



CHAIN-OF-CUSTODY RECORD

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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.missouri.gov
 Address P.O. Box 176 City Jefferson City State Mo Zip 65102
 Phone 573-526-3915 Fax _____

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

Turn Around Time:
 Normal
 Rush
 Lab Use Only:
 Pressurized by: _____
 Date: _____
 Pressurization Gas: _____
 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 (psi)
01A	D1 (134108)	35248	10/5/13	0330-0845	TD-15	-30	-5.5	
02A	D2 (134109)	5765	10/5/13	0330-0840	TD-15	-30	-5	
03A	D3 (134110) U1 (134110)	25312	10/5/13	0347-0913	TD-15	-29.5	-5	
04A	D4 U2 (134111)	31136	10/5/13	0356-0855	TD-15	-29	-4.75	
Relinquished by: (signature) <u>[Signature]</u> Date/Time <u>10/13/14 20:44</u> Received by: (signature) <u>[Signature]</u> Date/Time <u>10/14/13 1015</u> Relinquished by: (signature) _____ Date/Time _____ Received by: (signature) _____ Date/Time _____								

Notes:
 Sent via UPS Ground
 Tracking # 1Z 672 788 03
 4586 1189

Lab Use Only: Shipper Name UPS Air Bill # _____ Temp (°C) N/A Condition Good Custody Seats Intact? Yes No None Work Order # 1310282

10/28/2013

Ms. Celeste Koon
Missouri Dept. of Natural Resources
2710 West Main

Jefferson City MO 65109

Project Name: Bridgeton Landfill

Project #:

Workorder #: 1310282

Dear Ms. Celeste Koon

The following report includes the data for the above referenced project for sample(s) received on 10/14/2013 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 #: 1310282

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. #	3ESP140275
FAX:	573-526-3350	PROJECT #	Bridgeton Landfill
DATE RECEIVED:	10/14/2013	CONTACT:	Kelly Buettner
DATE COMPLETED:	10/26/2013		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	D1 (134108)	Modified TO-15	5.1 "Hg	5 psi
02A	D2 (134109)	Modified TO-15	5.5 "Hg	4.9 psi
03A	U1 (134110)	Modified TO-15	5.5 "Hg	5.2 psi
04A	U2 (134111)	Modified TO-15	5.7 "Hg	5.3 psi
05A	Lab Blank	Modified TO-15	NA	NA
05B	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
06B	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA
07B	LCS	Modified TO-15	NA	NA
07BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: 
 Technical Director

DATE: 10/26/13

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

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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# 1310282

Four 6 Liter Summa Canister (100% Certified) samples were received on October 14, 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

The Chain of Custody (COC) information for sample U2 (134111) 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

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: D1 (134108)

Lab ID#: 1310282-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.61	0.80	3.0
Freon 11	0.16	0.24	0.90	1.3
Ethanol	0.80	7.6	1.5	14
Acetone	0.80	10	1.9	24
2-Propanol	0.80	1.0	2.0	2.6
Carbon Disulfide	0.80	1.8	2.5	5.7
Methylene Chloride	0.32	0.63	1.1	2.2
2-Butanone (Methyl Ethyl Ketone)	0.80	1.2	2.4	3.7
Benzene	0.16	0.41	0.51	1.3
Toluene	0.16	0.30	0.61	1.1

Client Sample ID: D2 (134109)

Lab ID#: 1310282-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.58	0.81	2.8
Freon 11	0.16	0.24	0.92	1.4
Ethanol	0.82	4.4	1.5	8.2
Acetone	0.82	5.7	1.9	14
Benzene	0.16	0.25	0.52	0.79

Client Sample ID: U1 (134110)

Lab ID#: 1310282-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.58	0.82	2.8
Freon 11	0.17	0.26	0.93	1.4
Ethanol	0.83	2.0	1.6	3.7
Acetone	0.83	7.1	2.0	17
Toluene	0.17	0.17	0.62	0.65

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

Client Sample ID: U2 (134111)

Lab ID#: 1310282-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.60	0.83	3.0
Freon 11	0.17	0.24	0.94	1.4
Ethanol	0.84	3.1	1.6	5.9
Acetone	0.84	5.3	2.0	12
Methylene Chloride	0.34	0.36	1.2	1.2



Air Toxics

Client Sample ID: D1 (134108)

