detected	4.3	Not Detected
Benzene	0.18	Not Detected	0.59	Not Detected
1,2-Dichloroethane	0.18	Not Detected	0.74	Not Detected
Heptane	0.18	Not Detected	0.75	Not Detected
Trichloroethene	0.18	Not Detected	0.99	Not Detected
1,2-Dichloropropane	0.18	Not Detected	0.85	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	0.84	Not Detected
4-Methyl-2-pentanone	0.18	Not Detected	0.75	Not Detected
Toluene	0.18	0.26	0.69	0.98
trans-1,3-Dichloropropene	0.18	Not Detected	0.84	Not Detected
1,1,2-Trichloroethane	0.18	Not Detected	1.0	Not Detected
Tetrachloroethene	0.18	Not Detected	1.2	Not Detected
2-Hexanone	0.92	Not Detected	3.8	Not Detected



Air Toxics

Client Sample ID: D1 (152335)

Lab ID#: 1506296-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061807	Date of Collection:	6/9/15 3:10:00 PM
Dil. Factor:	1.84	Date of Analysis:	6/18/15 12:18 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	0.85	Not Detected
Ethyl Benzene	0.18	Not Detected	0.80	Not Detected
m,p-Xylene	0.18	Not Detected	0.80	Not Detected
o-Xylene	0.18	Not Detected	0.80	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	0.90	Not Detected
1,1,2,2-Tetrachloroethane	0.18	Not Detected	1.3	Not Detected
Propylbenzene	0.18	Not Detected	0.90	Not Detected
4-Ethyltoluene	0.18	Not Detected	0.90	Not Detected
1,3,5-Trimethylbenzene	0.18	Not Detected	0.90	Not Detected
1,2,4-Trimethylbenzene	0.18	Not Detected	0.90	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	0.92	Not Detected	4.8	Not Detected
1,2-Dichlorobenzene	0.18	Not Detected	1.1	Not Detected
1,2,4-Trichlorobenzene	0.92	Not Detected	6.8	Not Detected
Hexachlorobutadiene	0.92	Not Detected	9.8	Not Detected

J = Estimated value.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	90	70-130



Air Toxics

Client Sample ID: D2 (152336)

Lab ID#: 1506296-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061808	Date of Collection:	6/9/15 3:50:00 PM
Dil. Factor:	1.77	Date of Analysis:	6/18/15 01:25 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.46	0.88	2.3
Freon 114	0.18	Not Detected	1.2	Not Detected
Chloromethane	0.88	Not Detected	1.8	Not Detected
Vinyl Chloride	0.18	Not Detected	0.45	Not Detected
1,3-Butadiene	0.18	Not Detected	0.39	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.18	0.25	0.99	1.4
Ethanol	0.88	5.9	1.7	11
Freon 113	0.18	Not Detected	1.4	Not Detected
1,1-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Acetone	0.88	5.5	2.1	13
2-Propanol	0.88	Not Detected	2.2	Not Detected
Carbon Disulfide	0.88	Not Detected	2.8	Not Detected
3-Chloropropene	0.88	Not Detected	2.8	Not Detected
Methylene Chloride	0.35	Not Detected	1.2	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.64	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Hexane	0.18	0.18	0.62	0.63
1,1-Dichloroethane	0.18	Not Detected	0.72	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	0.98	2.6	2.9
cis-1,2-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.18	Not Detected	0.86	Not Detected
1,1,1-Trichloroethane	0.18	Not Detected	0.96	Not Detected
Cyclohexane	0.18	Not Detected	0.61	Not Detected
Carbon Tetrachloride	0.18	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.88	Not Detected	4.1	Not Detected
Benzene	0.18	0.34	0.56	1.1
1,2-Dichloroethane	0.18	Not Detected	0.72	Not Detected
Heptane	0.18	Not Detected	0.72	Not Detected
Trichloroethene	0.18	Not Detected	0.95	Not Detected
1,2-Dichloropropane	0.18	Not Detected	0.82	Not Detected
1,4-Dioxane	0.18	Not Detected	0.64	Not Detected
Bromodichloromethane	0.18	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.18	Not Detected	0.80	Not Detected
4-Methyl-2-pentanone	0.18	Not Detected	0.72	Not Detected
Toluene	0.18	0.47	0.67	1.8
trans-1,3-Dichloropropene	0.18	Not Detected	0.80	Not Detected
1,1,2-Trichloroethane	0.18	Not Detected	0.96	Not Detected
Tetrachloroethene	0.18	Not Detected	1.2	Not Detected
2-Hexanone	0.88	Not Detected	3.6	Not Detected



