

10/8/2015
Mr. Dennis Schroeder
Missouri Dept. of Natural Resources
2710 West Main

Jefferson City MO 65109

Project Name: Bridgeton Landfill
Project #:
Workorder #: 1509444

Dear Mr. Dennis Schroeder

The following report includes the data for the above referenced project for sample(s) received on 9/25/2015 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 Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free 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 #: 1509444

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:	09/25/2015	CONTACT:	Brian Whittaker
DATE COMPLETED:	10/08/2015		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	D1 (153589)	Modified TO-15	7.6 "Hg	4.8 psi
02A	D2 (153586)	Modified TO-15	6.7 "Hg	4.9 psi
03A	U1 (153587)	Modified TO-15	9.8 "Hg	4.9 psi
04A	Lab Blank	Modified TO-15	NA	NA
05A	CCV	Modified TO-15	NA	NA
06A	LCS	Modified TO-15	NA	NA
06AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: 

 Technical Director

DATE: 10/08/15

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

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LABORATORY NARRATIVE
Modified TO-15
Missouri Dept. of Natural Resources
Workorder# 1509444

Three 6 Liter Summa Canister (100% Certified) samples were received on September 25, 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	</=30% RSD with 2 compounds allowed out to < 40% RSD	</=30% RSD with 4 compounds allowed out to < 40% RSD
Blank and standards	Zero Air	UHP Nitrogen provides a higher purity gas matrix than zero air

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

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

Definition of Data Qualifying Flags

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

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

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

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

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

N - The identification is based on presumptive evidence.

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

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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

Client Sample ID: D1 (153589)

Lab ID#: 1509444-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.35	0.88	1.8
Freon 11	0.18	0.21	0.99	1.2
Ethanol	0.88	30 J0	1.7	57 J0
Acetone	0.88	5.7	2.1	14
2-Propanol	0.88	2.3	2.2	5.6
Cyclohexane	0.18	0.51	0.61	1.7
Toluene	0.18	0.98	0.67	3.7
m,p-Xylene	0.18	0.26	0.77	1.1

Client Sample ID: D2 (153586)

Lab ID#: 1509444-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.45	0.85	2.2
Freon 11	0.17	0.23	0.97	1.3
Ethanol	0.86	10 J0	1.6	20 J0
Acetone	0.86	8.0	2.0	19
2-Propanol	0.86	1.4	2.1	3.4
Methylene Chloride	0.34	0.46	1.2	1.6
Hexane	0.17	0.20	0.61	0.72
2-Butanone (Methyl Ethyl Ketone)	0.86	1.4	2.5	4.2
Cyclohexane	0.17	0.42	0.59	1.4
Heptane	0.17	0.67	0.70	2.7
4-Methyl-2-pentanone	0.17	0.26	0.70	1.1
Toluene	0.17	20	0.65	75
Tetrachloroethene	0.17	0.25	1.2	1.7
m,p-Xylene	0.17	0.31	0.75	1.4
1,2,4-Trimethylbenzene	0.17	0.19	0.84	0.95

Client Sample ID: U1 (153587)

Lab ID#: 1509444-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: U1 (153587)

Lab ID#: 1509444-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.20	0.40	0.98	2.0
Freon 11	0.20	0.20	1.1	1.1
Ethanol	0.99	7.6 J0	1.9	14 J0
Acetone	0.99	4.4	2.4	10
Toluene	0.20	1.8	0.75	7.0
m,p-Xylene	0.20	0.23	0.86	0.99



Air Toxics

Client Sample ID: D1 (153589)