Lab ID#: 1310282-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102318	Date of Collection:	10/5/13 8:45:00 AM
Dil. Factor:	1.61	Date of Analysis:	10/24/13 07:55 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.61	0.80	3.0
Freon 114	0.16	Not Detected	1.1	Not Detected
Chloromethane	0.80	Not Detected	1.7	Not Detected
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
1,3-Butadiene	0.16	Not Detected	0.36	Not Detected
Bromomethane	0.80	Not Detected	3.1	Not Detected
Chloroethane	0.80	Not Detected	2.1	Not Detected
Freon 11	0.16	0.24	0.90	1.3
Ethanol	0.80	7.6	1.5	14
Freon 113	0.16	Not Detected	1.2	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Acetone	0.80	10	1.9	24
2-Propanol	0.80	1.0	2.0	2.6
Carbon Disulfide	0.80	1.8	2.5	5.7
3-Chloropropene	0.80	Not Detected	2.5	Not Detected
Methylene Chloride	0.32	0.63	1.1	2.2
Methyl tert-butyl ether	0.16	Not Detected	0.58	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Hexane	0.16	Not Detected	0.57	Not Detected
1,1-Dichloroethane	0.16	Not Detected	0.65	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.80	1.2	2.4	3.7
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Tetrahydrofuran	0.80	Not Detected	2.4	Not Detected
Chloroform	0.16	Not Detected	0.79	Not Detected
1,1,1-Trichloroethane	0.16	Not Detected	0.88	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	3.8	Not Detected
Benzene	0.16	0.41	0.51	1.3
1,2-Dichloroethane	0.16	Not Detected	0.65	Not Detected
Heptane	0.16	Not Detected	0.66	Not Detected
Trichloroethene	0.16	Not Detected	0.86	Not Detected
1,2-Dichloropropane	0.16	Not Detected	0.74	Not Detected
1,4-Dioxane	0.16	Not Detected	0.58	Not Detected
Bromodichloromethane	0.16	Not Detected	1.1	Not Detected
cis-1,3-Dichloropropene	0.16	Not Detected	0.73	Not Detected
4-Methyl-2-pentanone	0.16	Not Detected	0.66	Not Detected
Toluene	0.16	0.30	0.61	1.1
trans-1,3-Dichloropropene	0.16	Not Detected	0.73	Not Detected
1,1,2-Trichloroethane	0.16	Not Detected	0.88	Not Detected
Tetrachloroethene	0.16	Not Detected	1.1	Not Detected
2-Hexanone	0.80	Not Detected	3.3	Not Detected



Client Sample ID: D1 (134108)

Lab ID#: 1310282-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102318	Date of Collection:	10/5/13 8:45:00 AM
Dil. Factor:	1.61	Date of Analysis:	10/24/13 07:55 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	1.2	Not Detected
Chlorobenzene	0.16	Not Detected	0.74	Not Detected
Ethyl Benzene	0.16	Not Detected	0.70	Not Detected
m,p-Xylene	0.16	Not Detected	0.70	Not Detected
o-Xylene	0.16	Not Detected	0.70	Not Detected
Styrene	0.16	Not Detected	0.68	Not Detected
Bromoform	0.16	Not Detected	1.7	Not Detected
Cumene	0.16	Not Detected	0.79	Not Detected
1,1,2,2-Tetrachloroethane	0.16	Not Detected	1.1	Not Detected
Propylbenzene	0.16	Not Detected	0.79	Not Detected
4-Ethyltoluene	0.16	Not Detected	0.79	Not Detected
1,3,5-Trimethylbenzene	0.16	Not Detected	0.79	Not Detected
1,2,4-Trimethylbenzene	0.16	Not Detected	0.79	Not Detected
1,3-Dichlorobenzene	0.16	Not Detected	0.97	Not Detected
1,4-Dichlorobenzene	0.16	Not Detected	0.97	Not Detected
alpha-Chlorotoluene	0.16	Not Detected	0.83	Not Detected
1,2-Dichlorobenzene	0.16	Not Detected	0.97	Not Detected
1,2,4-Trichlorobenzene	0.80	Not Detected	6.0	Not Detected
Hexachlorobutadiene	0.80	Not Detected	8.6	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	103	70-130



Air Toxics

Client Sample ID: D2 (134109)

