

ANALYTICAL REPORT

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Tel: (732)549-3900

Laboratory Job ID: 460-187370-1

Client Project/Site: 150 Water Street, Penn Yan NY

For:

AECOM
40 British American Blvd
Latham, New York 12110

Attn: Mr. Matt Thorpe



Authorized for release by:
7/30/2019 5:24:29 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: AECOM

Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Job ID: 460-187370-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

Job Narrative 460-187370-1

Receipt

The sample was received on 7/24/2019 9:20 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 460-627146 was outside the method criteria for the following analyte(s): Bromoform (biased low); Chloromethane and Dichlorodifluoromethane (biased high). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 460-627272 was outside the method criteria for the following analyte(s): 2,4-Dinitrophenol, 4-Nitrophenol, Pyrene, Hexachlorocyclopentadiene, Pentachlorophenol, 2-Nitroaniline and Di-n-octyl phthalate. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8270D: The laboratory control sample duplicate (LCSD) for preparation batch 460-627115 and analytical batch 460-627272 recovered outside control limits for the following analytes: Benzaldehyde. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: AECOM

Job ID: 460-187370-1

Project/Site: 150 Water Street, Penn Yan NY

Client Sample ID: PWFTWWNA090

Lab Sample ID: 460-187370-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	5.2		5.0	4.4	ug/L	1			8260C	Total/NA
Molybdenum	0.0094	J	0.020	0.0047	mg/L	1			200.7 Rev 4.4	Total Recoverable
Cyanide, Total	0.28		0.010	0.0040	mg/L	1			335.4	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

Client Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Client Sample ID: PWFTWWNA090

Lab Sample ID: 460-187370-1

Date Collected: 07/23/19 14:07

Matrix: Water

Date Received: 07/24/19 09:20

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/25/19 14:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/25/19 14:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/25/19 14:33	1
1,1,2-Trichloroethane	ND		1.0	0.43	ug/L			07/25/19 14:33	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/25/19 14:33	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			07/25/19 14:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.37	ug/L			07/25/19 14:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.38	ug/L			07/25/19 14:33	1
1,2-Dichlorobenzene	ND		1.0	0.43	ug/L			07/25/19 14:33	1
1,2-Dichloroethane	ND		1.0	0.43	ug/L			07/25/19 14:33	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/25/19 14:33	1
1,3-Dichlorobenzene	ND		1.0	0.34	ug/L			07/25/19 14:33	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			07/25/19 14:33	1
2-Butanone (MEK)	ND		5.0	1.9	ug/L			07/25/19 14:33	1
2-Hexanone	ND		5.0	1.1	ug/L			07/25/19 14:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.3	ug/L			07/25/19 14:33	1
Acetone	5.2		5.0	4.4	ug/L			07/25/19 14:33	1
Benzene	ND		1.0	0.20	ug/L			07/25/19 14:33	1
Bromoform	ND		1.0	0.54	ug/L			07/25/19 14:33	1
Bromomethane	ND		1.0	0.55	ug/L			07/25/19 14:33	1
Carbon disulfide	ND		1.0	0.82	ug/L			07/25/19 14:33	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/25/19 14:33	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/25/19 14:33	1
Dibromochloromethane	ND		1.0	0.28	ug/L			07/25/19 14:33	1
Chloroethane	ND		1.0	0.32	ug/L			07/25/19 14:33	1
Chloroform	ND		1.0	0.33	ug/L			07/25/19 14:33	1
Chloromethane	ND		1.0	0.40	ug/L			07/25/19 14:33	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/25/19 14:33	1
Cyclohexane	ND		1.0	0.32	ug/L			07/25/19 14:33	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/25/19 14:33	1
Dichlorodifluoromethane	ND		1.0	0.31	ug/L			07/25/19 14:33	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/25/19 14:33	1
1,2-Dibromoethane	ND		1.0	0.50	ug/L			07/25/19 14:33	1
Isopropylbenzene	ND		1.0	0.34	ug/L			07/25/19 14:33	1
Methyl acetate	ND		5.0	0.79	ug/L			07/25/19 14:33	1
Methyl tert-butyl ether	ND		1.0	0.47	ug/L			07/25/19 14:33	1
Methylcyclohexane	ND		1.0	0.26	ug/L			07/25/19 14:33	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/25/19 14:33	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/25/19 14:33	1
Toluene	ND		1.0	0.38	ug/L			07/25/19 14:33	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/25/19 14:33	1
trans-1,3-Dichloropropene	ND		1.0	0.49	ug/L			07/25/19 14:33	1
Trichloroethene	ND		1.0	0.31	ug/L			07/25/19 14:33	1
Trichlorofluoromethane	ND		1.0	0.32	ug/L			07/25/19 14:33	1
Vinyl chloride	ND		1.0	0.17	ug/L			07/25/19 14:33	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/25/19 14:33	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/25/19 14:33	1
Styrene	ND		1.0	0.42	ug/L			07/25/19 14:33	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Client Sample ID: PWFTWWNA090

