

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 Mike Davis

Collected by: (Print and Sign) Ann Tilden

Company Pro Air

Email hickspers@proair.com

Address 126 126 City Albany State CA Zip 95714

Phone 573-526-3918 Fax _____

Project Info:

P.O. # 355400007

Project # _____

Project Name Bridgeson Co. 111

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 D₁ (152533)

9420

6/25/15 8:03-12:46

T0 -15

-30

-6

02A O₃ (152533)

34426

6/25/15 5:04-13:04

T0 -15

-30

-6

03A U₁ (152533)

9551

6/25/15 5:16-13:35

T0 -15

-27

-6

04A U₂ (152533)

5749

6/25/15 9:24

T0 -15

-30

-65

Relinquished by: (signature) Date/Time 6/26/15 2:22

Received by: (signature) Date/Time 6/26/15 14:22

Notes:

Relinquished by: (signature) Date/Time 6/26/15 15:40

Received by: (signature) Date/Time 07/02/2015 11:15

Shipped via UPS

Tracking# 1Z672783034801174

Relinquished by: (signature) Date/Time _____

Received by: (signature) Date/Time _____

Lab Use Only

Shipper Name

Air Bill #

Temp (°C)

Condition

Custody Seals Intact?

Work Order #

Use Only

UPS

N/A

Good

Yes

No

None

1507043

7/17/2015

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

Jefferson City MO 65109

Project Name: Bridgeton Landfill

Project #:

Workorder #: 1507049

Dear Mr. Dennis Schroeder

The following report includes the data for the above referenced project for sample(s) received on 7/3/2015 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

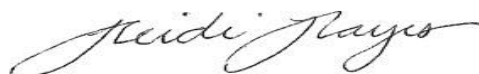
WORK ORDER #: 1507049

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 Landfill
DATE RECEIVED:	07/03/2015	CONTACT:	Brian Whittaker
DATE COMPLETED:	07/17/2015		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	D1 (152939)	Modified TO-15	6.5 "Hg	5 psi
02A	D2 (152938)	Modified TO-15	5.9 "Hg	5.1 psi
03A	U1 (152937)	Modified TO-15	9.4 "Hg	5.1 psi
04A	U2 (152936)	Modified TO-15	6.5 "Hg	4.8 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:



Technical Director

DATE: 07/17/15

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# 1507049

Four 6 Liter Summa Canister (100% Certified) samples were received on July 03, 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.

<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.

The Relative Percent Difference (RPD) of the LCS/LCSD exceeded acceptance limits for 1,2,4-Trichlorobenzene.

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 (152939)

Lab ID#: 1507049-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.45	0.84	2.2
Freon 11	0.17	0.22	0.96	1.2
Ethanol	0.86	3.7	1.6	6.9
Acetone	0.86	3.9	2.0	9.4
2-Propanol	0.86	1.0	2.1	2.5
Hexane	0.17	0.22	0.60	0.78
2-Butanone (Methyl Ethyl Ketone)	0.86	0.87	2.5	2.6
Toluene	0.17	0.85	0.64	3.2

Client Sample ID: D2 (152938)

Lab ID#: 1507049-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.45	0.83	2.2
Freon 11	0.17	0.26	0.94	1.4
Ethanol	0.84	9.7	1.6	18
Acetone	0.84	7.6	2.0	18
2-Propanol	0.84	3.3	2.1	8.0
Hexane	0.17	1.1	0.59	3.9
2-Butanone (Methyl Ethyl Ketone)	0.84	2.1	2.5	6.2
Cyclohexane	0.17	0.89	0.58	3.1
Heptane	0.17	0.38	0.69	1.6
Trichloroethene	0.17	0.29	0.90	1.5
4-Methyl-2-pentanone	0.17	0.19	0.69	0.78
Toluene	0.17	6.3	0.63	24
m,p-Xylene	0.17	0.37	0.73	1.6
Styrene	0.17	0.22	0.72	0.94

Client Sample ID: U1 (152937)

Lab ID#: 1507049-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.20	0.49	0.97	2.4

Summary of Detected Compounds

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: U1 (152937)