Air Toxics

Client Sample ID: D2 (152336)

Lab ID#: 1506296-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061808	Date of Collection:	6/9/15 3:50:00 PM
Dil. Factor:	1.77	Date of Analysis:	6/18/15 01:25 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.18	Not Detected	1.5	Not Detected
1,2-Dibromoethane (EDB)	0.18	Not Detected	1.4	Not Detected
Chlorobenzene	0.18	Not Detected	0.81	Not Detected
Ethyl Benzene	0.18	Not Detected	0.77	Not Detected
m,p-Xylene	0.18	Not Detected	0.77	Not Detected
o-Xylene	0.18	Not Detected	0.77	Not Detected
Styrene	0.18	Not Detected	0.75	Not Detected
Bromoform	0.18	Not Detected	1.8	Not Detected
Cumene	0.18	Not Detected	0.87	Not Detected
1,1,2,2-Tetrachloroethane	0.18	Not Detected	1.2	Not Detected
Propylbenzene	0.18	Not Detected	0.87	Not Detected
4-Ethyltoluene	0.18	Not Detected	0.87	Not Detected
1,3,5-Trimethylbenzene	0.18	Not Detected	0.87	Not Detected
1,2,4-Trimethylbenzene	0.18	Not Detected	0.87	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	0.88	Not Detected	4.6	Not Detected
1,2-Dichlorobenzene	0.18	Not Detected	1.1	Not Detected
1,2,4-Trichlorobenzene	0.88	Not Detected	6.6	Not Detected
Hexachlorobutadiene	0.88	Not Detected	9.4	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	89	70-130

Client Sample ID: U1 (152337)

Lab ID#: 1506296-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061809	Date of Collection:	6/9/15 3:40:00 PM
Dil. Factor:	1.74	Date of Analysis:	6/18/15 02:08 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.40	0.86	2.0
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.87	Not Detected	1.8	Not Detected
Vinyl Chloride	0.17	Not Detected	0.44	Not Detected
1,3-Butadiene	0.17	0.25	0.38	0.56
Bromomethane	0.87	Not Detected	3.4	Not Detected
Chloroethane	0.87	Not Detected	2.3	Not Detected
Freon 11	0.17	0.23	0.98	1.3
Ethanol	0.87	5.3	1.6	10
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.69	Not Detected
Acetone	0.87	5.7	2.1	14
2-Propanol	0.87	Not Detected	2.1	Not Detected
Carbon Disulfide	0.87	Not Detected	2.7	Not Detected
3-Chloropropene	0.87	Not Detected	2.7	Not Detected
Methylene Chloride	0.35	0.35	1.2	1.2
Methyl tert-butyl ether	0.17	Not Detected	0.63	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.69	Not Detected
Hexane	0.17	0.30	0.61	1.0
1,1-Dichloroethane	0.17	Not Detected	0.70	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.87	0.93	2.6	2.7
cis-1,2-Dichloroethene	0.17	Not Detected	0.69	Not Detected
Tetrahydrofuran	0.87	Not Detected	2.6	Not Detected
Chloroform	0.17	Not Detected	0.85	Not Detected
1,1,1-Trichloroethane	0.17	Not Detected	0.95	Not Detected
Cyclohexane	0.17	Not Detected	0.60	Not Detected
Carbon Tetrachloride	0.17	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.87	Not Detected	4.1	Not Detected
Benzene	0.17	0.61	0.56	2.0
1,2-Dichloroethane	0.17	Not Detected	0.70	Not Detected
Heptane	0.17	0.17 J	0.71	0.70 J
Trichloroethene	0.17	Not Detected	0.94	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.80	Not Detected
1,4-Dioxane	0.17	Not Detected	0.63	Not Detected
Bromodichloromethane	0.17	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.79	Not Detected
4-Methyl-2-pentanone	0.17	Not Detected	0.71	Not Detected
Toluene	0.17	0.76	0.66	2.9
trans-1,3-Dichloropropene	0.17	Not Detected	0.79	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.95	Not Detected
Tetrachloroethene	0.17	Not Detected	1.2	Not Detected
2-Hexanone	0.87	Not Detected	3.6	Not Detected

Client Sample ID: U1 (152337)