Lab Sample ID: 460-187370-1

Date Collected: 07/23/19 14:07

Matrix: Water

Date Received: 07/24/19 09:20

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/L</i>					<i>07/25/19 14:33</i>	<i>1</i>
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		74 - 132					07/25/19 14:33	1
Toluene-d8 (Surr)	101		80 - 120					07/25/19 14:33	1
Dibromofluoromethane (Surr)	106		72 - 131					07/25/19 14:33	1
4-Bromofluorobenzene	103		77 - 124					07/25/19 14:33	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		10	1.2	ug/L		07/25/19 09:06	07/26/19 00:26	1
bis (2-chloroisopropyl) ether	ND		10	0.63	ug/L		07/25/19 09:06	07/26/19 00:26	1
2,4,5-Trichlorophenol	ND		10	0.28	ug/L		07/25/19 09:06	07/26/19 00:26	1
2,4,6-Trichlorophenol	ND		10	0.30	ug/L		07/25/19 09:06	07/26/19 00:26	1
2,4-Dichlorophenol	ND		10	0.42	ug/L		07/25/19 09:06	07/26/19 00:26	1
2,4-Dimethylphenol	ND		10	0.24	ug/L		07/25/19 09:06	07/26/19 00:26	1
2,4-Dinitrophenol	ND		20	14	ug/L		07/25/19 09:06	07/26/19 00:26	1
2,4-Dinitrotoluene	ND		2.0	1.0	ug/L		07/25/19 09:06	07/26/19 00:26	1
2,6-Dinitrotoluene	ND		2.0	0.39	ug/L		07/25/19 09:06	07/26/19 00:26	1
2-Chloronaphthalene	ND		10	1.2	ug/L		07/25/19 09:06	07/26/19 00:26	1
2-Chlorophenol	ND		10	0.38	ug/L		07/25/19 09:06	07/26/19 00:26	1
2-Methylnaphthalene	ND		10	1.1	ug/L		07/25/19 09:06	07/26/19 00:26	1
2-Methylphenol	ND		10	0.26	ug/L		07/25/19 09:06	07/26/19 00:26	1
2-Nitroaniline	ND		10	0.47	ug/L		07/25/19 09:06	07/26/19 00:26	1
2-Nitrophenol	ND		10	0.75	ug/L		07/25/19 09:06	07/26/19 00:26	1
3,3'-Dichlorobenzidine	ND		10	1.4	ug/L		07/25/19 09:06	07/26/19 00:26	1
3-Nitroaniline	ND		10	0.96	ug/L		07/25/19 09:06	07/26/19 00:26	1
4,6-Dinitro-2-methylphenol	ND		20	13	ug/L		07/25/19 09:06	07/26/19 00:26	1
4-Bromophenyl phenyl ether	ND		10	0.75	ug/L		07/25/19 09:06	07/26/19 00:26	1
4-Chloro-3-methylphenol	ND		10	0.58	ug/L		07/25/19 09:06	07/26/19 00:26	1
4-Chloroaniline	ND		10	1.9	ug/L		07/25/19 09:06	07/26/19 00:26	1
4-Chlorophenyl phenyl ether	ND		10	1.3	ug/L		07/25/19 09:06	07/26/19 00:26	1
4-Methylphenol	ND		10	0.24	ug/L		07/25/19 09:06	07/26/19 00:26	1
4-Nitroaniline	ND		10	0.54	ug/L		07/25/19 09:06	07/26/19 00:26	1
4-Nitrophenol	ND		20	0.69	ug/L		07/25/19 09:06	07/26/19 00:26	1
Acenaphthene	ND		10	1.1	ug/L		07/25/19 09:06	07/26/19 00:26	1
Acenaphthylene	ND		10	0.82	ug/L		07/25/19 09:06	07/26/19 00:26	1
Acetophenone	ND		10	0.79	ug/L		07/25/19 09:06	07/26/19 00:26	1
Anthracene	ND		10	0.63	ug/L		07/25/19 09:06	07/26/19 00:26	1
Atrazine	ND		2.0	1.3	ug/L		07/25/19 09:06	07/26/19 00:26	1
Benzaldehyde	ND	*	10	0.59	ug/L		07/25/19 09:06	07/26/19 00:26	1
Benzo[a]anthracene	ND		1.0	0.59	ug/L		07/25/19 09:06	07/26/19 00:26	1
Benzo[a]pyrene	ND		1.0	0.41	ug/L		07/25/19 09:06	07/26/19 00:26	1
Benzo[b]fluoranthene	ND		2.0	1.1	ug/L		07/25/19 09:06	07/26/19 00:26	1
Benzo[g,h,i]perylene	ND		10	1.4	ug/L		07/25/19 09:06	07/26/19 00:26	1
Benzo[k]fluoranthene	ND		1.0	0.67	ug/L		07/25/19 09:06	07/26/19 00:26	1
Bis(2-chloroethoxy)methane	ND		10	0.24	ug/L		07/25/19 09:06	07/26/19 00:26	1
Bis(2-chloroethyl)ether	ND		1.0	0.30	ug/L		07/25/19 09:06	07/26/19 00:26	1
Bis(2-ethylhexyl) phthalate	ND		2.0	1.7	ug/L		07/25/19 09:06	07/26/19 00:26	1
Butyl benzyl phthalate	ND		10	0.85	ug/L		07/25/19 09:06	07/26/19 00:26	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Client Sample ID: PWFTWWNA090