Lab ID#: 1507049-03A

Freon 11	0.20	0.22	1.1	1.2
Ethanol	0.98	4.4	1.8	8.2
Acetone	0.98	3.7	2.3	8.8
2-Propanol	0.98	1.3	2.4	3.3
Toluene	0.20	0.78	0.74	2.9

Client Sample ID: U2 (152936)

Lab ID#: 1507049-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.45	0.84	2.2
Chloromethane	0.85	0.87	1.8	1.8
Freon 11	0.17	0.23	0.96	1.3
Ethanol	0.85	3.1	1.6	5.8
Acetone	0.85	14	2.0	33
Carbon Disulfide	0.85	3.4	2.6	11
2-Butanone (Methyl Ethyl Ketone)	0.85	1.6	2.5	4.9
Toluene	0.17	0.35	0.64	1.3



Air Toxics

Client Sample ID: D1 (152939)

Lab ID#: 1507049-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070615	Date of Collection: 6/25/15 12:40:00 PM
Dil. Factor:	1.71	Date of Analysis: 7/6/15 08:13 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.45	0.84	2.2
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.86	Not Detected	1.8	Not Detected
Vinyl Chloride	0.17	Not Detected	0.44	Not Detected
1,3-Butadiene	0.17	Not Detected	0.38	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.2	Not Detected
Freon 11	0.17	0.22	0.96	1.2
Ethanol	0.86	3.7	1.6	6.9
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Acetone	0.86	3.9	2.0	9.4
2-Propanol	0.86	1.0	2.1	2.5
Carbon Disulfide	0.86	Not Detected	2.7	Not Detected
3-Chloropropene	0.86	Not Detected	2.7	Not Detected
Methylene Chloride	0.34	Not Detected	1.2	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.62	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Hexane	0.17	0.22	0.60	0.78
1,1-Dichloroethane	0.17	Not Detected	0.69	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	0.87	2.5	2.6
cis-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.17	Not Detected	0.83	Not Detected
1,1,1-Trichloroethane	0.17	Not Detected	0.93	Not Detected
Cyclohexane	0.17	Not Detected	0.59	Not Detected
Carbon Tetrachloride	0.17	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.86	Not Detected	4.0	Not Detected
Benzene	0.17	Not Detected	0.55	Not Detected
1,2-Dichloroethane	0.17	Not Detected	0.69	Not Detected
Heptane	0.17	Not Detected	0.70	Not Detected
Trichloroethene	0.17	Not Detected	0.92	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.79	Not Detected
1,4-Dioxane	0.17	Not Detected	0.62	Not Detected
Bromodichloromethane	0.17	Not Detected	1.1	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.78	Not Detected
4-Methyl-2-pentanone	0.17	Not Detected	0.70	Not Detected
Toluene	0.17	0.85	0.64	3.2
trans-1,3-Dichloropropene	0.17	Not Detected	0.78	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.93	Not Detected
Tetrachloroethene	0.17	Not Detected	1.2	Not Detected
2-Hexanone	0.86	Not Detected	3.5	Not Detected



Air Toxics

Client Sample ID: D1 (152939)

Lab ID#: 1507049-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070615	Date of Collection: 6/25/15 12:40:00 PM
Dil. Factor:	1.71	Date of Analysis: 7/6/15 08:13 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.17	Not Detected	1.4	Not Detected
1,2-Dibromoethane (EDB)	0.17	Not Detected	1.3	Not Detected
Chlorobenzene	0.17	Not Detected	0.79	Not Detected
Ethyl Benzene	0.17	Not Detected	0.74	Not Detected
m,p-Xylene	0.17	Not Detected	0.74	Not Detected
o-Xylene	0.17	Not Detected	0.74	Not Detected
Styrene	0.17	Not Detected	0.73	Not Detected
Bromoform	0.17	Not Detected	1.8	Not Detected
Cumene	0.17	Not Detected	0.84	Not Detected
1,1,2,2-Tetrachloroethane	0.17	Not Detected	1.2	Not Detected
Propylbenzene	0.17	Not Detected	0.84	Not Detected
4-Ethyltoluene	0.17	Not Detected	0.84	Not Detected
1,3,5-Trimethylbenzene	0.17	Not Detected	0.84	Not Detected
1,2,4-Trimethylbenzene	0.17	Not Detected	0.84	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	0.17	Not Detected	0.88	Not Detected
1,2-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,2,4-Trichlorobenzene	0.86	Not Detected	6.3	Not Detected
Hexachlorobutadiene	0.86	Not Detected	9.1	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	96	70-130