Lab ID#: 1509444-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093010	Date of Collection:	9/17/15 3:15:00 PM
Dil. Factor:	1.77	Date of Analysis:	9/30/15 11:50 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.35	0.88	1.8
Freon 114	0.18	Not Detected	1.2	Not Detected
Chloromethane	0.88	Not Detected	1.8	Not Detected
Vinyl Chloride	0.18	Not Detected	0.45	Not Detected
1,3-Butadiene	0.18	Not Detected	0.39	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.18	0.21	0.99	1.2
Ethanol	0.88	30 J0	1.7	57 J0
Freon 113	0.18	Not Detected	1.4	Not Detected
1,1-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Acetone	0.88	5.7	2.1	14
2-Propanol	0.88	2.3	2.2	5.6
Carbon Disulfide	0.88	Not Detected	2.8	Not Detected
3-Chloropropene	0.88	Not Detected	2.8	Not Detected
Methylene Chloride	0.35	Not Detected	1.2	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.64	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Hexane	0.18	Not Detected	0.62	Not Detected
1,1-Dichloroethane	0.18	Not Detected	0.72	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.18	Not Detected	0.86	Not Detected
1,1,1-Trichloroethane	0.18	Not Detected	0.96	Not Detected
Cyclohexane	0.18	0.51	0.61	1.7
Carbon Tetrachloride	0.18	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.88	Not Detected	4.1	Not Detected
Benzene	0.18	Not Detected	0.56	Not Detected
1,2-Dichloroethane	0.18	Not Detected	0.72	Not Detected
Heptane	0.18	Not Detected	0.72	Not Detected
Trichloroethene	0.18	Not Detected	0.95	Not Detected
1,2-Dichloropropane	0.18	Not Detected	0.82	Not Detected
1,4-Dioxane	0.18	Not Detected	0.64	Not Detected
Bromodichloromethane	0.18	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.18	Not Detected	0.80	Not Detected
4-Methyl-2-pentanone	0.18	Not Detected	0.72	Not Detected
Toluene	0.18	0.98	0.67	3.7
trans-1,3-Dichloropropene	0.18	Not Detected	0.80	Not Detected
1,1,2-Trichloroethane	0.18	Not Detected	0.96	Not Detected
Tetrachloroethene	0.18	Not Detected	1.2	Not Detected
2-Hexanone	0.88	Not Detected	3.6	Not Detected



Client Sample ID: D1 (153589)

Lab ID#: 1509444-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093010	Date of Collection:	9/17/15 3:15:00 PM
Dil. Factor:	1.77	Date of Analysis:	9/30/15 11:50 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.18	Not Detected	1.5	Not Detected
1,2-Dibromoethane (EDB)	0.18	Not Detected	1.4	Not Detected
Chlorobenzene	0.18	Not Detected	0.81	Not Detected
Ethyl Benzene	0.18	Not Detected	0.77	Not Detected
m,p-Xylene	0.18	0.26	0.77	1.1
o-Xylene	0.18	Not Detected	0.77	Not Detected
Styrene	0.18	Not Detected	0.75	Not Detected
Bromoform	0.18	Not Detected	1.8	Not Detected
Cumene	0.18	Not Detected	0.87	Not Detected
1,1,2,2-Tetrachloroethane	0.18	Not Detected	1.2	Not Detected
Propylbenzene	0.18	Not Detected	0.87	Not Detected
4-Ethyltoluene	0.18	Not Detected	0.87	Not Detected
1,3,5-Trimethylbenzene	0.18	Not Detected	0.87	Not Detected
1,2,4-Trimethylbenzene	0.18	Not Detected	0.87	Not Detected
1,3-Dichlorobenzene	0.18	Not Detected	1.1	Not Detected
1,4-Dichlorobenzene	0.18	Not Detected	1.1	Not Detected
alpha-Chlorotoluene	0.18	Not Detected	0.92	Not Detected
1,2-Dichlorobenzene	0.18	Not Detected	1.1	Not Detected
1,2,4-Trichlorobenzene	0.88	Not Detected	6.6	Not Detected
Hexachlorobutadiene	0.88	Not Detected	9.4	Not Detected

J0 = Estimated value due to bias in the CCV.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	102	70-130



Air Toxics

Client Sample ID: D2 (153586)

Lab ID#: 1509444-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093011	Date of Collection:	9/17/15 3:24:00 PM
Dil. Factor:	1.72	Date of Analysis:	9/30/15 12:32 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.45	0.85	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	2.3	Not Detected
Freon 11	0.17	0.23	0.97	1.3
Ethanol	0.86	10 J0	1.6	20 J0
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Acetone	0.86	8.0	2.0	19
2-Propanol	0.86	1.4	2.1	3.4
Carbon Disulfide	0.86	Not Detected	2.7	Not Detected
3-Chloropropene	0.86	Not Detected	2.7	Not Detected
Methylene Chloride	0.34	0.46	1.2	1.6
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	0.20	0.61	0.72
1,1-Dichloroethane	0.17	Not Detected	0.70	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	1.4	2.5	4.2
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	0.84	Not Detected
1,1,1-Trichloroethane	0.17	Not Detected	0.94	Not Detected
Cyclohexane	0.17	0.42	0.59	1.4
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	0.70	Not Detected
Heptane	0.17	0.67	0.70	2.7
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	1.2	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.78	Not Detected
4-Methyl-2-pentanone	0.17	0.26	0.70	1.1
Toluene	0.17	20	0.65	75
trans-1,3-Dichloropropene	0.17	Not Detected	0.78	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.94	Not Detected
Tetrachloroethene	0.17	0.25	1.2	1.7
2-Hexanone	0.86	Not Detected	3.5	Not Detected



