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5/19/2017
Mr. Curt Lueckenhoff
Missouri Dept. of Natural Resources
2710 West Main

Jefferson City MO 65109

Project Name: Bridgeton Landfill
Project #:
Workorder #: 1705160

Dear Mr. Curt Lueckenhoff

The following report includes the data for the above referenced project for sample(s) received on 5/8/2017 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 to contact the Project Manager: Brian Whittaker at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Brian Whittaker

Project Manager

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WORK ORDER #: 1705160

Work Order Summary

CLIENT:	Mr. Curt Lueckenhoff 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. #**	3ESP170928
FAX:	573-526-3350	**PROJECT #**	Bridgeton Landfill
DATE RECEIVED:	05/08/2017	**CONTACT:**	Brian Whittaker
DATE COMPLETED:	05/17/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	D1 (172326)	Modified TO-15	5.7 "Hg	5.2 psi
02A	U1 (172326)	Modified TO-15	6.1 "Hg	5.2 psi
03A	Lab Blank	Modified TO-15	NA	NA
04A	CCV	Modified TO-15	NA	NA
05A	LCS	Modified TO-15	NA	NA
05AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:  DATE: 05/17/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

LABORATORY NARRATIVE
Modified TO-15
Missouri Dept. of Natural Resources
Workorder# 1705160

Two 6 Liter Summa Canister (100% Cert Ambient) samples were received on May 08, 2017. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

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

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

Requirement	***TO-15***	***ATL Modifications***
Initial Calibration	</=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

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

Client Sample ID: D1 (172326)

Lab ID#: 1705160-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.47	0.82	2.3
Freon 11	0.17	0.20	0.94	1.1
Ethanol	0.84	5.2	1.6	9.7
Acetone	0.84	11	2.0	26
2-Propanol	0.84	1.5	2.0	3.6
2-Butanone (Methyl Ethyl Ketone)	0.84	2.8	2.5	8.4
Heptane	0.17	0.24	0.68	0.99
Toluene	0.17	0.19	0.63	0.70

Client Sample ID: U1 (172326)

Lab ID#: 1705160-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.44	0.84	2.2
Freon 11	0.17	0.21	0.96	1.2
Ethanol	0.85	5.3	1.6	9.9
Acetone	0.85	9.9	2.0	23
2-Propanol	0.85	1.1	2.1	2.6
Hexane	0.17	0.28	0.60	0.98
2-Butanone (Methyl Ethyl Ketone)	0.85	2.2	2.5	6.3
Heptane	0.17	0.32	0.70	1.3
Toluene	0.17	0.44	0.64	1.6

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Client Sample ID: D1 (172326)

Lab ID#: 1705160-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e051108**	**Date of Collection:**	**5/2/17 1:15:00 PM**
Dil. Factor:	**1.67**	**Date of Analysis:**	**5/11/17 01:14 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.47	0.82	2.3
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	3.2	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.17	0.20	0.94	1.1
Ethanol	0.84	5.2	1.6	9.7
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.66	Not Detected
Acetone	0.84	11	2.0	26
2-Propanol	0.84	1.5	2.0	3.6
Carbon Disulfide	0.84	Not Detected	2.6	Not Detected
3-Chloropropene	0.84	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	0.59	Not Detected
1,1-Dichloroethane	0.17	Not Detected	0.68	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	2.8	2.5	8.4
cis-1,2-Dichloroethene	0.17	Not Detected	0.66	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	0.91	Not Detected
Cyclohexane	0.17	Not Detected	0.57	Not Detected
Carbon Tetrachloride	0.17	Not Detected UJ	1.0	Not Detected UJ
2,2,4-Trimethylpentane	0.84	Not Detected	3.9	Not Detected
Benzene	0.17	Not Detected	0.53	Not Detected
1,2-Dichloroethane	0.17	Not Detected	0.68	Not Detected
Heptane	0.17	0.24	0.68	0.99
Trichloroethene	0.17	Not Detected	0.90	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	0.76	Not Detected
4-Methyl-2-pentanone	0.17	Not Detected	0.68	Not Detected
Toluene	0.17	0.19	0.63	0.70
trans-1,3-Dichloropropene	0.17	Not Detected	0.76	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.91	Not Detected
Tetrachloroethene	0.17	Not Detected	1.1	Not Detected
2-Hexanone	0.84	Not Detected	3.4	Not Detected

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Client Sample ID: D1 (172326)

Lab ID#: 1705160-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e051108**	**Date of Collection:**	**5/2/17 1:15:00 PM**
Dil. Factor:	**1.67**	**Date of Analysis:**	**5/11/17 01:14 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	0.72	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	0.84	Not Detected	6.2	Not Detected
Hexachlorobutadiene	0.84	Not Detected	8.9	Not Detected

UJ = Analyte associated with low bias in the CCV.

