



CHAIN-OF-CUSTODY RECORD

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 Dan Norris
 Collected by: (Print and Sign) DAN NORRIS
 Company Missouri DNR Email dan.norris@dnr.mo.gov
 Address P.O. Box 176 City Jefferson City State Mo zip 65101
 Phone 573-526-3915 Fax _____

Project Info:
 P.O. # _____
 Project # _____
 Project Name Briggton Landfill

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)
D1A	U1 (132108)	33779	9/21/13	0225-1220	TO-15	-26	-6.5	
D2A	U2 (132109)	1703	9/21/13	0747-1241	TO-15	-30	-6	
D3A	D1 (132110)	6L0004	9/21/13	0815-1255	TO-15	-29.5	-6	
D4A	D2 (132111)	2329	9/21/13	0900-1350	TO-15	-30	-5	
Relinquished by: (signature) <u>[Signature]</u> Date/Time <u>9/23/13 13:43</u> Received by: (signature) <u>[Signature]</u> Date/Time <u>09/20/13 1044</u> Notes: <u>Sent via UPS Ground Tracking # 1Z 672 788 03 4401 2964</u>								
Relinquished by: (signature) _____ Date/Time _____			Received by: (signature) _____ Date/Time _____					

Lab Shipper Name UPS Air Bill # _____ Temp (°C) NA Condition good Custody Seals Intact? Yes No None Work Order # 1309577

10/6/2013
Ms. Celeste Koon
Missouri Dept. of Natural Resources
2710 West Main

Jefferson City MO 65109

Project Name: Bridgeton Landfill
Project #:
Workorder #: 1309577

Dear Ms. Celeste Koon

The following report includes the data for the above referenced project for sample(s) received on 9/30/2013 at Air Toxics Ltd.

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

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

Regards,



Kelly Buettner
Project Manager

WORK ORDER #: 1309577

Work Order Summary

CLIENT:	Ms. Celeste Koon 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:	573-526-3363	P.O. #	3ESP1301039
FAX:	573-526-3350	PROJECT #	Bridgeton Landfill
DATE RECEIVED:	09/30/2013	CONTACT:	Kelly Buettner
DATE COMPLETED:	10/05/2013		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	U1 (132108)	Modified TO-15	4.5 "Hg	5.2 psi
02A	U2 (132109)	Modified TO-15	5.9 "Hg	4.6 psi
03A	D1 (132110)	Modified TO-15	6.1 "Hg	5 psi
04A	D2 (132111)	Modified TO-15	6.7 "Hg	5.1 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: 10/06/13

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-12-5, UT NELAP CA009332012-3, VA NELAP - 460197, WA NELAP - C935
 Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
 Accreditation number: CA300005, Effective date: 10/18/2012, Expiration date: 10/17/2013.

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 Low Level
Missouri Dept. of Natural Resources
Workorder# 1309577

Four 6 Liter Summa Canister (100% Certified) samples were received on September 30, 2013. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

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

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

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
Initial Calibration	</=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. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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

Client Sample ID: U1 (132108)

Lab ID#: 1309577-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.16	0.23	0.89	1.3
Ethanol	0.80	3.4	1.5	6.5
Acetone	0.80	4.4	1.9	10
2-Propanol	0.80	5.7	2.0	14
Hexane	0.16	0.49	0.56	1.7
2-Butanone (Methyl Ethyl Ketone)	0.80	1.8	2.3	5.4
1,2-Dichloroethane	0.16	0.17	0.64	0.70
Heptane	0.16	0.30	0.65	1.2
4-Methyl-2-pentanone	0.16	1.5	0.65	6.2
Toluene	0.16	6.8	0.60	25
m,p-Xylene	0.16	0.20	0.69	0.89

Client Sample ID: U2 (132109)

Lab ID#: 1309577-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.16	0.24	0.92	1.4
Ethanol	0.82	1.1	1.5	2.1
Acetone	0.82	3.2	1.9	7.5

Client Sample ID: D1 (132110)