Client Sample ID: D2 (153586)

Lab ID#: 1509444-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093011	Date of Collection:	9/17/15 3:24:00 PM
Dil. Factor:	1.72	Date of Analysis:	9/30/15 12:32 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.17	Not Detected	1.5	Not Detected
1,2-Dibromoethane (EDB)	0.17	Not Detected	1.3	Not Detected
Chlorobenzene	0.17	Not Detected	0.79	Not Detected
Ethyl Benzene	0.17	Not Detected	0.75	Not Detected
m,p-Xylene	0.17	0.31	0.75	1.4
o-Xylene	0.17	Not Detected	0.75	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	0.19	0.84	0.95
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	0.89	Not Detected
1,2-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,2,4-Trichlorobenzene	0.86	Not Detected	6.4	Not Detected
Hexachlorobutadiene	0.86	Not Detected	9.2	Not Detected

J0 = Estimated value due to bias in the CCV.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: U1 (153587)

Lab ID#: 1509444-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093012	Date of Collection:	9/17/15 3:32:00 PM
Dil. Factor:	1.98	Date of Analysis:	9/30/15 01:24 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.20	0.40	0.98	2.0
Freon 114	0.20	Not Detected	1.4	Not Detected
Chloromethane	0.99	Not Detected	2.0	Not Detected
Vinyl Chloride	0.20	Not Detected	0.51	Not Detected
1,3-Butadiene	0.20	Not Detected	0.44	Not Detected
Bromomethane	0.99	Not Detected	3.8	Not Detected
Chloroethane	0.99	Not Detected	2.6	Not Detected
Freon 11	0.20	0.20	1.1	1.1
Ethanol	0.99	7.6 J0	1.9	14 J0
Freon 113	0.20	Not Detected	1.5	Not Detected
1,1-Dichloroethene	0.20	Not Detected	0.78	Not Detected
Acetone	0.99	4.4	2.4	10
2-Propanol	0.99	Not Detected	2.4	Not Detected
Carbon Disulfide	0.99	Not Detected	3.1	Not Detected
3-Chloropropene	0.99	Not Detected	3.1	Not Detected
Methylene Chloride	0.40	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	0.70	Not Detected
1,1-Dichloroethane	0.20	Not Detected	0.80	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.99	Not Detected	2.9	Not Detected
cis-1,2-Dichloroethene	0.20	Not Detected	0.78	Not Detected
Tetrahydrofuran	0.99	Not Detected	2.9	Not Detected
Chloroform	0.20	Not Detected	0.97	Not Detected
1,1,1-Trichloroethane	0.20	Not Detected	1.1	Not Detected
Cyclohexane	0.20	Not Detected	0.68	Not Detected
Carbon Tetrachloride	0.20	Not Detected	1.2	Not Detected
2,2,4-Trimethylpentane	0.99	Not Detected	4.6	Not Detected
Benzene	0.20	Not Detected	0.63	Not Detected
1,2-Dichloroethane	0.20	Not Detected	0.80	Not Detected
Heptane	0.20	Not Detected	0.81	Not Detected
Trichloroethene	0.20	Not Detected	1.1	Not Detected
1,2-Dichloropropane	0.20	Not Detected	0.92	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	0.90	Not Detected
4-Methyl-2-pentanone	0.20	Not Detected	0.81	Not Detected
Toluene	0.20	1.8	0.75	7.0
trans-1,3-Dichloropropene	0.20	Not Detected	0.90	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	0.99	Not Detected	4.0	Not Detected



Client Sample ID: U1 (153587)

Lab ID#: 1509444-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093012	Date of Collection: 9/17/15 3:32:00 PM
Dil. Factor:	1.98	Date of Analysis: 9/30/15 01:24 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	0.91	Not Detected
Ethyl Benzene	0.20	Not Detected	0.86	Not Detected
m,p-Xylene	0.20	0.23	0.86	0.99
o-Xylene	0.20	Not Detected	0.86	Not Detected
Styrene	0.20	Not Detected	0.84	Not Detected
Bromoform	0.20	Not Detected	2.0	Not Detected
Cumene	0.20	Not Detected	0.97	Not Detected
1,1,2,2-Tetrachloroethane	0.20	Not Detected	1.4	Not Detected
Propylbenzene	0.20	Not Detected	0.97	Not Detected
4-Ethyltoluene	0.20	Not Detected	0.97	Not Detected
1,3,5-Trimethylbenzene	0.20	Not Detected	0.97	Not Detected
1,2,4-Trimethylbenzene	0.20	Not Detected	0.97	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	0.99	Not Detected	7.3	Not Detected
Hexachlorobutadiene	0.99	Not Detected	10	Not Detected