Container Type: 6 Liter Summa Canister (100% Cert Ambient)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: U1 (172326)

Lab ID#: 1705160-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e051109**	**Date of Collection:**	**5/2/17 1:35:00 PM**
Dil. Factor:	**1.70**	**Date of Analysis:**	**5/11/17 01:56 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.44	0.84	2.2
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.85	Not Detected	1.8	Not Detected
Vinyl Chloride	0.17	Not Detected	0.43	Not Detected
1,3-Butadiene	0.17	Not Detected	0.38	Not Detected
Bromomethane	0.85	Not Detected	3.3	Not Detected
Chloroethane	0.85	Not Detected	2.2	Not Detected
Freon 11	0.17	0.21	0.96	1.2
Ethanol	0.85	5.3	1.6	9.9
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Acetone	0.85	9.9	2.0	23
2-Propanol	0.85	1.1	2.1	2.6
Carbon Disulfide	0.85	Not Detected	2.6	Not Detected
3-Chloropropene	0.85	Not Detected	2.7	Not Detected
Methylene Chloride	0.34	Not Detected	1.2	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.61	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Hexane	0.17	0.28	0.60	0.98
1,1-Dichloroethane	0.17	Not Detected	0.69	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.85	2.2	2.5	6.3
cis-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Tetrahydrofuran	0.85	Not Detected	2.5	Not Detected
Chloroform	0.17	Not Detected	0.83	Not Detected
1,1,1-Trichloroethane	0.17	Not Detected	0.93	Not Detected
Cyclohexane	0.17	Not Detected	0.58	Not Detected
Carbon Tetrachloride	0.17	Not Detected UJ	1.1	Not Detected UJ
2,2,4-Trimethylpentane	0.85	Not Detected	4.0	Not Detected
Benzene	0.17	Not Detected	0.54	Not Detected
1,2-Dichloroethane	0.17	Not Detected	0.69	Not Detected
Heptane	0.17	0.32	0.70	1.3
Trichloroethene	0.17	Not Detected	0.91	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.78	Not Detected
1,4-Dioxane	0.17	Not Detected	0.61	Not Detected
Bromodichloromethane	0.17	Not Detected	1.1	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.77	Not Detected
4-Methyl-2-pentanone	0.17	Not Detected	0.70	Not Detected
Toluene	0.17	0.44	0.64	1.6
trans-1,3-Dichloropropene	0.17	Not Detected	0.77	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.93	Not Detected
Tetrachloroethene	0.17	Not Detected	1.2	Not Detected
2-Hexanone	0.85	Not Detected	3.5	Not Detected

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Client Sample ID: U1 (172326)

Lab ID#: 1705160-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e051109**	**Date of Collection:**	**5/2/17 1:35:00 PM**
Dil. Factor:	**1.70**	**Date of Analysis:**	**5/11/17 01:56 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	0.78	Not Detected
Ethyl Benzene	0.17	Not Detected	0.74	Not Detected
m,p-Xylene	0.17	Not Detected	0.74	Not Detected
o-Xylene	0.17	Not Detected	0.74	Not Detected
Styrene	0.17	Not Detected	0.72	Not Detected
Bromoform	0.17	Not Detected	1.8	Not Detected
Cumene	0.17	Not Detected	0.84	Not Detected
1,1,2,2-Tetrachloroethane	0.17	Not Detected	1.2	Not Detected
Propylbenzene	0.17	Not Detected	0.84	Not Detected
4-Ethyltoluene	0.17	Not Detected	0.84	Not Detected
1,3,5-Trimethylbenzene	0.17	Not Detected	0.84	Not Detected
1,2,4-Trimethylbenzene	0.17	Not Detected	0.84	Not Detected
1,3-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,4-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
alpha-Chlorotoluene	0.17	Not Detected	0.88	Not Detected
1,2-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,2,4-Trichlorobenzene	0.85	Not Detected	6.3	Not Detected
Hexachlorobutadiene	0.85	Not Detected	9.1	Not Detected

UJ = Analyte associated with low bias in the CCV.