Lab ID#: 1310282-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102319	Date of Collection:	10/5/13 8:40:00 AM
Dil. Factor:	1.63	Date of Analysis:	10/24/13 08:36 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.58	0.81	2.8
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	4.4	1.5	8.2
Freon 113	0.16	Not Detected	1.2	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Acetone	0.82	5.7	1.9	14
2-Propanol	0.82	Not Detected	2.0	Not Detected
Carbon Disulfide	0.82	Not Detected	2.5	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	0.57	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	0.25	0.52	0.79
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	0.75	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	0.61	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	3.3	Not Detected

Client Sample ID: D2 (134109)

Lab ID#: 1310282-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102319	Date of Collection:	10/5/13 8:40:00 AM
Dil. Factor:	1.63	Date of Analysis:	10/24/13 08:36 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	1.2	Not Detected
Chlorobenzene	0.16	Not Detected	0.75	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	0.69	Not Detected
Bromoform	0.16	Not Detected	1.7	Not Detected
Cumene	0.16	Not Detected	0.80	Not Detected
1,1,2,2-Tetrachloroethane	0.16	Not Detected	1.1	Not Detected
Propylbenzene	0.16	Not Detected	0.80	Not Detected
4-Ethyltoluene	0.16	Not Detected	0.80	Not Detected
1,3,5-Trimethylbenzene	0.16	Not Detected	0.80	Not Detected
1,2,4-Trimethylbenzene	0.16	Not Detected	0.80	Not Detected
1,3-Dichlorobenzene	0.16	Not Detected	0.98	Not Detected
1,4-Dichlorobenzene	0.16	Not Detected	0.98	Not Detected
alpha-Chlorotoluene	0.16	Not Detected	0.84	Not Detected
1,2-Dichlorobenzene	0.16	Not Detected	0.98	Not Detected
1,2,4-Trichlorobenzene	0.82	Not Detected	6.0	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	119	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	100	70-130



Air Toxics

Client Sample ID: U1 (134110)

Lab ID#: 1310282-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102320	Date of Collection:	10/5/13 9:13:00 AM
Dil. Factor:	1.66	Date of Analysis:	10/24/13 09:23 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.58	0.82	2.8
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.83	Not Detected	1.7	Not Detected
Vinyl Chloride	0.17	Not Detected	0.42	Not Detected
1,3-Butadiene	0.17	Not Detected	0.37	Not Detected
Bromomethane	0.83	Not Detected	3.2	Not Detected
Chloroethane	0.83	Not Detected	2.2	Not Detected
Freon 11	0.17	0.26	0.93	1.4
Ethanol	0.83	2.0	1.6	3.7
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.66	Not Detected
Acetone	0.83	7.1	2.0	17
2-Propanol	0.83	Not Detected	2.0	Not Detected
Carbon Disulfide	0.83	Not Detected	2.6	Not Detected
3-Chloropropene	0.83	Not Detected	2.6	Not Detected
Methylene Chloride	0.33	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	0.66	Not Detected
Hexane	0.17	Not Detected	0.58	Not Detected
1,1-Dichloroethane	0.17	Not Detected	0.67	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.83	Not Detected	2.4	Not Detected
cis-1,2-Dichloroethene	0.17	Not Detected	0.66	Not Detected
Tetrahydrofuran	0.83	Not Detected	2.4	Not Detected
Chloroform	0.17	Not Detected	0.81	Not Detected
1,1,1-Trichloroethane	0.17	Not Detected	0.90	Not Detected
Cyclohexane	0.17	Not Detected	0.57	Not Detected
Carbon Tetrachloride	0.17	Not Detected	1.0	Not Detected
2,2,4-Trimethylpentane	0.83	Not Detected	3.9	Not Detected
Benzene	0.17	Not Detected	0.53	Not Detected
1,2-Dichloroethane	0.17	Not Detected	0.67	Not Detected
Heptane	0.17	Not Detected	0.68	Not Detected
Trichloroethene	0.17	Not Detected	0.89	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.77	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	0.75	Not Detected
4-Methyl-2-pentanone	0.17	Not Detected	0.68	Not Detected
Toluene	0.17	0.17	0.62	0.65
trans-1,3-Dichloropropene	0.17	Not Detected	0.75	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.90	Not Detected
Tetrachloroethene	0.17	Not Detected	1.1	Not Detected
2-Hexanone	0.83	Not Detected	3.4	Not Detected