Lab ID#: 1309577-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.17	0.27	0.94	1.5
Ethanol	0.84	4.9	1.6	9.3
Acetone	0.84	9.3	2.0	22
2-Butanone (Methyl Ethyl Ketone)	0.84	2.4	2.5	7.2
Benzene	0.17	0.83	0.54	2.6
Toluene	0.17	0.18	0.63	0.68

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

Client Sample ID: D2 (132111)

Lab ID#: 1309577-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.16	0.27	0.92	1.5
Ethanol	0.82	3.0	1.6	5.7
Acetone	0.82	3.9	2.0	9.2
Hexane	0.16	0.18	0.58	0.65
Benzene	0.16	0.47	0.53	1.5
Toluene	0.16	0.70	0.62	2.6



Air Toxics

Client Sample ID: U1 (132108)

Lab ID#: 1309577-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100317	Date of Collection:	9/21/13 12:20:00 PM
Dil. Factor:	1.59	Date of Analysis:	10/3/13 10:36 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	Not Detected	0.79	Not Detected
Freon 114	0.16	Not Detected	1.1	Not Detected
Chloromethane	0.80	Not Detected	1.6	Not Detected
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
1,3-Butadiene	0.16	Not Detected	0.35	Not Detected
Bromomethane	0.80	Not Detected	3.1	Not Detected
Chloroethane	0.80	Not Detected	2.1	Not Detected
Freon 11	0.16	0.23	0.89	1.3
Ethanol	0.80	3.4	1.5	6.5
Freon 113	0.16	Not Detected	1.2	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.63	Not Detected
Acetone	0.80	4.4	1.9	10
2-Propanol	0.80	5.7	2.0	14
Carbon Disulfide	0.80	Not Detected	2.5	Not Detected
3-Chloropropene	0.80	Not Detected	2.5	Not Detected
Methylene Chloride	0.32	Not Detected	1.1	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.57	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
Hexane	0.16	0.49	0.56	1.7
1,1-Dichloroethane	0.16	Not Detected	0.64	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.80	1.8	2.3	5.4
cis-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
Tetrahydrofuran	0.80	Not Detected	2.3	Not Detected
Chloroform	0.16	Not Detected	0.78	Not Detected
1,1,1-Trichloroethane	0.16	Not Detected	0.87	Not Detected
Cyclohexane	0.16	Not Detected	0.55	Not Detected
Carbon Tetrachloride	0.16	Not Detected	1.0	Not Detected
2,2,4-Trimethylpentane	0.80	Not Detected	3.7	Not Detected
Benzene	0.16	Not Detected	0.51	Not Detected
1,2-Dichloroethane	0.16	0.17	0.64	0.70
Heptane	0.16	0.30	0.65	1.2
Trichloroethene	0.16	Not Detected	0.85	Not Detected
1,2-Dichloropropane	0.16	Not Detected	0.73	Not Detected
1,4-Dioxane	0.16	Not Detected	0.57	Not Detected
Bromodichloromethane	0.16	Not Detected	1.1	Not Detected
cis-1,3-Dichloropropene	0.16	Not Detected	0.72	Not Detected
4-Methyl-2-pentanone	0.16	1.5	0.65	6.2
Toluene	0.16	6.8	0.60	25
trans-1,3-Dichloropropene	0.16	Not Detected	0.72	Not Detected
1,1,2-Trichloroethane	0.16	Not Detected	0.87	Not Detected
Tetrachloroethene	0.16	Not Detected	1.1	Not Detected
2-Hexanone	0.80	Not Detected	3.2	Not Detected



Client Sample ID: U1 (132108)