Container Type: 6 Liter Summa Canister (100% Cert Ambient)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1705160-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e051107**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/11/17 12:25 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 UJ	0.63	Not Detected UJ
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

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Client Sample ID: Lab Blank

Lab ID#: 1705160-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e051107**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/11/17 12:25 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

UJ = Analyte associated with low bias in the CCV.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: CCV

Lab ID#: 1705160-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e051102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/11/17 08:17 AM**	

Compound	%Recovery
Freon 12	99
Freon 114	95
Chloromethane	108
Vinyl Chloride	96
1,3-Butadiene	97
Bromomethane	100
Chloroethane	100
Freon 11	100
Ethanol	117
Freon 113	91
1,1-Dichloroethene	90
Acetone	94
2-Propanol	100
Carbon Disulfide	95
3-Chloropropene	97
Methylene Chloride	90
Methyl tert-butyl ether	98
trans-1,2-Dichloroethene	93
Hexane	99
1,1-Dichloroethane	97
2-Butanone (Methyl Ethyl Ketone)	98
cis-1,2-Dichloroethene	95
Tetrahydrofuran	103
Chloroform	97
1,1,1-Trichloroethane	95
Cyclohexane	96
Carbon Tetrachloride	67 Q
2,2,4-Trimethylpentane	98
Benzene	90
1,2-Dichloroethane	98
Heptane	104
Trichloroethene	107
1,2-Dichloropropane	96
1,4-Dioxane	99
Bromodichloromethane	97
cis-1,3-Dichloropropene	100
4-Methyl-2-pentanone	106
Toluene	97
trans-1,3-Dichloropropene	94
1,1,2-Trichloroethane	94
Tetrachloroethene	94
2-Hexanone	104

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Client Sample ID: CCV

Lab ID#: 1705160-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e051102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/11/17 08:17 AM**	

Compound	%Recovery
Dibromochloromethane	95
1,2-Dibromoethane (EDB)	98
Chlorobenzene	95
Ethyl Benzene	102
m,p-Xylene	102
o-Xylene	99
Styrene	103
Bromoform	92
Cumene	102
1,1,2,2-Tetrachloroethane	79
Propylbenzene	100
4-Ethyltoluene	96
1,3,5-Trimethylbenzene	108
1,2,4-Trimethylbenzene	98
1,3-Dichlorobenzene	93
1,4-Dichlorobenzene	90
alpha-Chlorotoluene	98
1,2-Dichlorobenzene	93
1,2,4-Trichlorobenzene	83
Hexachlorobutadiene	100

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1705160-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e051103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/11/17 09:02 AM**	