Client Sample ID: U1 (134110)

Lab ID#: 1310282-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102320	Date of Collection:	10/5/13 9:13:00 AM
Dil. Factor:	1.66	Date of Analysis:	10/24/13 09:23 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	0.76	Not Detected
Ethyl Benzene	0.17	Not Detected	0.72	Not Detected
m,p-Xylene	0.17	Not Detected	0.72	Not Detected
o-Xylene	0.17	Not Detected	0.72	Not Detected
Styrene	0.17	Not Detected	0.71	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	1.1	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	0.86	Not Detected
1,2-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,2,4-Trichlorobenzene	0.83	Not Detected	6.2	Not Detected
Hexachlorobutadiene	0.83	Not Detected	8.8	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	119	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	103	70-130



Air Toxics

Client Sample ID: U2 (134111)

Lab ID#: 1310282-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102407	Date of Collection:	10/5/13 8:55:00 AM
Dil. Factor:	1.68	Date of Analysis:	10/24/13 02:04 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.60	0.83	3.0
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	0.24	0.94	1.4
Ethanol	0.84	3.1	1.6	5.9
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Acetone	0.84	5.3	2.0	12
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	0.36	1.2	1.2
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	Not Detected	2.5	Not Detected
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	Not Detected	0.54	Not Detected
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	Not Detected	0.63	Not Detected
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: U2 (134111)

Lab ID#: 1310282-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102407	Date of Collection: 10/5/13 8:55:00 AM
Dil. Factor:	1.68	Date of Analysis: 10/24/13 02:04 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	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	120	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	101	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1310282-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102306	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/23/13 01:33 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#: 1310282-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102306	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/23/13 01:33 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	108	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1310282-05B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102406	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/24/13 01:16 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#: 1310282-05B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102406	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/24/13 01:16 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	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	95	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 1310282-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102302	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/23/13 10:07 AM

Compound	%Recovery
Freon 12	106
Freon 114	102
Chloromethane	91
Vinyl Chloride	95
1,3-Butadiene	96
Bromomethane	96
Chloroethane	102
Freon 11	104
Ethanol	103
Freon 113	90
1,1-Dichloroethene	88
Acetone	91
2-Propanol	106
Carbon Disulfide	110
3-Chloropropene	129
Methylene Chloride	80
Methyl tert-butyl ether	103
trans-1,2-Dichloroethene	106
Hexane	102
1,1-Dichloroethane	100
2-Butanone (Methyl Ethyl Ketone)	94
cis-1,2-Dichloroethene	94
Tetrahydrofuran	97
Chloroform	100
1,1,1-Trichloroethane	105
Cyclohexane	99
Carbon Tetrachloride	121
2,2,4-Trimethylpentane	101
Benzene	95
1,2-Dichloroethane	106
Heptane	102
Trichloroethene	98
1,2-Dichloropropane	97
1,4-Dioxane	98
Bromodichloromethane	100
cis-1,3-Dichloropropene	102
4-Methyl-2-pentanone	107
Toluene	98
trans-1,3-Dichloropropene	112
1,1,2-Trichloroethane	100
Tetrachloroethene	111
2-Hexanone	113

Client Sample ID: CCV

Lab ID#: 1310282-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102302	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/23/13 10:07 AM

Compound	%Recovery
Dibromochloromethane	108
1,2-Dibromoethane (EDB)	110
Chlorobenzene	106
Ethyl Benzene	113
m,p-Xylene	115
o-Xylene	117
Styrene	126
Bromoform	114
Cumene	115
1,1,2,2-Tetrachloroethane	112
Propylbenzene	114
4-Ethyltoluene	108
1,3,5-Trimethylbenzene	113
1,2,4-Trimethylbenzene	112
1,3-Dichlorobenzene	109
1,4-Dichlorobenzene	111
alpha-Chlorotoluene	108
1,2-Dichlorobenzene	111
1,2,4-Trichlorobenzene	85
Hexachlorobutadiene	85

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	109	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 1310282-06B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102402	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/24/13 10:20 AM