Lab Sample ID: 460-187370-1

Date Collected: 07/23/19 14:07

Matrix: Water

Date Received: 07/24/19 09:20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		10	0.68	ug/L		07/25/19 09:06	07/26/19 00:26	1
Carbazole	ND		10	0.68	ug/L		07/25/19 09:06	07/26/19 00:26	1
Chrysene	ND		2.0	0.91	ug/L		07/25/19 09:06	07/26/19 00:26	1
Dibenz(a,h)anthracene	ND		1.0	0.72	ug/L		07/25/19 09:06	07/26/19 00:26	1
Dibenzofuran	ND		10	1.1	ug/L		07/25/19 09:06	07/26/19 00:26	1
Diethyl phthalate	ND		10	0.98	ug/L		07/25/19 09:06	07/26/19 00:26	1
Dimethyl phthalate	ND		10	0.77	ug/L		07/25/19 09:06	07/26/19 00:26	1
Di-n-butyl phthalate	ND		10	0.84	ug/L		07/25/19 09:06	07/26/19 00:26	1
Di-n-octyl phthalate	ND		10	4.8	ug/L		07/25/19 09:06	07/26/19 00:26	1
Fluoranthene	ND		10	0.84	ug/L		07/25/19 09:06	07/26/19 00:26	1
Fluorene	ND		10	0.91	ug/L		07/25/19 09:06	07/26/19 00:26	1
Hexachlorobenzene	ND		1.0	0.40	ug/L		07/25/19 09:06	07/26/19 00:26	1
Hexachlorobutadiene	ND		1.0	0.78	ug/L		07/25/19 09:06	07/26/19 00:26	1
Hexachlorocyclopentadiene	ND		10	1.7	ug/L		07/25/19 09:06	07/26/19 00:26	1
Hexachloroethane	ND		2.0	1.2	ug/L		07/25/19 09:06	07/26/19 00:26	1
Indeno[1,2,3-cd]pyrene	ND		2.0	1.3	ug/L		07/25/19 09:06	07/26/19 00:26	1
Isophorone	ND		10	0.80	ug/L		07/25/19 09:06	07/26/19 00:26	1
Naphthalene	ND		10	1.1	ug/L		07/25/19 09:06	07/26/19 00:26	1
Nitrobenzene	ND		1.0	0.57	ug/L		07/25/19 09:06	07/26/19 00:26	1
N-Nitrosodi-n-propylamine	ND		1.0	0.43	ug/L		07/25/19 09:06	07/26/19 00:26	1
N-Nitrosodiphenylamine	ND		10	0.89	ug/L		07/25/19 09:06	07/26/19 00:26	1
Pentachlorophenol	ND		20	1.4	ug/L		07/25/19 09:06	07/26/19 00:26	1
Phenanthrene	ND		10	0.58	ug/L		07/25/19 09:06	07/26/19 00:26	1
Phenol	ND		10	0.29	ug/L		07/25/19 09:06	07/26/19 00:26	1
Pyrene	ND		10	1.6	ug/L		07/25/19 09:06	07/26/19 00:26	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L				07/25/19 09:06	07/26/19 00:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	105		51 - 108	07/25/19 09:06	07/26/19 00:26	1
Phenol-d5 (Surr)	32		14 - 39	07/25/19 09:06	07/26/19 00:26	1
2-Fluorophenol (Surr)	47		25 - 58	07/25/19 09:06	07/26/19 00:26	1
2,4,6-Tribromophenol (Surr)	81		26 - 139	07/25/19 09:06	07/26/19 00:26	1
2-Fluorobiphenyl (Surr)	107		45 - 107	07/25/19 09:06	07/26/19 00:26	1
Terphenyl-d14 (Surr)	129		40 - 148	07/25/19 09:06	07/26/19 00:26	1

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050	0.0042	mg/L		07/25/19 20:15	07/26/19 14:08	1
Cadmium	ND		0.0050	0.0021	mg/L		07/25/19 20:15	07/26/19 14:08	1
Chromium	ND		0.010	0.0059	mg/L		07/25/19 20:15	07/26/19 14:08	1
Copper	ND		0.025	0.0055	mg/L		07/25/19 20:15	07/26/19 14:08	1
Lead	ND		0.0050	0.0038	mg/L		07/25/19 20:15	07/26/19 14:08	1
Molybdenum	0.0094	J	0.020	0.0047	mg/L		07/25/19 20:15	07/26/19 14:08	1
Nickel	ND		0.040	0.0063	mg/L		07/25/19 20:15	07/26/19 14:08	1
Selenium	ND		0.0050	0.0042	mg/L		07/25/19 20:15	07/26/19 14:08	1
Zinc	ND		0.030	0.0054	mg/L		07/25/19 20:15	07/26/19 14:08	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Client Sample ID: PWFTWWNA090

Lab Sample ID: 460-187370-1

Date Collected: 07/23/19 14:07

Matrix: Water

Date Received: 07/24/19 09:20

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.12	ug/L	-	07/26/19 12:39	07/26/19 14:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.28		0.010	0.0040	mg/L	-	07/30/19 12:02	07/30/19 13:29	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		2.5	2.5	mg/L	-		07/26/19 08:36	1