Lab ID#: 1309577-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100317	Date of Collection:	9/21/13 12:20:00 PM
Dil. Factor:	1.59	Date of Analysis:	10/3/13 10:36 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.16	Not Detected	1.4	Not Detected
1,2-Dibromoethane (EDB)	0.16	Not Detected	1.2	Not Detected
Chlorobenzene	0.16	Not Detected	0.73	Not Detected
Ethyl Benzene	0.16	Not Detected	0.69	Not Detected
m,p-Xylene	0.16	0.20	0.69	0.89
o-Xylene	0.16	Not Detected	0.69	Not Detected
Styrene	0.16	Not Detected	0.68	Not Detected
Bromoform	0.16	Not Detected	1.6	Not Detected
Cumene	0.16	Not Detected	0.78	Not Detected
1,1,2,2-Tetrachloroethane	0.16	Not Detected	1.1	Not Detected
Propylbenzene	0.16	Not Detected	0.78	Not Detected
4-Ethyltoluene	0.16	Not Detected	0.78	Not Detected
1,3,5-Trimethylbenzene	0.16	Not Detected	0.78	Not Detected
1,2,4-Trimethylbenzene	0.16	Not Detected	0.78	Not Detected
1,3-Dichlorobenzene	0.16	Not Detected	0.96	Not Detected
1,4-Dichlorobenzene	0.16	Not Detected	0.96	Not Detected
alpha-Chlorotoluene	0.16	Not Detected	0.82	Not Detected
1,2-Dichlorobenzene	0.16	Not Detected	0.96	Not Detected
1,2,4-Trichlorobenzene	0.80	Not Detected	5.9	Not Detected
Hexachlorobutadiene	0.80	Not Detected	8.5	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	119	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	97	70-130



Air Toxics

Client Sample ID: U2 (132109)

Lab ID#: 1309577-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100319	Date of Collection:	9/21/13 12:41:00 PM
Dil. Factor:	1.64	Date of Analysis:	10/4/13 08:53 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	Not Detected	0.81	Not Detected
Freon 114	0.16	Not Detected	1.1	Not Detected
Chloromethane	0.82	Not Detected	1.7	Not Detected
Vinyl Chloride	0.16	Not Detected	0.42	Not Detected
1,3-Butadiene	0.16	Not Detected	0.36	Not Detected
Bromomethane	0.82	Not Detected	3.2	Not Detected
Chloroethane	0.82	Not Detected	2.2	Not Detected
Freon 11	0.16	0.24	0.92	1.4
Ethanol	0.82	1.1	1.5	2.1
Freon 113	0.16	Not Detected	1.2	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Acetone	0.82	3.2	1.9	7.5
2-Propanol	0.82	Not Detected	2.0	Not Detected
Carbon Disulfide	0.82	Not Detected	2.6	Not Detected
3-Chloropropene	0.82	Not Detected	2.6	Not Detected
Methylene Chloride	0.33	Not Detected	1.1	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.59	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Hexane	0.16	Not Detected	0.58	Not Detected
1,1-Dichloroethane	0.16	Not Detected	0.66	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.82	Not Detected	2.4	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Tetrahydrofuran	0.82	Not Detected	2.4	Not Detected
Chloroform	0.16	Not Detected	0.80	Not Detected
1,1,1-Trichloroethane	0.16	Not Detected	0.89	Not Detected
Cyclohexane	0.16	Not Detected	0.56	Not Detected
Carbon Tetrachloride	0.16	Not Detected	1.0	Not Detected
2,2,4-Trimethylpentane	0.82	Not Detected	3.8	Not Detected
Benzene	0.16	Not Detected	0.52	Not Detected
1,2-Dichloroethane	0.16	Not Detected	0.66	Not Detected
Heptane	0.16	Not Detected	0.67	Not Detected
Trichloroethene	0.16	Not Detected	0.88	Not Detected
1,2-Dichloropropane	0.16	Not Detected	0.76	Not Detected
1,4-Dioxane	0.16	Not Detected	0.59	Not Detected
Bromodichloromethane	0.16	Not Detected	1.1	Not Detected
cis-1,3-Dichloropropene	0.16	Not Detected	0.74	Not Detected
4-Methyl-2-pentanone	0.16	Not Detected	0.67	Not Detected
Toluene	0.16	Not Detected	0.62	Not Detected
trans-1,3-Dichloropropene	0.16	Not Detected	0.74	Not Detected
1,1,2-Trichloroethane	0.16	Not Detected	0.89	Not Detected
Tetrachloroethene	0.16	Not Detected	1.1	Not Detected
2-Hexanone	0.82	Not Detected	3.4	Not Detected