Compound	%Recovery
Freon 12	107
Freon 114	100
Chloromethane	88
Vinyl Chloride	91
1,3-Butadiene	95
Bromomethane	97
Chloroethane	101
Freon 11	105
Ethanol	102
Freon 113	88
1,1-Dichloroethene	87
Acetone	90
2-Propanol	100
Carbon Disulfide	107
3-Chloropropene	134 Q
Methylene Chloride	78
Methyl tert-butyl ether	100
trans-1,2-Dichloroethene	104
Hexane	97
1,1-Dichloroethane	98
2-Butanone (Methyl Ethyl Ketone)	90
cis-1,2-Dichloroethene	90
Tetrahydrofuran	95
Chloroform	98
1,1,1-Trichloroethane	104
Cyclohexane	94
Carbon Tetrachloride	116
2,2,4-Trimethylpentane	97
Benzene	102
1,2-Dichloroethane	115
Heptane	110
Trichloroethene	107
1,2-Dichloropropane	103
1,4-Dioxane	100
Bromodichloromethane	107
cis-1,3-Dichloropropene	108
4-Methyl-2-pentanone	114
Toluene	106
trans-1,3-Dichloropropene	106
1,1,2-Trichloroethane	97
Tetrachloroethene	107
2-Hexanone	104



Client Sample ID: CCV

Lab ID#: 1310282-06B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102402	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/24/13 10:20 AM

Compound	%Recovery
Dibromochloromethane	106
1,2-Dibromoethane (EDB)	107
Chlorobenzene	99
Ethyl Benzene	105
m,p-Xylene	110
o-Xylene	111
Styrene	118
Bromoform	109
Cumene	109
1,1,2,2-Tetrachloroethane	107
Propylbenzene	110
4-Ethyltoluene	105
1,3,5-Trimethylbenzene	111
1,2,4-Trimethylbenzene	112
1,3-Dichlorobenzene	106
1,4-Dichlorobenzene	107
alpha-Chlorotoluene	98
1,2-Dichlorobenzene	108
1,2,4-Trichlorobenzene	85
Hexachlorobutadiene	80

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	106	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1310282-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102303	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/23/13 10:48 AM

Compound	%Recovery	Method Limits
Freon 12	101	70-130
Freon 114	96	70-130
Chloromethane	86	70-130
Vinyl Chloride	92	70-130
1,3-Butadiene	95	70-130
Bromomethane	98	70-130
Chloroethane	98	70-130
Freon 11	102	70-130
Ethanol	91	70-130
Freon 113	100	70-130
1,1-Dichloroethene	98	70-130
Acetone	98	70-130
2-Propanol	100	70-130
Carbon Disulfide	114	70-130
3-Chloropropene	130	70-130
Methylene Chloride	85	70-130
Methyl tert-butyl ether	100	70-130
trans-1,2-Dichloroethene	108	70-130
Hexane	99	70-130
1,1-Dichloroethane	96	70-130
2-Butanone (Methyl Ethyl Ketone)	95	70-130
cis-1,2-Dichloroethene	92	70-130
Tetrahydrofuran	96	70-130
Chloroform	97	70-130
1,1,1-Trichloroethane	101	70-130
Cyclohexane	98	70-130
Carbon Tetrachloride	110	70-130
2,2,4-Trimethylpentane	91	70-130
Benzene	96	70-130
1,2-Dichloroethane	104	70-130
Heptane	104	70-130
Trichloroethene	100	70-130
1,2-Dichloropropane	96	70-130
1,4-Dioxane	99	70-130
Bromodichloromethane	102	70-130
cis-1,3-Dichloropropene	100	70-130
4-Methyl-2-pentanone	109	70-130
Toluene	99	70-130
trans-1,3-Dichloropropene	101	70-130
1,1,2-Trichloroethane	97	70-130
Tetrachloroethene	107	70-130
2-Hexanone	108	70-130

Client Sample ID: LCS

Lab ID#: 1310282-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102303	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/23/13 10:48 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	103	70-130
1,2-Dibromoethane (EDB)	106	70-130
Chlorobenzene	97	70-130
Ethyl Benzene	107	70-130
m,p-Xylene	110	70-130
o-Xylene	112	70-130
Styrene	116	70-130
Bromoform	109	70-130
Cumene	111	70-130
1,1,2,2-Tetrachloroethane	104	70-130
Propylbenzene	113	70-130
4-Ethyltoluene	107	70-130
1,3,5-Trimethylbenzene	110	70-130
1,2,4-Trimethylbenzene	106	70-130
1,3-Dichlorobenzene	106	70-130
1,4-Dichlorobenzene	109	70-130
alpha-Chlorotoluene	106	70-130
1,2-Dichlorobenzene	111	70-130
1,2,4-Trichlorobenzene	93	70-130
Hexachlorobutadiene	87	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	113	70-130