Air Toxics

Client Sample ID: D2 (152938)

Lab ID#: 1507049-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070616	Date of Collection: 6/25/15 1:04:00 PM
Dil. Factor:	1.68	Date of Analysis: 7/6/15 09:22 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.45	0.83	2.2
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.84	Not Detected	1.7	Not Detected
Vinyl Chloride	0.17	Not Detected	0.43	Not Detected
1,3-Butadiene	0.17	Not Detected	0.37	Not Detected
Bromomethane	0.84	Not Detected	3.3	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.17	0.26	0.94	1.4
Ethanol	0.84	9.7	1.6	18
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Acetone	0.84	7.6	2.0	18
2-Propanol	0.84	3.3	2.1	8.0
Carbon Disulfide	0.84	Not Detected	2.6	Not Detected
3-Chloropropene	0.84	Not Detected	2.6	Not Detected
Methylene Chloride	0.34	Not Detected	1.2	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.60	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Hexane	0.17	1.1	0.59	3.9
1,1-Dichloroethane	0.17	Not Detected	0.68	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	2.1	2.5	6.2
cis-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.17	Not Detected	0.82	Not Detected
1,1,1-Trichloroethane	0.17	Not Detected	0.92	Not Detected
Cyclohexane	0.17	0.89	0.58	3.1
Carbon Tetrachloride	0.17	Not Detected	1.0	Not Detected
2,2,4-Trimethylpentane	0.84	Not Detected	3.9	Not Detected
Benzene	0.17	Not Detected	0.54	Not Detected
1,2-Dichloroethane	0.17	Not Detected	0.68	Not Detected
Heptane	0.17	0.38	0.69	1.6
Trichloroethene	0.17	0.29	0.90	1.5
1,2-Dichloropropane	0.17	Not Detected	0.78	Not Detected
1,4-Dioxane	0.17	Not Detected	0.60	Not Detected
Bromodichloromethane	0.17	Not Detected	1.1	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.76	Not Detected
4-Methyl-2-pentanone	0.17	0.19	0.69	0.78
Toluene	0.17	6.3	0.63	24
trans-1,3-Dichloropropene	0.17	Not Detected	0.76	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.92	Not Detected
Tetrachloroethene	0.17	Not Detected	1.1	Not Detected
2-Hexanone	0.84	Not Detected	3.4	Not Detected

Client Sample ID: D2 (152938)

Lab ID#: 1507049-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070616	Date of Collection: 6/25/15 1:04:00 PM
Dil. Factor:	1.68	Date of Analysis: 7/6/15 09:22 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.17	Not Detected	1.4	Not Detected
1,2-Dibromoethane (EDB)	0.17	Not Detected	1.3	Not Detected
Chlorobenzene	0.17	Not Detected	0.77	Not Detected
Ethyl Benzene	0.17	Not Detected	0.73	Not Detected
m,p-Xylene	0.17	0.37	0.73	1.6
o-Xylene	0.17	Not Detected	0.73	Not Detected
Styrene	0.17	0.22	0.72	0.94
Bromoform	0.17	Not Detected	1.7	Not Detected
Cumene	0.17	Not Detected	0.82	Not Detected
1,1,2,2-Tetrachloroethane	0.17	Not Detected	1.2	Not Detected
Propylbenzene	0.17	Not Detected	0.82	Not Detected
4-Ethyltoluene	0.17	Not Detected	0.82	Not Detected
1,3,5-Trimethylbenzene	0.17	Not Detected	0.82	Not Detected
1,2,4-Trimethylbenzene	0.17	Not Detected	0.82	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	0.17	Not Detected	0.87	Not Detected
1,2-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,2,4-Trichlorobenzene	0.84	Not Detected	6.2	Not Detected
Hexachlorobutadiene	0.84	Not Detected	9.0	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130

Client Sample ID: U1 (152937)