Client Sample ID: U2 (132109)

Lab ID#: 1309577-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100319	Date of Collection:	9/21/13 12:41:00 PM
Dil. Factor:	1.64	Date of Analysis:	10/4/13 08:53 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.16	Not Detected	1.4	Not Detected
1,2-Dibromoethane (EDB)	0.16	Not Detected	1.3	Not Detected
Chlorobenzene	0.16	Not Detected	0.76	Not Detected
Ethyl Benzene	0.16	Not Detected	0.71	Not Detected
m,p-Xylene	0.16	Not Detected	0.71	Not Detected
o-Xylene	0.16	Not Detected	0.71	Not Detected
Styrene	0.16	Not Detected	0.70	Not Detected
Bromoform	0.16	Not Detected	1.7	Not Detected
Cumene	0.16	Not Detected	0.81	Not Detected
1,1,2,2-Tetrachloroethane	0.16	Not Detected	1.1	Not Detected
Propylbenzene	0.16	Not Detected	0.81	Not Detected
4-Ethyltoluene	0.16	Not Detected	0.81	Not Detected
1,3,5-Trimethylbenzene	0.16	Not Detected	0.81	Not Detected
1,2,4-Trimethylbenzene	0.16	Not Detected	0.81	Not Detected
1,3-Dichlorobenzene	0.16	Not Detected	0.99	Not Detected
1,4-Dichlorobenzene	0.16	Not Detected	0.99	Not Detected
alpha-Chlorotoluene	0.16	Not Detected	0.85	Not Detected
1,2-Dichlorobenzene	0.16	Not Detected	0.99	Not Detected
1,2,4-Trichlorobenzene	0.82	Not Detected	6.1	Not Detected
Hexachlorobutadiene	0.82	Not Detected	8.7	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	125	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	84	70-130



Air Toxics

Client Sample ID: D1 (132110)

Lab ID#: 1309577-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100320	Date of Collection:	9/21/13 12:55:00 PM
Dil. Factor:	1.68	Date of Analysis:	10/4/13 09:36 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	Not Detected	0.83	Not Detected
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	0.27	0.94	1.5
Ethanol	0.84	4.9	1.6	9.3
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Acetone	0.84	9.3	2.0	22
2-Propanol	0.84	Not Detected	2.1	Not Detected
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	Not Detected	0.59	Not Detected
1,1-Dichloroethane	0.17	Not Detected	0.68	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	2.4	2.5	7.2
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	Not Detected	0.58	Not Detected
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	0.83	0.54	2.6
1,2-Dichloroethane	0.17	Not Detected	0.68	Not Detected
Heptane	0.17	Not Detected	0.69	Not Detected
Trichloroethene	0.17	Not Detected	0.90	Not Detected
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	Not Detected	0.69	Not Detected
Toluene	0.17	0.18	0.63	0.68
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: D1 (132110)

Lab ID#: 1309577-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100320	Date of Collection:	9/21/13 12:55:00 PM
Dil. Factor:	1.68	Date of Analysis:	10/4/13 09:36 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	0.77	Not Detected
Ethyl Benzene	0.17	Not Detected	0.73	Not Detected
m,p-Xylene	0.17	Not Detected	0.73	Not Detected
o-Xylene	0.17	Not Detected	0.73	Not Detected
Styrene	0.17	Not Detected	0.72	Not Detected
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	124	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	80	70-130



Air Toxics

Client Sample ID: D2 (132111)