Compound	%Recovery	Method Limits
Freon 12	88	70-130
Freon 114	84	70-130
Chloromethane	92	70-130
Vinyl Chloride	89	70-130
1,3-Butadiene	86	70-130
Bromomethane	89	70-130
Chloroethane	88	70-130
Freon 11	89	70-130
Ethanol	92	70-130
Freon 113	79	70-130
1,1-Dichloroethene	80	70-130
Acetone	82	70-130
2-Propanol	89	70-130
Carbon Disulfide	86	70-130
3-Chloropropene	86	70-130
Methylene Chloride	82	70-130
Methyl tert-butyl ether	85	70-130
trans-1,2-Dichloroethene	91	70-130
Hexane	88	70-130
1,1-Dichloroethane	84	70-130
2-Butanone (Methyl Ethyl Ketone)	91	70-130
cis-1,2-Dichloroethene	78	70-130
Tetrahydrofuran	91	70-130
Chloroform	86	70-130
1,1,1-Trichloroethane	86	70-130
Cyclohexane	86	70-130
Carbon Tetrachloride	138 Q	70-130
2,2,4-Trimethylpentane	85	70-130
Benzene	81	70-130
1,2-Dichloroethane	87	70-130
Heptane	94	70-130
Trichloroethene	76	70-130
1,2-Dichloropropane	87	70-130
1,4-Dioxane	89	70-130
Bromodichloromethane	91	70-130
cis-1,3-Dichloropropene	96	70-130
4-Methyl-2-pentanone	96	70-130
Toluene	89	70-130
trans-1,3-Dichloropropene	86	70-130
1,1,2-Trichloroethane	85	70-130
Tetrachloroethene	84	70-130
2-Hexanone	97	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1705160-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e051103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/11/17 09:02 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	93	70-130
1,2-Dibromoethane (EDB)	88	70-130
Chlorobenzene	86	70-130
Ethyl Benzene	92	70-130
m,p-Xylene	93	70-130
o-Xylene	90	70-130
Styrene	94	70-130
Bromoform	97	70-130
Cumene	92	70-130
1,1,2,2-Tetrachloroethane	94	70-130
Propylbenzene	91	70-130
4-Ethyltoluene	88	70-130
1,3,5-Trimethylbenzene	97	70-130
1,2,4-Trimethylbenzene	89	70-130
1,3-Dichlorobenzene	82	70-130
1,4-Dichlorobenzene	81	70-130
alpha-Chlorotoluene	89	70-130
1,2-Dichlorobenzene	82	70-130
1,2,4-Trichlorobenzene	67 Q	70-130
Hexachlorobutadiene	82	70-130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: LCSD

Lab ID#: 1705160-05AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e051104**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/11/17 09:48 AM**	

Compound	%Recovery	Method Limits
Freon 12	89	70-130
Freon 114	88	70-130
Chloromethane	94	70-130
Vinyl Chloride	89	70-130
1,3-Butadiene	87	70-130
Bromomethane	91	70-130
Chloroethane	92	70-130
Freon 11	91	70-130
Ethanol	95	70-130
Freon 113	81	70-130
1,1-Dichloroethene	82	70-130
Acetone	84	70-130
2-Propanol	90	70-130
Carbon Disulfide	87	70-130
3-Chloropropene	92	70-130
Methylene Chloride	82	70-130
Methyl tert-butyl ether	88	70-130
trans-1,2-Dichloroethene	94	70-130
Hexane	92	70-130
1,1-Dichloroethane	86	70-130
2-Butanone (Methyl Ethyl Ketone)	92	70-130
cis-1,2-Dichloroethene	80	70-130
Tetrahydrofuran	95	70-130
Chloroform	88	70-130
1,1,1-Trichloroethane	88	70-130
Cyclohexane	88	70-130
Carbon Tetrachloride	140 Q	70-130
2,2,4-Trimethylpentane	86	70-130
Benzene	81	70-130
1,2-Dichloroethane	86	70-130
Heptane	95	70-130
Trichloroethene	77	70-130
1,2-Dichloropropane	87	70-130
1,4-Dioxane	87	70-130
Bromodichloromethane	91	70-130
cis-1,3-Dichloropropene	96	70-130
4-Methyl-2-pentanone	97	70-130
Toluene	87	70-130
trans-1,3-Dichloropropene	89	70-130
1,1,2-Trichloroethane	86	70-130
Tetrachloroethene	84	70-130
2-Hexanone	99	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1705160-05AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e051104**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/11/17 09:48 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	93	70-130
1,2-Dibromoethane (EDB)	87	70-130
Chlorobenzene	87	70-130
Ethyl Benzene	93	70-130
m,p-Xylene	95	70-130
o-Xylene	90	70-130
Styrene	95	70-130
Bromoform	99	70-130
Cumene	93	70-130
1,1,2,2-Tetrachloroethane	94	70-130
Propylbenzene	92	70-130
4-Ethyltoluene	89	70-130
1,3,5-Trimethylbenzene	99	70-130
1,2,4-Trimethylbenzene	92	70-130
1,3-Dichlorobenzene	83	70-130
1,4-Dichlorobenzene	82	70-130
alpha-Chlorotoluene	89	70-130
1,2-Dichlorobenzene	82	70-130
1,2,4-Trichlorobenzene	69 Q	70-130
Hexachlorobutadiene	82	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	101	70-130
4-Bromofluorobenzene	102	70-130