J0 = Estimated value due to bias in the CCV.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	95	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1509444-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093007	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/30/15 09:33 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.10	Not Detected	0.49	Not Detected
Freon 114	0.10	Not Detected	0.70	Not Detected
Chloromethane	0.50	Not Detected	1.0	Not Detected
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
1,3-Butadiene	0.10	Not Detected	0.22	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.10	Not Detected	0.56	Not Detected
Ethanol	0.50	Not Detected UJ	0.94	Not Detected UJ
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#: 1509444-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093007	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/30/15 09:33 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.10	Not Detected	0.85	Not Detected
1,2-Dibromoethane (EDB)	0.10	Not Detected	0.77	Not Detected
Chlorobenzene	0.10	Not Detected	0.46	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	Not Detected	0.43	Not Detected
o-Xylene	0.10	Not Detected	0.43	Not Detected
Styrene	0.10	Not Detected	0.42	Not Detected
Bromoform	0.10	Not Detected	1.0	Not Detected
Cumene	0.10	Not Detected	0.49	Not Detected
1,1,2,2-Tetrachloroethane	0.10	Not Detected	0.69	Not Detected
Propylbenzene	0.10	Not Detected	0.49	Not Detected
4-Ethyltoluene	0.10	Not Detected	0.49	Not Detected
1,3,5-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,2,4-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,3-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
1,4-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
alpha-Chlorotoluene	0.10	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

UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: NA - Not Applicable

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



Air Toxics

Client Sample ID: CCV

Lab ID#: 1509444-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093002	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/30/15 05:49 AM

Compound	%Recovery
Freon 12	80
Freon 114	82
Chloromethane	83
Vinyl Chloride	80
1,3-Butadiene	77
Bromomethane	79
Chloroethane	77
Freon 11	79
Ethanol	69 Q
Freon 113	79
1,1-Dichloroethene	80
Acetone	72
2-Propanol	78
Carbon Disulfide	93
3-Chloropropene	73
Methylene Chloride	75
Methyl tert-butyl ether	82
trans-1,2-Dichloroethene	78
Hexane	80
1,1-Dichloroethane	80
2-Butanone (Methyl Ethyl Ketone)	76
cis-1,2-Dichloroethene	80
Tetrahydrofuran	80
Chloroform	82
1,1,1-Trichloroethane	85
Cyclohexane	85
Carbon Tetrachloride	80
2,2,4-Trimethylpentane	78
Benzene	72
1,2-Dichloroethane	76
Heptane	77
Trichloroethene	72
1,2-Dichloropropane	70
1,4-Dioxane	74
Bromodichloromethane	74
cis-1,3-Dichloropropene	75
4-Methyl-2-pentanone	76
Toluene	78
trans-1,3-Dichloropropene	81
1,1,2-Trichloroethane	71
Tetrachloroethene	78
2-Hexanone	77



Air Toxics

Client Sample ID: CCV

Lab ID#: 1509444-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093002	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/30/15 05:49 AM

Compound	%Recovery
Dibromochloromethane	80
1,2-Dibromoethane (EDB)	79
Chlorobenzene	80
Ethyl Benzene	85
m,p-Xylene	83
o-Xylene	85
Styrene	88
Bromoform	80
Cumene	83
1,1,2,2-Tetrachloroethane	72
Propylbenzene	83
4-Ethyltoluene	85
1,3,5-Trimethylbenzene	85
1,2,4-Trimethylbenzene	81
1,3-Dichlorobenzene	82
1,4-Dichlorobenzene	80
alpha-Chlorotoluene	78
1,2-Dichlorobenzene	81
1,2,4-Trichlorobenzene	70
Hexachlorobutadiene	79

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	101	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1509444-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/30/15 06:32 AM