Lab ID#: 1309577-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100318	Date of Collection:	9/21/13 1:50:00 PM
Dil. Factor:	1.65	Date of Analysis:	10/4/13 08:12 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	Not Detected	0.81	Not Detected
Freon 114	0.16	Not Detected	1.2	Not Detected
Chloromethane	0.82	Not Detected	1.7	Not Detected
Vinyl Chloride	0.16	Not Detected	0.42	Not Detected
1,3-Butadiene	0.16	Not Detected	0.36	Not Detected
Bromomethane	0.82	Not Detected	3.2	Not Detected
Chloroethane	0.82	Not Detected	2.2	Not Detected
Freon 11	0.16	0.27	0.92	1.5
Ethanol	0.82	3.0	1.6	5.7
Freon 113	0.16	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Acetone	0.82	3.9	2.0	9.2
2-Propanol	0.82	Not Detected	2.0	Not Detected
Carbon Disulfide	0.82	Not Detected	2.6	Not Detected
3-Chloropropene	0.82	Not Detected	2.6	Not Detected
Methylene Chloride	0.33	Not Detected	1.1	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.59	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Hexane	0.16	0.18	0.58	0.65
1,1-Dichloroethane	0.16	Not Detected	0.67	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.82	Not Detected	2.4	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Tetrahydrofuran	0.82	Not Detected	2.4	Not Detected
Chloroform	0.16	Not Detected	0.80	Not Detected
1,1,1-Trichloroethane	0.16	Not Detected	0.90	Not Detected
Cyclohexane	0.16	Not Detected	0.57	Not Detected
Carbon Tetrachloride	0.16	Not Detected	1.0	Not Detected
2,2,4-Trimethylpentane	0.82	Not Detected	3.8	Not Detected
Benzene	0.16	0.47	0.53	1.5
1,2-Dichloroethane	0.16	Not Detected	0.67	Not Detected
Heptane	0.16	Not Detected	0.67	Not Detected
Trichloroethene	0.16	Not Detected	0.88	Not Detected
1,2-Dichloropropane	0.16	Not Detected	0.76	Not Detected
1,4-Dioxane	0.16	Not Detected	0.59	Not Detected
Bromodichloromethane	0.16	Not Detected	1.1	Not Detected
cis-1,3-Dichloropropene	0.16	Not Detected	0.75	Not Detected
4-Methyl-2-pentanone	0.16	Not Detected	0.67	Not Detected
Toluene	0.16	0.70	0.62	2.6
trans-1,3-Dichloropropene	0.16	Not Detected	0.75	Not Detected
1,1,2-Trichloroethane	0.16	Not Detected	0.90	Not Detected
Tetrachloroethene	0.16	Not Detected	1.1	Not Detected
2-Hexanone	0.82	Not Detected	3.4	Not Detected



Client Sample ID: D2 (132111)

Lab ID#: 1309577-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100318	Date of Collection:	9/21/13 1:50:00 PM
Dil. Factor:	1.65	Date of Analysis:	10/4/13 08:12 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.16	Not Detected	1.4	Not Detected
1,2-Dibromoethane (EDB)	0.16	Not Detected	1.3	Not Detected
Chlorobenzene	0.16	Not Detected	0.76	Not Detected
Ethyl Benzene	0.16	Not Detected	0.72	Not Detected
m,p-Xylene	0.16	Not Detected	0.72	Not Detected
o-Xylene	0.16	Not Detected	0.72	Not Detected
Styrene	0.16	Not Detected	0.70	Not Detected
Bromoform	0.16	Not Detected	1.7	Not Detected
Cumene	0.16	Not Detected	0.81	Not Detected
1,1,2,2-Tetrachloroethane	0.16	Not Detected	1.1	Not Detected
Propylbenzene	0.16	Not Detected	0.81	Not Detected
4-Ethyltoluene	0.16	Not Detected	0.81	Not Detected
1,3,5-Trimethylbenzene	0.16	Not Detected	0.81	Not Detected
1,2,4-Trimethylbenzene	0.16	Not Detected	0.81	Not Detected
1,3-Dichlorobenzene	0.16	Not Detected	0.99	Not Detected
1,4-Dichlorobenzene	0.16	Not Detected	0.99	Not Detected
alpha-Chlorotoluene	0.16	Not Detected	0.85	Not Detected
1,2-Dichlorobenzene	0.16	Not Detected	0.99	Not Detected
1,2,4-Trichlorobenzene	0.82	Not Detected	6.1	Not Detected
Hexachlorobutadiene	0.82	Not Detected	8.8	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	123	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	82	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309577-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100309	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/3/13 02:42 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#: 1309577-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100309	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/3/13 02:42 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	111	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 1309577-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100304	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/3/13 11:25 AM