Air Toxics

Client Sample ID: LCS D

Lab ID#: 1310282-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102304	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/23/13 11:29 AM

Compound	%Recovery	Method Limits
Freon 12	102	70-130
Freon 114	96	70-130
Chloromethane	87	70-130
Vinyl Chloride	94	70-130
1,3-Butadiene	98	70-130
Bromomethane	104	70-130
Chloroethane	102	70-130
Freon 11	102	70-130
Ethanol	99	70-130
Freon 113	100	70-130
1,1-Dichloroethene	101	70-130
Acetone	95	70-130
2-Propanol	101	70-130
Carbon Disulfide	115	70-130
3-Chloropropene	137 Q	70-130
Methylene Chloride	86	70-130
Methyl tert-butyl ether	99	70-130
trans-1,2-Dichloroethene	108	70-130
Hexane	100	70-130
1,1-Dichloroethane	98	70-130
2-Butanone (Methyl Ethyl Ketone)	96	70-130
cis-1,2-Dichloroethene	93	70-130
Tetrahydrofuran	96	70-130
Chloroform	98	70-130
1,1,1-Trichloroethane	100	70-130
Cyclohexane	98	70-130
Carbon Tetrachloride	109	70-130
2,2,4-Trimethylpentane	95	70-130
Benzene	93	70-130
1,2-Dichloroethane	100	70-130
Heptane	104	70-130
Trichloroethene	95	70-130
1,2-Dichloropropane	94	70-130
1,4-Dioxane	94	70-130
Bromodichloromethane	100	70-130
cis-1,3-Dichloropropene	98	70-130
4-Methyl-2-pentanone	107	70-130
Toluene	98	70-130
trans-1,3-Dichloropropene	98	70-130
1,1,2-Trichloroethane	92	70-130
Tetrachloroethene	103	70-130
2-Hexanone	103	70-130

Client Sample ID: LCSD

Lab ID#: 1310282-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102304	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/23/13 11:29 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	100	70-130
1,2-Dibromoethane (EDB)	102	70-130
Chlorobenzene	95	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	111	70-130
o-Xylene	111	70-130
Styrene	118	70-130
Bromoform	104	70-130
Cumene	110	70-130
1,1,2,2-Tetrachloroethane	99	70-130
Propylbenzene	112	70-130
4-Ethyltoluene	108	70-130
1,3,5-Trimethylbenzene	107	70-130
1,2,4-Trimethylbenzene	107	70-130
1,3-Dichlorobenzene	108	70-130
1,4-Dichlorobenzene	109	70-130
alpha-Chlorotoluene	108	70-130
1,2-Dichlorobenzene	114	70-130
1,2,4-Trichlorobenzene	91	70-130
Hexachlorobutadiene	85	70-130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	109	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1310282-07B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102403	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/24/13 11:00 AM

Compound	%Recovery	Method Limits
Freon 12	102	70-130
Freon 114	97	70-130
Chloromethane	86	70-130
Vinyl Chloride	92	70-130
1,3-Butadiene	95	70-130
Bromomethane	100	70-130
Chloroethane	101	70-130
Freon 11	103	70-130
Ethanol	95	70-130
Freon 113	97	70-130
1,1-Dichloroethene	96	70-130
Acetone	89	70-130
2-Propanol	97	70-130
Carbon Disulfide	110	70-130
3-Chloropropene	126	70-130
Methylene Chloride	84	70-130
Methyl tert-butyl ether	96	70-130
trans-1,2-Dichloroethene	103	70-130
Hexane	96	70-130
1,1-Dichloroethane	94	70-130
2-Butanone (Methyl Ethyl Ketone)	90	70-130
cis-1,2-Dichloroethene	90	70-130
Tetrahydrofuran	93	70-130
Chloroform	96	70-130
1,1,1-Trichloroethane	101	70-130
Cyclohexane	95	70-130
Carbon Tetrachloride	109	70-130
2,2,4-Trimethylpentane	90	70-130
Benzene	94	70-130
1,2-Dichloroethane	104	70-130
Heptane	101	70-130
Trichloroethene	98	70-130
1,2-Dichloropropane	94	70-130
1,4-Dioxane	96	70-130
Bromodichloromethane	102	70-130
cis-1,3-Dichloropropene	97	70-130
4-Methyl-2-pentanone	109	70-130
Toluene	98	70-130
trans-1,3-Dichloropropene	103	70-130
1,1,2-Trichloroethane	95	70-130
Tetrachloroethene	107	70-130
2-Hexanone	105	70-130