Lab ID#: 1506296-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061809	Date of Collection:	6/9/15 3:40:00 PM
Dil. Factor:	1.74	Date of Analysis:	6/18/15 02:08 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.17	Not Detected	1.5	Not Detected
1,2-Dibromoethane (EDB)	0.17	Not Detected	1.3	Not Detected
Chlorobenzene	0.17	Not Detected	0.80	Not Detected
Ethyl Benzene	0.17	Not Detected	0.76	Not Detected
m,p-Xylene	0.17	Not Detected	0.76	Not Detected
o-Xylene	0.17	Not Detected	0.76	Not Detected
Styrene	0.17	Not Detected	0.74	Not Detected
Bromoform	0.17	Not Detected	1.8	Not Detected
Cumene	0.17	Not Detected	0.86	Not Detected
1,1,2,2-Tetrachloroethane	0.17	Not Detected	1.2	Not Detected
Propylbenzene	0.17	Not Detected	0.86	Not Detected
4-Ethyltoluene	0.17	Not Detected	0.86	Not Detected
1,3,5-Trimethylbenzene	0.17	Not Detected	0.86	Not Detected
1,2,4-Trimethylbenzene	0.17	Not Detected	0.86	Not Detected
1,3-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,4-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
alpha-Chlorotoluene	0.87	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,2,4-Trichlorobenzene	0.87	Not Detected	6.4	Not Detected
Hexachlorobutadiene	0.87	Not Detected	9.3	Not Detected

J = Estimated value.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	95	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1506296-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061806	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/18/15 11:24 AM

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



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1506296-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061806	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/18/15 11:24 AM

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	0.50	Not Detected	2.6	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	110	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: CCV

Lab ID#: 1506296-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/18/15 08:10 AM

Compound	%Recovery
Freon 12	94
Freon 114	89
Chloromethane	72
Vinyl Chloride	84
1,3-Butadiene	78
Bromomethane	97
Chloroethane	98
Freon 11	117
Ethanol	114
Freon 113	102
1,1-Dichloroethene	110
Acetone	102
2-Propanol	114
Carbon Disulfide	111
3-Chloropropene	94
Methylene Chloride	112
Methyl tert-butyl ether	115
trans-1,2-Dichloroethene	110
Hexane	101
1,1-Dichloroethane	112
2-Butanone (Methyl Ethyl Ketone)	110
cis-1,2-Dichloroethene	111
Tetrahydrofuran	109
Chloroform	113
1,1,1-Trichloroethane	110
Cyclohexane	110
Carbon Tetrachloride	91
2,2,4-Trimethylpentane	113
Benzene	109
1,2-Dichloroethane	116
Heptane	106
Trichloroethene	101
1,2-Dichloropropane	84
1,4-Dioxane	90
Bromodichloromethane	110
cis-1,3-Dichloropropene	106
4-Methyl-2-pentanone	116
Toluene	102
trans-1,3-Dichloropropene	95
1,1,2-Trichloroethane	103
Tetrachloroethene	98
2-Hexanone	95



Air Toxics

Client Sample ID: CCV

Lab ID#: 1506296-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/18/15 08:10 AM

Compound	%Recovery
Dibromochloromethane	99
1,2-Dibromoethane (EDB)	105
Chlorobenzene	99
Ethyl Benzene	98
m,p-Xylene	95
o-Xylene	96
Styrene	92
Bromoform	94
Cumene	99
1,1,2,2-Tetrachloroethane	99
Propylbenzene	89
4-Ethyltoluene	83
1,3,5-Trimethylbenzene	89
1,2,4-Trimethylbenzene	102
1,3-Dichlorobenzene	89
1,4-Dichlorobenzene	80
alpha-Chlorotoluene	90
1,2-Dichlorobenzene	77
1,2,4-Trichlorobenzene	97
Hexachlorobutadiene	86

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	121	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	95	70-130

Client Sample ID: LCS

Lab ID#: 1506296-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061803	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/18/15 08:46 AM

Compound	%Recovery	Method Limits
Freon 12	118	70-130
Freon 114	113	70-130
Chloromethane	104	70-130
Vinyl Chloride	111	70-130
1,3-Butadiene	100	70-130
Bromomethane	123	70-130
Chloroethane	121	70-130
Freon 11	127	70-130
Ethanol	122	70-130
Freon 113	108	70-130
1,1-Dichloroethene	118	70-130
Acetone	104	70-130
2-Propanol	78	70-130
Carbon Disulfide	97	70-130
3-Chloropropene	81	70-130
Methylene Chloride	85	70-130
Methyl tert-butyl ether	95	70-130
trans-1,2-Dichloroethene	76	70-130
Hexane	80	70-130
1,1-Dichloroethane	105	70-130
2-Butanone (Methyl Ethyl Ketone)	95	70-130
cis-1,2-Dichloroethene	110	70-130
Tetrahydrofuran	94	70-130
Chloroform	108	70-130
1,1,1-Trichloroethane	113	70-130
Cyclohexane	114	70-130
Carbon Tetrachloride	111	70-130
2,2,4-Trimethylpentane	114	70-130
Benzene	102	70-130
1,2-Dichloroethane	110	70-130
Heptane	101	70-130
Trichloroethene	97	70-130
1,2-Dichloropropane	100	70-130
1,4-Dioxane	102	70-130
Bromodichloromethane	108	70-130
cis-1,3-Dichloropropene	95	70-130
4-Methyl-2-pentanone	120	70-130
Toluene	98	70-130
trans-1,3-Dichloropropene	105	70-130
1,1,2-Trichloroethane	119	70-130
Tetrachloroethene	111	70-130
2-Hexanone	118	70-130