Compound	%Recovery
Freon 12	104
Freon 114	102
Chloromethane	102
Vinyl Chloride	103
1,3-Butadiene	103
Bromomethane	106
Chloroethane	101
Freon 11	101
Ethanol	100
Freon 113	95
1,1-Dichloroethene	95
Acetone	95
2-Propanol	99
Carbon Disulfide	101
3-Chloropropene	100
Methylene Chloride	97
Methyl tert-butyl ether	94
trans-1,2-Dichloroethene	95
Hexane	96
1,1-Dichloroethane	97
2-Butanone (Methyl Ethyl Ketone)	101
cis-1,2-Dichloroethene	97
Tetrahydrofuran	101
Chloroform	99
1,1,1-Trichloroethane	94
Cyclohexane	95
Carbon Tetrachloride	107
2,2,4-Trimethylpentane	95
Benzene	97
1,2-Dichloroethane	104
Heptane	100
Trichloroethene	93
1,2-Dichloropropane	100
1,4-Dioxane	97
Bromodichloromethane	102
cis-1,3-Dichloropropene	100
4-Methyl-2-pentanone	102
Toluene	97
trans-1,3-Dichloropropene	100
1,1,2-Trichloroethane	96
Tetrachloroethene	97
2-Hexanone	101

Client Sample ID: CCV

Lab ID#: 1309577-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100304	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/3/13 11:25 AM

Compound	%Recovery
Dibromochloromethane	101
1,2-Dibromoethane (EDB)	97
Chlorobenzene	94
Ethyl Benzene	98
m,p-Xylene	102
o-Xylene	96
Styrene	93
Bromoform	103
Cumene	100
1,1,2,2-Tetrachloroethane	95
Propylbenzene	99
4-Ethyltoluene	96
1,3,5-Trimethylbenzene	94
1,2,4-Trimethylbenzene	89
1,3-Dichlorobenzene	88
1,4-Dichlorobenzene	86
alpha-Chlorotoluene	106
1,2-Dichlorobenzene	88
1,2,4-Trichlorobenzene	82
Hexachlorobutadiene	91

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	100	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1309577-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100305	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/3/13 12:08 PM

Compound	%Recovery	Method Limits
Freon 12	95	70-130
Freon 114	91	70-130
Chloromethane	93	70-130
Vinyl Chloride	94	70-130
1,3-Butadiene	90	70-130
Bromomethane	90	70-130
Chloroethane	92	70-130
Freon 11	92	70-130
Ethanol	85	70-130
Freon 113	87	70-130
1,1-Dichloroethene	91	70-130
Acetone	84	70-130
2-Propanol	89	70-130
Carbon Disulfide	113	70-130
3-Chloropropene	100	70-130
Methylene Chloride	87	70-130
Methyl tert-butyl ether	88	70-130
trans-1,2-Dichloroethene	99	70-130
Hexane	86	70-130
1,1-Dichloroethane	88	70-130
2-Butanone (Methyl Ethyl Ketone)	93	70-130
cis-1,2-Dichloroethene	89	70-130
Tetrahydrofuran	87	70-130
Chloroform	91	70-130
1,1,1-Trichloroethane	86	70-130
Cyclohexane	85	70-130
Carbon Tetrachloride	105	70-130
2,2,4-Trimethylpentane	84	70-130
Benzene	88	70-130
1,2-Dichloroethane	93	70-130
Heptane	88	70-130
Trichloroethene	88	70-130
1,2-Dichloropropane	87	70-130
1,4-Dioxane	84	70-130
Bromodichloromethane	92	70-130
cis-1,3-Dichloropropene	88	70-130
4-Methyl-2-pentanone	85	70-130
Toluene	86	70-130
trans-1,3-Dichloropropene	88	70-130
1,1,2-Trichloroethane	85	70-130
Tetrachloroethene	85	70-130
2-Hexanone	85	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1309577-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100305	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/3/13 12:08 PM