Surrogate Summary

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (74-132)	TOL (80-120)	DBFM (72-131)	BFB (77-124)
460-187370-1	PWFTWWNA090	110	101	106	103
LCS 460-627146/4	Lab Control Sample	110	99	106	99
LCSD 460-627146/5	Lab Control Sample Dup	105	97	101	96
MB 460-627146/10	Method Blank	106	99	104	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		NBZ (51-108)	PHL (14-39)	2FP (25-58)	TBP (26-139)	FBP (45-107)	TPHL (40-148)
460-187370-1	PWFTWWNA090	105	32	47	81	107	129
LCS 460-627115/2-A	Lab Control Sample	81	34	43	74	77	99
LCS 460-627115/4-A	Lab Control Sample	100	37	47	83	101	141
LCSD 460-627115/5-A	Lab Control Sample Dup	104	38	48	85	102	145
MB 460-627115/1-A	Method Blank	83	33	42	67	84	121

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

2FP = 2-Fluorophenol (Surr)

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl (Surr)

TPHL = Terphenyl-d14 (Surr)

QC Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-627146/10

Matrix: Water

Analysis Batch: 627146

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/25/19 14:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/25/19 14:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/25/19 14:10	1
1,1,2-Trichloroethane	ND		1.0	0.43	ug/L			07/25/19 14:10	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/25/19 14:10	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			07/25/19 14:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.37	ug/L			07/25/19 14:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.38	ug/L			07/25/19 14:10	1
1,2-Dichlorobenzene	ND		1.0	0.43	ug/L			07/25/19 14:10	1
1,2-Dichloroethane	ND		1.0	0.43	ug/L			07/25/19 14:10	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/25/19 14:10	1
1,3-Dichlorobenzene	ND		1.0	0.34	ug/L			07/25/19 14:10	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			07/25/19 14:10	1
2-Butanone (MEK)	ND		5.0	1.9	ug/L			07/25/19 14:10	1
2-Hexanone	ND		5.0	1.1	ug/L			07/25/19 14:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.3	ug/L			07/25/19 14:10	1
Acetone	ND		5.0	4.4	ug/L			07/25/19 14:10	1
Benzene	ND		1.0	0.20	ug/L			07/25/19 14:10	1
Bromoform	ND		1.0	0.54	ug/L			07/25/19 14:10	1
Bromomethane	ND		1.0	0.55	ug/L			07/25/19 14:10	1
Carbon disulfide	ND		1.0	0.82	ug/L			07/25/19 14:10	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/25/19 14:10	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/25/19 14:10	1
Dibromochloromethane	ND		1.0	0.28	ug/L			07/25/19 14:10	1
Chloroethane	ND		1.0	0.32	ug/L			07/25/19 14:10	1
Chloroform	ND		1.0	0.33	ug/L			07/25/19 14:10	1
Chloromethane	ND		1.0	0.40	ug/L			07/25/19 14:10	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/25/19 14:10	1
Cyclohexane	ND		1.0	0.32	ug/L			07/25/19 14:10	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/25/19 14:10	1
Dichlorodifluoromethane	ND		1.0	0.31	ug/L			07/25/19 14:10	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/25/19 14:10	1
1,2-Dibromoethane	ND		1.0	0.50	ug/L			07/25/19 14:10	1
Isopropylbenzene	ND		1.0	0.34	ug/L			07/25/19 14:10	1
Methyl acetate	ND		5.0	0.79	ug/L			07/25/19 14:10	1
Methyl tert-butyl ether	ND		1.0	0.47	ug/L			07/25/19 14:10	1
Methylcyclohexane	ND		1.0	0.26	ug/L			07/25/19 14:10	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/25/19 14:10	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/25/19 14:10	1
Toluene	ND		1.0	0.38	ug/L			07/25/19 14:10	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/25/19 14:10	1
trans-1,3-Dichloropropene	ND		1.0	0.49	ug/L			07/25/19 14:10	1
Trichloroethene	ND		1.0	0.31	ug/L			07/25/19 14:10	1
Trichlorofluoromethane	ND		1.0	0.32	ug/L			07/25/19 14:10	1
Vinyl chloride	ND		1.0	0.17	ug/L			07/25/19 14:10	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/25/19 14:10	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/25/19 14:10	1
Styrene	ND		1.0	0.42	ug/L			07/25/19 14:10	1

Eurofins TestAmerica, Edison

QC Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-627146/10

Matrix: Water

Analysis Batch: 627146

Client Sample ID: Method Blank

Prep Type: Total/NA

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		ug/L					07/25/19 14:10	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	106		74 - 132					07/25/19 14:10	1
Toluene-d8 (Surr)	99		80 - 120					07/25/19 14:10	1
Dibromofluoromethane (Surr)	104		72 - 131					07/25/19 14:10	1
4-Bromofluorobenzene	101		77 - 124					07/25/19 14:10	1