Compound	%Recovery	Method Limits
Freon 12	114	70-130
Freon 114	118	70-130
Chloromethane	109	70-130
Vinyl Chloride	107	70-130
1,3-Butadiene	106	70-130
Bromomethane	112	70-130
Chloroethane	108	70-130
Freon 11	122	70-130
Ethanol	106	70-130
Freon 113	106	70-130
1,1-Dichloroethene	111	70-130
Acetone	95	70-130
2-Propanol	118	70-130
Carbon Disulfide	88	70-130
3-Chloropropene	97	70-130
Methylene Chloride	106	70-130
Methyl tert-butyl ether	113	70-130
trans-1,2-Dichloroethene	91	70-130
Hexane	114	70-130
1,1-Dichloroethane	109	70-130
2-Butanone (Methyl Ethyl Ketone)	115	70-130
cis-1,2-Dichloroethene	127	70-130
Tetrahydrofuran	112	70-130
Chloroform	108	70-130
1,1,1-Trichloroethane	116	70-130
Cyclohexane	113	70-130
Carbon Tetrachloride	116	70-130
2,2,4-Trimethylpentane	111	70-130
Benzene	102	70-130
1,2-Dichloroethane	104	70-130
Heptane	108	70-130
Trichloroethene	104	70-130
1,2-Dichloropropane	99	70-130
1,4-Dioxane	106	70-130
Bromodichloromethane	103	70-130
cis-1,3-Dichloropropene	93	70-130
4-Methyl-2-pentanone	105	70-130
Toluene	104	70-130
trans-1,3-Dichloropropene	104	70-130
1,1,2-Trichloroethane	92	70-130
Tetrachloroethene	106	70-130
2-Hexanone	115	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1509444-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/30/15 06:32 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	107	70-130
1,2-Dibromoethane (EDB)	106	70-130
Chlorobenzene	102	70-130
Ethyl Benzene	107	70-130
m,p-Xylene	113	70-130
o-Xylene	107	70-130
Styrene	119	70-130
Bromoform	106	70-130
Cumene	113	70-130
1,1,2,2-Tetrachloroethane	96	70-130
Propylbenzene	114	70-130
4-Ethyltoluene	112	70-130
1,3,5-Trimethylbenzene	114	70-130
1,2,4-Trimethylbenzene	110	70-130
1,3-Dichlorobenzene	110	70-130
1,4-Dichlorobenzene	112	70-130
alpha-Chlorotoluene	106	70-130
1,2-Dichlorobenzene	111	70-130
1,2,4-Trichlorobenzene	100	70-130
Hexachlorobutadiene	102	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130



Air Toxics

Client Sample ID: LCS D

Lab ID#: 1509444-06AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093004	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/30/15 07:15 AM

Compound	%Recovery	Method Limits
Freon 12	113	70-130
Freon 114	123	70-130
Chloromethane	112	70-130
Vinyl Chloride	109	70-130
1,3-Butadiene	105	70-130
Bromomethane	111	70-130
Chloroethane	115	70-130
Freon 11	117	70-130
Ethanol	106	70-130
Freon 113	108	70-130
1,1-Dichloroethene	116	70-130
Acetone	91	70-130
2-Propanol	117	70-130
Carbon Disulfide	86	70-130
3-Chloropropene	105	70-130
Methylene Chloride	102	70-130
Methyl tert-butyl ether	113	70-130
trans-1,2-Dichloroethene	95	70-130
Hexane	115	70-130
1,1-Dichloroethane	108	70-130
2-Butanone (Methyl Ethyl Ketone)	112	70-130
cis-1,2-Dichloroethene	127	70-130
Tetrahydrofuran	113	70-130
Chloroform	113	70-130
1,1,1-Trichloroethane	120	70-130
Cyclohexane	120	70-130
Carbon Tetrachloride	116	70-130
2,2,4-Trimethylpentane	107	70-130
Benzene	99	70-130
1,2-Dichloroethane	108	70-130
Heptane	115	70-130
Trichloroethene	101	70-130
1,2-Dichloropropane	97	70-130
1,4-Dioxane	100	70-130
Bromodichloromethane	101	70-130
cis-1,3-Dichloropropene	97	70-130
4-Methyl-2-pentanone	108	70-130
Toluene	104	70-130
trans-1,3-Dichloropropene	103	70-130
1,1,2-Trichloroethane	96	70-130
Tetrachloroethene	103	70-130
2-Hexanone	116	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1509444-06AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e093004	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/30/15 07:15 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	109	70-130
1,2-Dibromoethane (EDB)	109	70-130
Chlorobenzene	106	70-130
Ethyl Benzene	113	70-130
m,p-Xylene	116	70-130
o-Xylene	113	70-130
Styrene	122	70-130
Bromoform	113	70-130
Cumene	116	70-130
1,1,2,2-Tetrachloroethane	95	70-130
Propylbenzene	114	70-130
4-Ethyltoluene	114	70-130
1,3,5-Trimethylbenzene	117	70-130
1,2,4-Trimethylbenzene	110	70-130
1,3-Dichlorobenzene	112	70-130
1,4-Dichlorobenzene	112	70-130
alpha-Chlorotoluene	108	70-130
1,2-Dichlorobenzene	114	70-130
1,2,4-Trichlorobenzene	104	70-130
Hexachlorobutadiene	96	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	97	70-130