Compound	%Recovery	Method Limits
Dibromochloromethane	88	70-130
1,2-Dibromoethane (EDB)	90	70-130
Chlorobenzene	86	70-130
Ethyl Benzene	88	70-130
m,p-Xylene	91	70-130
o-Xylene	88	70-130
Styrene	83	70-130
Bromoform	90	70-130
Cumene	89	70-130
1,1,2,2-Tetrachloroethane	87	70-130
Propylbenzene	90	70-130
4-Ethyltoluene	82	70-130
1,3,5-Trimethylbenzene	84	70-130
1,2,4-Trimethylbenzene	76	70-130
1,3-Dichlorobenzene	80	70-130
1,4-Dichlorobenzene	76	70-130
alpha-Chlorotoluene	87	70-130
1,2-Dichlorobenzene	79	70-130
1,2,4-Trichlorobenzene	65 Q	70-130
Hexachlorobutadiene	71	70-130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	103	70-130



Air Toxics

Client Sample ID: LCS D

Lab ID#: 1309577-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100306	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/3/13 12:48 PM

Compound	%Recovery	Method Limits
Freon 12	95	70-130
Freon 114	90	70-130
Chloromethane	94	70-130
Vinyl Chloride	93	70-130
1,3-Butadiene	90	70-130
Bromomethane	90	70-130
Chloroethane	91	70-130
Freon 11	94	70-130
Ethanol	84	70-130
Freon 113	86	70-130
1,1-Dichloroethene	93	70-130
Acetone	83	70-130
2-Propanol	89	70-130
Carbon Disulfide	113	70-130
3-Chloropropene	101	70-130
Methylene Chloride	88	70-130
Methyl tert-butyl ether	88	70-130
trans-1,2-Dichloroethene	98	70-130
Hexane	86	70-130
1,1-Dichloroethane	89	70-130
2-Butanone (Methyl Ethyl Ketone)	93	70-130
cis-1,2-Dichloroethene	88	70-130
Tetrahydrofuran	88	70-130
Chloroform	92	70-130
1,1,1-Trichloroethane	88	70-130
Cyclohexane	87	70-130
Carbon Tetrachloride	106	70-130
2,2,4-Trimethylpentane	84	70-130
Benzene	88	70-130
1,2-Dichloroethane	93	70-130
Heptane	87	70-130
Trichloroethene	85	70-130
1,2-Dichloropropane	88	70-130
1,4-Dioxane	82	70-130
Bromodichloromethane	92	70-130
cis-1,3-Dichloropropene	87	70-130
4-Methyl-2-pentanone	86	70-130
Toluene	85	70-130
trans-1,3-Dichloropropene	89	70-130
1,1,2-Trichloroethane	84	70-130
Tetrachloroethene	85	70-130
2-Hexanone	85	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1309577-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v100306	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/3/13 12:48 PM

Compound	%Recovery	Method Limits
Dibromochloromethane	86	70-130
1,2-Dibromoethane (EDB)	88	70-130
Chlorobenzene	84	70-130
Ethyl Benzene	86	70-130
m,p-Xylene	88	70-130
o-Xylene	86	70-130
Styrene	82	70-130
Bromoform	89	70-130
Cumene	88	70-130
1,1,2,2-Tetrachloroethane	88	70-130
Propylbenzene	90	70-130
4-Ethyltoluene	82	70-130
1,3,5-Trimethylbenzene	81	70-130
1,2,4-Trimethylbenzene	77	70-130
1,3-Dichlorobenzene	77	70-130
1,4-Dichlorobenzene	76	70-130
alpha-Chlorotoluene	83	70-130
1,2-Dichlorobenzene	78	70-130
1,2,4-Trichlorobenzene	66 Q	70-130
Hexachlorobutadiene	74	70-130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130