Lab Sample ID: LCS 460-627146/4

Matrix: Water

Analysis Batch: 627146

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
1,1,1-Trichloroethane	20.0	20.4		ug/L		102	75 - 125
1,1,2,2-Tetrachloroethane	20.0	20.3		ug/L		102	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.7		ug/L		103	59 - 150
1,1,2-Trichloroethane	20.0	18.9		ug/L		95	78 - 120
1,1-Dichloroethane	20.0	21.3		ug/L		107	77 - 123
1,1-Dichloroethene	20.0	19.6		ug/L		98	74 - 123
1,2,4-Trichlorobenzene	20.0	19.8		ug/L		99	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	17.3		ug/L		86	55 - 134
1,2-Dichlorobenzene	20.0	20.2		ug/L		101	80 - 120
1,2-Dichloroethane	20.0	20.8		ug/L		104	76 - 121
1,2-Dichloropropane	20.0	18.7		ug/L		94	77 - 123
1,3-Dichlorobenzene	20.0	20.0		ug/L		100	80 - 120
1,4-Dichlorobenzene	20.0	19.7		ug/L		98	80 - 120
2-Butanone (MEK)	100	93.1		ug/L		93	64 - 120
2-Hexanone	100	100		ug/L		100	71 - 125
4-Methyl-2-pentanone (MIBK)	100	103		ug/L		103	78 - 124
Acetone	100	102		ug/L		102	39 - 150
Benzene	20.0	18.9		ug/L		95	77 - 121
Bromoform	20.0	13.8		ug/L		69	53 - 120
Bromomethane	20.0	22.8		ug/L		114	10 - 150
Carbon disulfide	20.0	20.2		ug/L		101	69 - 133
Carbon tetrachloride	20.0	17.5		ug/L		87	70 - 132
Chlorobenzene	20.0	19.0		ug/L		95	80 - 120
Dibromochloromethane	20.0	15.7		ug/L		78	73 - 120
Chloroethane	20.0	21.9		ug/L		109	52 - 150
Chloroform	20.0	20.5		ug/L		103	80 - 120
Chloromethane	20.0	24.4		ug/L		122	56 - 131
cis-1,2-Dichloroethene	20.0	20.4		ug/L		102	80 - 120
Cyclohexane	20.0	21.4		ug/L		107	56 - 150
Bromodichloromethane	20.0	17.2		ug/L		86	76 - 120
Dichlorodifluoromethane	20.0	21.6		ug/L		108	50 - 131
Ethylbenzene	20.0	19.6		ug/L		98	80 - 120
1,2-Dibromoethane	20.0	18.6		ug/L		93	80 - 120
Isopropylbenzene	20.0	20.4		ug/L		102	80 - 123

Eurofins TestAmerica, Edison

QC Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-627146/4

Matrix: Water

Analysis Batch: 627146

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	40.0	41.4		ug/L		104	66 - 144
Methyl tert-butyl ether	20.0	22.2		ug/L		111	79 - 122
Methylcyclohexane	20.0	21.0		ug/L		105	61 - 145
Methylene Chloride	20.0	20.6		ug/L		103	77 - 123
Tetrachloroethene	20.0	17.6		ug/L		88	78 - 122
Toluene	20.0	18.8		ug/L		94	80 - 120
trans-1,2-Dichloroethene	20.0	21.4		ug/L		107	79 - 120
trans-1,3-Dichloropropene	20.0	17.4		ug/L		87	76 - 120
Trichloroethene	20.0	18.4		ug/L		92	77 - 120
Trichlorofluoromethane	20.0	22.3		ug/L		112	71 - 143
Vinyl chloride	20.0	23.2		ug/L		116	62 - 138
cis-1,3-Dichloropropene	20.0	17.1		ug/L		86	77 - 120
Styrene	20.0	20.0		ug/L		100	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	110		74 - 132
Toluene-d8 (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	106		72 - 131
4-Bromofluorobenzene	99		77 - 124

Lab Sample ID: LCSD 460-627146/5

Matrix: Water

Analysis Batch: 627146

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	20.1		ug/L		100	75 - 125	1	30
1,1,2,2-Tetrachloroethane	20.0	19.9		ug/L		100	74 - 120	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.9		ug/L		104	59 - 150	1	30
1,1,2-Trichloroethane	20.0	19.0		ug/L		95	78 - 120	0	30
1,1-Dichloroethane	20.0	21.6		ug/L		108	77 - 123	1	30
1,1-Dichloroethene	20.0	19.5		ug/L		97	74 - 123	1	30
1,2,4-Trichlorobenzene	20.0	19.0		ug/L		95	80 - 124	4	30
1,2-Dibromo-3-Chloropropane	20.0	17.5		ug/L		87	55 - 134	1	30
1,2-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120	3	30
1,2-Dichloroethane	20.0	20.9		ug/L		104	76 - 121	1	30
1,2-Dichloropropane	20.0	18.4		ug/L		92	77 - 123	2	30
1,3-Dichlorobenzene	20.0	19.3		ug/L		96	80 - 120	3	30
1,4-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120	1	30
2-Butanone (MEK)	100	95.2		ug/L		95	64 - 120	2	30
2-Hexanone	100	98.7		ug/L		99	71 - 125	2	30
4-Methyl-2-pentanone (MIBK)	100	101		ug/L		101	78 - 124	1	30
Acetone	100	110		ug/L		110	39 - 150	7	30
Benzene	20.0	19.1		ug/L		96	77 - 121	1	30
Bromoform	20.0	14.3		ug/L		71	53 - 120	3	30
Bromomethane	20.0	22.2		ug/L		111	10 - 150	2	30
Carbon disulfide	20.0	20.1		ug/L		101	69 - 133	0	30
Carbon tetrachloride	20.0	17.6		ug/L		88	70 - 132	0	30
Chlorobenzene	20.0	19.2		ug/L		96	80 - 120	1	30