Lab ID#: 1507049-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070617	Date of Collection: 6/25/15 1:35:00 PM
Dil. Factor:	1.96	Date of Analysis: 7/6/15 10:05 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.20	0.49	0.97	2.4
Freon 114	0.20	Not Detected	1.4	Not Detected
Chloromethane	0.98	Not Detected	2.0	Not Detected
Vinyl Chloride	0.20	Not Detected	0.50	Not Detected
1,3-Butadiene	0.20	Not Detected	0.43	Not Detected
Bromomethane	0.98	Not Detected	3.8	Not Detected
Chloroethane	0.98	Not Detected	2.6	Not Detected
Freon 11	0.20	0.22	1.1	1.2
Ethanol	0.98	4.4	1.8	8.2
Freon 113	0.20	Not Detected	1.5	Not Detected
1,1-Dichloroethene	0.20	Not Detected	0.78	Not Detected
Acetone	0.98	3.7	2.3	8.8
2-Propanol	0.98	1.3	2.4	3.3
Carbon Disulfide	0.98	Not Detected	3.0	Not Detected
3-Chloropropene	0.98	Not Detected	3.1	Not Detected
Methylene Chloride	0.39	Not Detected	1.4	Not Detected
Methyl tert-butyl ether	0.20	Not Detected	0.71	Not Detected
trans-1,2-Dichloroethene	0.20	Not Detected	0.78	Not Detected
Hexane	0.20	Not Detected	0.69	Not Detected
1,1-Dichloroethane	0.20	Not Detected	0.79	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.98	Not Detected	2.9	Not Detected
cis-1,2-Dichloroethene	0.20	Not Detected	0.78	Not Detected
Tetrahydrofuran	0.98	Not Detected	2.9	Not Detected
Chloroform	0.20	Not Detected	0.96	Not Detected
1,1,1-Trichloroethane	0.20	Not Detected	1.1	Not Detected
Cyclohexane	0.20	Not Detected	0.67	Not Detected
Carbon Tetrachloride	0.20	Not Detected	1.2	Not Detected
2,2,4-Trimethylpentane	0.98	Not Detected	4.6	Not Detected
Benzene	0.20	Not Detected	0.63	Not Detected
1,2-Dichloroethane	0.20	Not Detected	0.79	Not Detected
Heptane	0.20	Not Detected	0.80	Not Detected
Trichloroethene	0.20	Not Detected	1.0	Not Detected
1,2-Dichloropropane	0.20	Not Detected	0.90	Not Detected
1,4-Dioxane	0.20	Not Detected	0.71	Not Detected
Bromodichloromethane	0.20	Not Detected	1.3	Not Detected
cis-1,3-Dichloropropene	0.20	Not Detected	0.89	Not Detected
4-Methyl-2-pentanone	0.20	Not Detected	0.80	Not Detected
Toluene	0.20	0.78	0.74	2.9
trans-1,3-Dichloropropene	0.20	Not Detected	0.89	Not Detected
1,1,2-Trichloroethane	0.20	Not Detected	1.1	Not Detected
Tetrachloroethene	0.20	Not Detected	1.3	Not Detected
2-Hexanone	0.98	Not Detected	4.0	Not Detected



Air Toxics

Client Sample ID: U1 (152937)

Lab ID#: 1507049-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070617	Date of Collection: 6/25/15 1:35:00 PM
Dil. Factor:	1.96	Date of Analysis: 7/6/15 10:05 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.20	Not Detected	1.7	Not Detected
1,2-Dibromoethane (EDB)	0.20	Not Detected	1.5	Not Detected
Chlorobenzene	0.20	Not Detected	0.90	Not Detected
Ethyl Benzene	0.20	Not Detected	0.85	Not Detected
m,p-Xylene	0.20	Not Detected	0.85	Not Detected
o-Xylene	0.20	Not Detected	0.85	Not Detected
Styrene	0.20	Not Detected	0.83	Not Detected
Bromoform	0.20	Not Detected	2.0	Not Detected
Cumene	0.20	Not Detected	0.96	Not Detected
1,1,2,2-Tetrachloroethane	0.20	Not Detected	1.3	Not Detected
Propylbenzene	0.20	Not Detected	0.96	Not Detected
4-Ethyltoluene	0.20	Not Detected	0.96	Not Detected
1,3,5-Trimethylbenzene	0.20	Not Detected	0.96	Not Detected
1,2,4-Trimethylbenzene	0.20	Not Detected	0.96	Not Detected
1,3-Dichlorobenzene	0.20	Not Detected	1.2	Not Detected
1,4-Dichlorobenzene	0.20	Not Detected	1.2	Not Detected
alpha-Chlorotoluene	0.20	Not Detected	1.0	Not Detected
1,2-Dichlorobenzene	0.20	Not Detected	1.2	Not Detected
1,2,4-Trichlorobenzene	0.98	Not Detected	7.3	Not Detected
Hexachlorobutadiene	0.98	Not Detected	10	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130