Client Sample ID: LCS

Lab ID#: 1506296-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061803	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/18/15 08:46 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	114	70-130
1,2-Dibromoethane (EDB)	115	70-130
Chlorobenzene	107	70-130
Ethyl Benzene	106	70-130
m,p-Xylene	94	70-130
o-Xylene	110	70-130
Styrene	108	70-130
Bromoform	114	70-130
Cumene	110	70-130
1,1,2,2-Tetrachloroethane	120	70-130
Propylbenzene	106	70-130
4-Ethyltoluene	103	70-130
1,3,5-Trimethylbenzene	114	70-130
1,2,4-Trimethylbenzene	127	70-130
1,3-Dichlorobenzene	106	70-130
1,4-Dichlorobenzene	94	70-130
alpha-Chlorotoluene	121	70-130
1,2-Dichlorobenzene	98	70-130
1,2,4-Trichlorobenzene	106	70-130
Hexachlorobutadiene	101	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	123	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	102	70-130

Client Sample ID: LCSD

Lab ID#: 1506296-06AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061804	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/18/15 09:22 AM

Compound	%Recovery	Method Limits
Freon 12	104	70-130
Freon 114	104	70-130
Chloromethane	99	70-130
Vinyl Chloride	81	70-130
1,3-Butadiene	75	70-130
Bromomethane	108	70-130
Chloroethane	113	70-130
Freon 11	114	70-130
Ethanol	116	70-130
Freon 113	100	70-130
1,1-Dichloroethene	104	70-130
Acetone	94	70-130
2-Propanol	110	70-130
Carbon Disulfide	91	70-130
3-Chloropropene	98	70-130
Methylene Chloride	99	70-130
Methyl tert-butyl ether	108	70-130
trans-1,2-Dichloroethene	88	70-130
Hexane	95	70-130
1,1-Dichloroethane	107	70-130
2-Butanone (Methyl Ethyl Ketone)	105	70-130
cis-1,2-Dichloroethene	116	70-130
Tetrahydrofuran	103	70-130
Chloroform	107	70-130
1,1,1-Trichloroethane	105	70-130
Cyclohexane	105	70-130
Carbon Tetrachloride	107	70-130
2,2,4-Trimethylpentane	100	70-130
Benzene	105	70-130
1,2-Dichloroethane	112	70-130
Heptane	101	70-130
Trichloroethene	102	70-130
1,2-Dichloropropane	102	70-130
1,4-Dioxane	104	70-130
Bromodichloromethane	111	70-130
cis-1,3-Dichloropropene	99	70-130
4-Methyl-2-pentanone	116	70-130
Toluene	100	70-130
trans-1,3-Dichloropropene	111	70-130
1,1,2-Trichloroethane	107	70-130
Tetrachloroethene	106	70-130
2-Hexanone	112	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1506296-06AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: v061804

Date of Collection: NA

Dil. Factor: 1.00

Date of Analysis: 6/18/15 09:22 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	105	70-130
1,2-Dibromoethane (EDB)	107	70-130
Chlorobenzene	104	70-130
Ethyl Benzene	104	70-130
m,p-Xylene	103	70-130
o-Xylene	109	70-130
Styrene	102	70-130
Bromoform	111	70-130
Cumene	105	70-130
1,1,2,2-Tetrachloroethane	104	70-130
Propylbenzene	97	70-130
4-Ethyltoluene	90	70-130
1,3,5-Trimethylbenzene	98	70-130
1,2,4-Trimethylbenzene	108	70-130
1,3-Dichlorobenzene	97	70-130
1,4-Dichlorobenzene	88	70-130
alpha-Chlorotoluene	104	70-130
1,2-Dichlorobenzene	88	70-130
1,2,4-Trichlorobenzene	92	70-130
Hexachlorobutadiene	86	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130