Eurofins TestAmerica, Edison

QC Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-627146/5

Matrix: Water

Analysis Batch: 627146

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibromochloromethane	20.0	15.5		ug/L		77	73 - 120	1	30
Chloroethane	20.0	21.1		ug/L		105	52 - 150	4	30
Chloroform	20.0	19.9		ug/L		99	80 - 120	3	30
Chloromethane	20.0	23.8		ug/L		119	56 - 131	3	30
cis-1,2-Dichloroethene	20.0	20.3		ug/L		101	80 - 120	1	30
Cyclohexane	20.0	21.1		ug/L		105	56 - 150	1	30
Bromodichloromethane	20.0	17.3		ug/L		87	76 - 120	1	30
Dichlorodifluoromethane	20.0	24.2		ug/L		121	50 - 131	11	30
Ethylbenzene	20.0	19.1		ug/L		96	80 - 120	2	30
1,2-Dibromoethane	20.0	18.8		ug/L		94	80 - 120	1	30
Isopropylbenzene	20.0	20.4		ug/L		102	80 - 123	0	30
Methyl acetate	40.0	43.6		ug/L		109	66 - 144	5	30
Methyl tert-butyl ether	20.0	21.7		ug/L		109	79 - 122	2	30
Methylcyclohexane	20.0	21.0		ug/L		105	61 - 145	0	30
Methylene Chloride	20.0	20.4		ug/L		102	77 - 123	1	30
Tetrachloroethene	20.0	18.4		ug/L		92	78 - 122	4	30
Toluene	20.0	19.2		ug/L		96	80 - 120	2	30
trans-1,2-Dichloroethene	20.0	20.4		ug/L		102	79 - 120	4	30
trans-1,3-Dichloropropene	20.0	18.5		ug/L		92	76 - 120	6	30
Trichloroethene	20.0	17.5		ug/L		87	77 - 120	5	30
Trichlorofluoromethane	20.0	23.0		ug/L		115	71 - 143	3	30
Vinyl chloride	20.0	23.0		ug/L		115	62 - 138	0	30
cis-1,3-Dichloropropene	20.0	17.6		ug/L		88	77 - 120	3	30
Styrene	20.0	20.2		ug/L		101	80 - 120	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		74 - 132
Toluene-d8 (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	101		72 - 131
4-Bromofluorobenzene	96		77 - 124

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-627115/1-A

Matrix: Water

Analysis Batch: 627272

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 627115

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		10	1.2	ug/L		07/25/19 09:06	07/25/19 21:15	1
bis (2-chloroisopropyl) ether	ND		10	0.63	ug/L		07/25/19 09:06	07/25/19 21:15	1
2,4,5-Trichlorophenol	ND		10	0.28	ug/L		07/25/19 09:06	07/25/19 21:15	1
2,4,6-Trichlorophenol	ND		10	0.30	ug/L		07/25/19 09:06	07/25/19 21:15	1
2,4-Dichlorophenol	ND		10	0.42	ug/L		07/25/19 09:06	07/25/19 21:15	1
2,4-Dimethylphenol	ND		10	0.24	ug/L		07/25/19 09:06	07/25/19 21:15	1
2,4-Dinitrophenol	ND		20	14	ug/L		07/25/19 09:06	07/25/19 21:15	1
2,4-Dinitrotoluene	ND		2.0	1.0	ug/L		07/25/19 09:06	07/25/19 21:15	1
2,6-Dinitrotoluene	ND		2.0	0.39	ug/L		07/25/19 09:06	07/25/19 21:15	1
2-Chloronaphthalene	ND		10	1.2	ug/L		07/25/19 09:06	07/25/19 21:15	1
2-Chlorophenol	ND		10	0.38	ug/L		07/25/19 09:06	07/25/19 21:15	1