Client Sample ID: U2 (152936)

Lab ID#: 1507049-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070618	Date of Collection: 6/25/15 2:20:00 PM
Dil. Factor:	1.70	Date of Analysis: 7/7/15 08:23 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.45	0.84	2.2
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.85	0.87	1.8	1.8
Vinyl Chloride	0.17	Not Detected	0.43	Not Detected
1,3-Butadiene	0.17	Not Detected	0.38	Not Detected
Bromomethane	0.85	Not Detected	3.3	Not Detected
Chloroethane	0.85	Not Detected	2.2	Not Detected
Freon 11	0.17	0.23	0.96	1.3
Ethanol	0.85	3.1	1.6	5.8
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Acetone	0.85	14	2.0	33
2-Propanol	0.85	Not Detected	2.1	Not Detected
Carbon Disulfide	0.85	3.4	2.6	11
3-Chloropropene	0.85	Not Detected	2.7	Not Detected
Methylene Chloride	0.34	Not Detected	1.2	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.61	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Hexane	0.17	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.17	Not Detected	0.69	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.85	1.6	2.5	4.9
cis-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Tetrahydrofuran	0.85	Not Detected	2.5	Not Detected
Chloroform	0.17	Not Detected	0.83	Not Detected
1,1,1-Trichloroethane	0.17	Not Detected	0.93	Not Detected
Cyclohexane	0.17	Not Detected	0.58	Not Detected
Carbon Tetrachloride	0.17	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.85	Not Detected	4.0	Not Detected
Benzene	0.17	Not Detected	0.54	Not Detected
1,2-Dichloroethane	0.17	Not Detected	0.69	Not Detected
Heptane	0.17	Not Detected	0.70	Not Detected
Trichloroethene	0.17	Not Detected	0.91	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.78	Not Detected
1,4-Dioxane	0.17	Not Detected	0.61	Not Detected
Bromodichloromethane	0.17	Not Detected	1.1	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.77	Not Detected
4-Methyl-2-pentanone	0.17	Not Detected	0.70	Not Detected
Toluene	0.17	0.35	0.64	1.3
trans-1,3-Dichloropropene	0.17	Not Detected	0.77	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.93	Not Detected
Tetrachloroethene	0.17	Not Detected	1.2	Not Detected
2-Hexanone	0.85	Not Detected	3.5	Not Detected

Client Sample ID: U2 (152936)

Lab ID#: 1507049-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070618	Date of Collection:	6/25/15 2:20:00 PM
Dil. Factor:	1.70	Date of Analysis:	7/7/15 08:23 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.17	Not Detected	1.4	Not Detected
1,2-Dibromoethane (EDB)	0.17	Not Detected	1.3	Not Detected
Chlorobenzene	0.17	Not Detected	0.78	Not Detected
Ethyl Benzene	0.17	Not Detected	0.74	Not Detected
m,p-Xylene	0.17	Not Detected	0.74	Not Detected
o-Xylene	0.17	Not Detected	0.74	Not Detected
Styrene	0.17	Not Detected	0.72	Not Detected
Bromoform	0.17	Not Detected	1.8	Not Detected
Cumene	0.17	Not Detected	0.84	Not Detected
1,1,2,2-Tetrachloroethane	0.17	Not Detected	1.2	Not Detected
Propylbenzene	0.17	Not Detected	0.84	Not Detected
4-Ethyltoluene	0.17	Not Detected	0.84	Not Detected
1,3,5-Trimethylbenzene	0.17	Not Detected	0.84	Not Detected
1,2,4-Trimethylbenzene	0.17	Not Detected	0.84	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	0.17	Not Detected	0.88	Not Detected
1,2-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,2,4-Trichlorobenzene	0.85	Not Detected	6.3	Not Detected
Hexachlorobutadiene	0.85	Not Detected	9.1	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1507049-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: e070607