Client Sample ID: LCS

Lab ID#: 1310282-07B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102403	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/24/13 11:00 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	106	70-130
1,2-Dibromoethane (EDB)	105	70-130
Chlorobenzene	97	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	105	70-130
o-Xylene	104	70-130
Styrene	112	70-130
Bromoform	109	70-130
Cumene	105	70-130
1,1,2,2-Tetrachloroethane	102	70-130
Propylbenzene	104	70-130
4-Ethyltoluene	100	70-130
1,3,5-Trimethylbenzene	105	70-130
1,2,4-Trimethylbenzene	103	70-130
1,3-Dichlorobenzene	102	70-130
1,4-Dichlorobenzene	102	70-130
alpha-Chlorotoluene	97	70-130
1,2-Dichlorobenzene	107	70-130
1,2,4-Trichlorobenzene	94	70-130
Hexachlorobutadiene	84	70-130

Container Type: NA - Not Applicable

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



Air Toxics

Client Sample ID: LCS D

Lab ID#: 1310282-07BB

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102404	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/24/13 11:40 AM

Compound	%Recovery	Method Limits
Freon 12	99	70-130
Freon 114	97	70-130
Chloromethane	95	70-130
Vinyl Chloride	90	70-130
1,3-Butadiene	97	70-130
Bromomethane	100	70-130
Chloroethane	99	70-130
Freon 11	103	70-130
Ethanol	89	70-130
Freon 113	99	70-130
1,1-Dichloroethene	99	70-130
Acetone	92	70-130
2-Propanol	100	70-130
Carbon Disulfide	114	70-130
3-Chloropropene	126	70-130
Methylene Chloride	84	70-130
Methyl tert-butyl ether	98	70-130
trans-1,2-Dichloroethene	106	70-130
Hexane	97	70-130
1,1-Dichloroethane	96	70-130
2-Butanone (Methyl Ethyl Ketone)	93	70-130
cis-1,2-Dichloroethene	92	70-130
Tetrahydrofuran	94	70-130
Chloroform	98	70-130
1,1,1-Trichloroethane	100	70-130
Cyclohexane	98	70-130
Carbon Tetrachloride	109	70-130
2,2,4-Trimethylpentane	90	70-130
Benzene	96	70-130
1,2-Dichloroethane	108	70-130
Heptane	105	70-130
Trichloroethene	101	70-130
1,2-Dichloropropane	97	70-130
1,4-Dioxane	98	70-130
Bromodichloromethane	107	70-130
cis-1,3-Dichloropropene	101	70-130
4-Methyl-2-pentanone	112	70-130
Toluene	99	70-130
trans-1,3-Dichloropropene	105	70-130
1,1,2-Trichloroethane	96	70-130
Tetrachloroethene	105	70-130
2-Hexanone	108	70-130

Client Sample ID: LCSD

Lab ID#: 1310282-07BB

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	c102404	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/24/13 11:40 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	108	70-130
1,2-Dibromoethane (EDB)	108	70-130
Chlorobenzene	96	70-130
Ethyl Benzene	102	70-130
m,p-Xylene	105	70-130
o-Xylene	103	70-130
Styrene	111	70-130
Bromoform	107	70-130
Cumene	103	70-130
1,1,2,2-Tetrachloroethane	101	70-130
Propylbenzene	102	70-130
4-Ethyltoluene	96	70-130
1,3,5-Trimethylbenzene	99	70-130
1,2,4-Trimethylbenzene	96	70-130
1,3-Dichlorobenzene	96	70-130
1,4-Dichlorobenzene	94	70-130
alpha-Chlorotoluene	94	70-130
1,2-Dichlorobenzene	98	70-130
1,2,4-Trichlorobenzene	77	70-130
Hexachlorobutadiene	68 Q	70-130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	106	70-130