Eurofins TestAmerica, Edison

QC Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-627115/1-A

Matrix: Water

Analysis Batch: 627272

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 627115

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	1.1	ug/L		07/25/19 09:06	07/25/19 21:15	1
2-Methylphenol	ND		10	0.26	ug/L		07/25/19 09:06	07/25/19 21:15	1
2-Nitroaniline	ND		10	0.47	ug/L		07/25/19 09:06	07/25/19 21:15	1
2-Nitrophenol	ND		10	0.75	ug/L		07/25/19 09:06	07/25/19 21:15	1
3,3'-Dichlorobenzidine	ND		10	1.4	ug/L		07/25/19 09:06	07/25/19 21:15	1
3-Nitroaniline	ND		10	0.96	ug/L		07/25/19 09:06	07/25/19 21:15	1
4,6-Dinitro-2-methylphenol	ND		20	13	ug/L		07/25/19 09:06	07/25/19 21:15	1
4-Bromophenyl phenyl ether	ND		10	0.75	ug/L		07/25/19 09:06	07/25/19 21:15	1
4-Chloro-3-methylphenol	ND		10	0.58	ug/L		07/25/19 09:06	07/25/19 21:15	1
4-Chloroaniline	ND		10	1.9	ug/L		07/25/19 09:06	07/25/19 21:15	1
4-Chlorophenyl phenyl ether	ND		10	1.3	ug/L		07/25/19 09:06	07/25/19 21:15	1
4-Methylphenol	ND		10	0.24	ug/L		07/25/19 09:06	07/25/19 21:15	1
4-Nitroaniline	ND		10	0.54	ug/L		07/25/19 09:06	07/25/19 21:15	1
4-Nitrophenol	ND		20	0.69	ug/L		07/25/19 09:06	07/25/19 21:15	1
Acenaphthene	ND		10	1.1	ug/L		07/25/19 09:06	07/25/19 21:15	1
Acenaphthylene	ND		10	0.82	ug/L		07/25/19 09:06	07/25/19 21:15	1
Acetophenone	ND		10	0.79	ug/L		07/25/19 09:06	07/25/19 21:15	1
Anthracene	ND		10	0.63	ug/L		07/25/19 09:06	07/25/19 21:15	1
Atrazine	ND		2.0	1.3	ug/L		07/25/19 09:06	07/25/19 21:15	1
Benzaldehyde	ND		10	0.59	ug/L		07/25/19 09:06	07/25/19 21:15	1
Benzo[a]anthracene	ND		1.0	0.59	ug/L		07/25/19 09:06	07/25/19 21:15	1
Benzo[a]pyrene	ND		1.0	0.41	ug/L		07/25/19 09:06	07/25/19 21:15	1
Benzo[b]fluoranthene	ND		2.0	1.1	ug/L		07/25/19 09:06	07/25/19 21:15	1
Benzo[g,h,i]perylene	ND		10	1.4	ug/L		07/25/19 09:06	07/25/19 21:15	1
Benzo[k]fluoranthene	ND		1.0	0.67	ug/L		07/25/19 09:06	07/25/19 21:15	1
Bis(2-chloroethoxy)methane	ND		10	0.24	ug/L		07/25/19 09:06	07/25/19 21:15	1
Bis(2-chloroethyl)ether	ND		1.0	0.30	ug/L		07/25/19 09:06	07/25/19 21:15	1
Bis(2-ethylhexyl) phthalate	ND		2.0	1.7	ug/L		07/25/19 09:06	07/25/19 21:15	1
Butyl benzyl phthalate	ND		10	0.85	ug/L		07/25/19 09:06	07/25/19 21:15	1
Caprolactam	ND		10	0.68	ug/L		07/25/19 09:06	07/25/19 21:15	1
Carbazole	ND		10	0.68	ug/L		07/25/19 09:06	07/25/19 21:15	1
Chrysene	ND		2.0	0.91	ug/L		07/25/19 09:06	07/25/19 21:15	1
Dibenz(a,h)anthracene	ND		1.0	0.72	ug/L		07/25/19 09:06	07/25/19 21:15	1
Dibenzofuran	ND		10	1.1	ug/L		07/25/19 09:06	07/25/19 21:15	1
Diethyl phthalate	ND		10	0.98	ug/L		07/25/19 09:06	07/25/19 21:15	1
Dimethyl phthalate	ND		10	0.77	ug/L		07/25/19 09:06	07/25/19 21:15	1
Di-n-butyl phthalate	ND		10	0.84	ug/L		07/25/19 09:06	07/25/19 21:15	1
Di-n-octyl phthalate	ND		10	4.8	ug/L		07/25/19 09:06	07/25/19 21:15	1
Fluoranthene	ND		10	0.84	ug/L		07/25/19 09:06	07/25/19 21:15	1
Fluorene	ND		10	0.91	ug/L		07/25/19 09:06	07/25/19 21:15	1
Hexachlorobenzene	ND		1.0	0.40	ug/L		07/25/19 09:06	07/25/19 21:15	1
Hexachlorobutadiene	ND		1.0	0.78	ug/L		07/25/19 09:06	07/25/19 21:15	1
Hexachlorocyclopentadiene	ND		10	1.7	ug/L		07/25/19 09:06	07/25/19 21:15	1
Hexachloroethane	ND		2.0	1.2	ug/L		07/25/19 09:06	07/25/19 21:15	1
Indeno[1,2,3-cd]pyrene	ND		2.0	1.3	ug/L		07/25/19 09:06	07/25/19 21:15	1
Isophorone	ND		10	0.80	ug/L		07/25/19 09:06	07/25/19 21:15	1
Naphthalene	ND		10	1.1	ug/L		07/25/19 09:06	07/25/19 21:15	1
Nitrobenzene	ND		1.0	0.57	ug/L		07/25/19 09:06	07/25/19 21:15	1
N-Nitrosodi-n-propylamine	ND		1.0	0.43	ug/L		07/25/19 09:06	07/25/19 21:15	1