Date of Collection: NA

Dil. Factor: 1.00

Date of Analysis: 7/6/15 01:57 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#: 1507049-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070607	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/6/15 01:57 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	107	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130

Client Sample ID: CCV

Lab ID#: 1507049-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070602	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/6/15 09:57 AM

Compound	%Recovery
Freon 12	98
Freon 114	97
Chloromethane	94
Vinyl Chloride	93
1,3-Butadiene	89
Bromomethane	89
Chloroethane	83
Freon 11	92
Ethanol	80
Freon 113	92
1,1-Dichloroethene	88
Acetone	82
2-Propanol	92
Carbon Disulfide	93
3-Chloropropene	85
Methylene Chloride	84
Methyl tert-butyl ether	95
trans-1,2-Dichloroethene	87
Hexane	88
1,1-Dichloroethane	95
2-Butanone (Methyl Ethyl Ketone)	91
cis-1,2-Dichloroethene	87
Tetrahydrofuran	99
Chloroform	91
1,1,1-Trichloroethane	97
Cyclohexane	86
Carbon Tetrachloride	83
2,2,4-Trimethylpentane	93
Benzene	88
1,2-Dichloroethane	99
Heptane	80
Trichloroethene	90
1,2-Dichloropropane	85
1,4-Dioxane	90
Bromodichloromethane	87
cis-1,3-Dichloropropene	86
4-Methyl-2-pentanone	87
Toluene	84
trans-1,3-Dichloropropene	91
1,1,2-Trichloroethane	82
Tetrachloroethene	92
2-Hexanone	88



Air Toxics

Client Sample ID: CCV

Lab ID#: 1507049-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070602	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/6/15 09:57 AM

Compound	%Recovery
Dibromochloromethane	99
1,2-Dibromoethane (EDB)	93
Chlorobenzene	92
Ethyl Benzene	94
m,p-Xylene	87
o-Xylene	92
Styrene	90
Bromoform	95
Cumene	81
1,1,2,2-Tetrachloroethane	85
Propylbenzene	90
4-Ethyltoluene	89
1,3,5-Trimethylbenzene	74
1,2,4-Trimethylbenzene	83
1,3-Dichlorobenzene	86
1,4-Dichlorobenzene	89
alpha-Chlorotoluene	80
1,2-Dichlorobenzene	86
1,2,4-Trichlorobenzene	74
Hexachlorobutadiene	75

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	98	70-130

Client Sample ID: LCS

Lab ID#: 1507049-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070603	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/6/15 10:41 AM

Compound	%Recovery	Method Limits
Freon 12	122	70-130
Freon 114	124	70-130
Chloromethane	115	70-130
Vinyl Chloride	118	70-130
1,3-Butadiene	102	70-130
Bromomethane	110	70-130
Chloroethane	105	70-130
Freon 11	116	70-130
Ethanol	106	70-130
Freon 113	110	70-130
1,1-Dichloroethene	105	70-130
Acetone	103	70-130
2-Propanol	116	70-130
Carbon Disulfide	88	70-130
3-Chloropropene	103	70-130
Methylene Chloride	102	70-130
Methyl tert-butyl ether	116	70-130
trans-1,2-Dichloroethene	89	70-130
Hexane	108	70-130
1,1-Dichloroethane	118	70-130
2-Butanone (Methyl Ethyl Ketone)	108	70-130
cis-1,2-Dichloroethene	118	70-130
Tetrahydrofuran	95	70-130
Chloroform	112	70-130
1,1,1-Trichloroethane	114	70-130
Cyclohexane	106	70-130
Carbon Tetrachloride	126	70-130
2,2,4-Trimethylpentane	118	70-130
Benzene	110	70-130
1,2-Dichloroethane	131 Q	70-130
Heptane	107	70-130
Trichloroethene	117	70-130
1,2-Dichloropropane	108	70-130
1,4-Dioxane	115	70-130
Bromodichloromethane	116	70-130
cis-1,3-Dichloropropene	104	70-130
4-Methyl-2-pentanone	116	70-130
Toluene	108	70-130
trans-1,3-Dichloropropene	116	70-130
1,1,2-Trichloroethane	103	70-130
Tetrachloroethene	116	70-130
2-Hexanone	119	70-130

Client Sample ID: LCS

Lab ID#: 1507049-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070603	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/6/15 10:41 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	123	70-130
1,2-Dibromoethane (EDB)	115	70-130
Chlorobenzene	116	70-130
Ethyl Benzene	118	70-130
m,p-Xylene	110	70-130
o-Xylene	122	70-130
Styrene	113	70-130
Bromoform	122	70-130
Cumene	102	70-130
1,1,2,2-Tetrachloroethane	108	70-130
Propylbenzene	119	70-130
4-Ethyltoluene	116	70-130
1,3,5-Trimethylbenzene	96	70-130
1,2,4-Trimethylbenzene	107	70-130
1,3-Dichlorobenzene	114	70-130
1,4-Dichlorobenzene	113	70-130
alpha-Chlorotoluene	111	70-130
1,2-Dichlorobenzene	109	70-130
1,2,4-Trichlorobenzene	71	70-130
Hexachlorobutadiene	74	70-130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: LCSD

Lab ID#: 1507049-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070604	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/6/15 11:23 AM

Compound	%Recovery	Method Limits
Freon 12	129	70-130
Freon 114	124	70-130
Chloromethane	117	70-130
Vinyl Chloride	122	70-130
1,3-Butadiene	104	70-130
Bromomethane	113	70-130
Chloroethane	110	70-130
Freon 11	120	70-130
Ethanol	112	70-130
Freon 113	115	70-130
1,1-Dichloroethene	107	70-130
Acetone	106	70-130
2-Propanol	117	70-130
Carbon Disulfide	87	70-130
3-Chloropropene	107	70-130
Methylene Chloride	105	70-130
Methyl tert-butyl ether	118	70-130
trans-1,2-Dichloroethene	94	70-130
Hexane	111	70-130
1,1-Dichloroethane	117	70-130
2-Butanone (Methyl Ethyl Ketone)	110	70-130
cis-1,2-Dichloroethene	121	70-130
Tetrahydrofuran	99	70-130
Chloroform	117	70-130
1,1,1-Trichloroethane	120	70-130
Cyclohexane	109	70-130
Carbon Tetrachloride	129	70-130
2,2,4-Trimethylpentane	108	70-130
Benzene	108	70-130
1,2-Dichloroethane	130	70-130
Heptane	105	70-130
Trichloroethene	116	70-130
1,2-Dichloropropane	107	70-130
1,4-Dioxane	116	70-130
Bromodichloromethane	115	70-130
cis-1,3-Dichloropropene	104	70-130
4-Methyl-2-pentanone	114	70-130
Toluene	108	70-130
trans-1,3-Dichloropropene	115	70-130
1,1,2-Trichloroethane	102	70-130
Tetrachloroethene	114	70-130
2-Hexanone	116	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1507049-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e070604	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/6/15 11:23 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	124	70-130
1,2-Dibromoethane (EDB)	117	70-130
Chlorobenzene	116	70-130
Ethyl Benzene	118	70-130
m,p-Xylene	110	70-130
o-Xylene	119	70-130
Styrene	113	70-130
Bromoform	121	70-130
Cumene	104	70-130
1,1,2,2-Tetrachloroethane	107	70-130
Propylbenzene	122	70-130
4-Ethyltoluene	120	70-130
1,3,5-Trimethylbenzene	99	70-130
1,2,4-Trimethylbenzene	112	70-130
1,3-Dichlorobenzene	114	70-130
1,4-Dichlorobenzene	115	70-130
alpha-Chlorotoluene	113	70-130
1,2-Dichlorobenzene	114	70-130
1,2,4-Trichlorobenzene	94	70-130
Hexachlorobutadiene	91	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	98	70-130