Eurofins TestAmerica, Edison

QC Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-627115/1-A

Matrix: Water

Analysis Batch: 627272

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 627115

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		10	0.89	ug/L		07/25/19 09:06	07/25/19 21:15	1
Pentachlorophenol	ND		20	1.4	ug/L		07/25/19 09:06	07/25/19 21:15	1
Phenanthrene	ND		10	0.58	ug/L		07/25/19 09:06	07/25/19 21:15	1
Phenol	ND		10	0.29	ug/L		07/25/19 09:06	07/25/19 21:15	1
Pyrene	ND		10	1.6	ug/L		07/25/19 09:06	07/25/19 21:15	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L				07/25/19 09:06	07/25/19 21:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	83		51 - 108	07/25/19 09:06	07/25/19 21:15	1
Phenol-d5 (Surr)	33		14 - 39	07/25/19 09:06	07/25/19 21:15	1
2-Fluorophenol (Surr)	42		25 - 58	07/25/19 09:06	07/25/19 21:15	1
2,4,6-Tribromophenol (Surr)	67		26 - 139	07/25/19 09:06	07/25/19 21:15	1
2-Fluorobiphenyl (Surr)	84		45 - 107	07/25/19 09:06	07/25/19 21:15	1
Terphenyl-d14 (Surr)	121		40 - 148	07/25/19 09:06	07/25/19 21:15	1

Lab Sample ID: LCS 460-627115/2-A

Matrix: Water

Analysis Batch: 627272

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 627115

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Biphenyl	80.0	63.2		ug/L		79	54 - 108
bis (2-chloroisopropyl) ether	80.0	72.9		ug/L		91	50 - 108
2,4,5-Trichlorophenol	80.0	64.6		ug/L		81	59 - 117
2,4,6-Trichlorophenol	80.0	69.3		ug/L		87	62 - 120
2,4-Dichlorophenol	80.0	65.0		ug/L		81	62 - 102
2,4-Dimethylphenol	80.0	61.5		ug/L		77	61 - 95
2,4-Dinitrophenol	160	110		ug/L		69	45 - 125
2,4-Dinitrotoluene	80.0	68.1		ug/L		85	70 - 123
2,6-Dinitrotoluene	80.0	72.0		ug/L		90	68 - 121
2-Chloronaphthalene	80.0	61.5		ug/L		77	54 - 105
2-Chlorophenol	80.0	62.7		ug/L		78	54 - 92
2-Methylnaphthalene	80.0	56.0		ug/L		70	47 - 104
2-Methylphenol	80.0	52.9		ug/L		66	43 - 80
2-Nitroaniline	80.0	56.6		ug/L		71	46 - 124
2-Nitrophenol	80.0	67.3		ug/L		84	58 - 109
3,3'-Dichlorobenzidine	80.0	65.3		ug/L		82	68 - 123
3-Nitroaniline	80.0	58.5		ug/L		73	60 - 117
4,6-Dinitro-2-methylphenol	160	152		ug/L		95	59 - 132
4-Bromophenyl phenyl ether	80.0	68.9		ug/L		86	57 - 126
4-Chloro-3-methylphenol	80.0	57.0		ug/L		71	58 - 98
4-Chloroaniline	80.0	52.9		ug/L		66	51 - 108
4-Chlorophenyl phenyl ether	80.0	62.0		ug/L		77	60 - 114
4-Methylphenol	80.0	45.2		ug/L		57	34 - 78
4-Nitroaniline	80.0	58.6		ug/L		73	48 - 135
4-Nitrophenol	160	48.5		ug/L		30	11 - 47
Acenaphthene	80.0	60.6		ug/L		76	58 - 107

Eurofins TestAmerica, Edison

QC Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-627115/2-A

Matrix: Water

Analysis Batch: 627272

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 627115

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	80.0	66.5		ug/L		83	61 - 106
Acetophenone	80.0	62.6		ug/L		78	54 - 115
Anthracene	80.0	72.1		ug/L		90	70 - 118
Benzo[a]anthracene	80.0	70.6		ug/L		88	73 - 119
Benzo[a]pyrene	80.0	65.8		ug/L		82	76 - 125
Benzo[b]fluoranthene	80.0	69.6		ug/L		87	78 - 123
Benzo[g,h,i]perylene	80.0	70.5		ug/L		88	63 - 133
Benzo[k]fluoranthene	80.0	70.2		ug/L		88	71 - 126
Bis(2-chloroethoxy)methane	80.0	73.8		ug/L		92	67 - 104
Bis(2-chloroethyl)ether	80.0	76.6		ug/L		96	63 - 106
Bis(2-ethylhexyl) phthalate	80.0	85.7		ug/L		107	63 - 135
Butyl benzyl phthalate	80.0	83.6		ug/L		104	66 - 129
Carbazole	80.0	70.3		ug/L		88	68 - 121
Chrysene	80.0	75.6		ug/L		94	73 - 121
Dibenz(a,h)anthracene	80.0	74.5		ug/L		93	59 - 136
Dibenzofuran	80.0	64.4		ug/L		81	67 - 108
Diethyl phthalate	80.0	61.9		ug/L		77	61 - 129
Dimethyl phthalate	80.0	65.2		ug/L		82	65 - 121
Di-n-butyl phthalate	80.0	69.9		ug/L		87	64 - 130
Di-n-octyl phthalate	80.0	77.0		ug/L		96	64 - 131
Fluoranthene	80.0	65.7		ug/L		82	66 - 123
Fluorene	80.0	64.3		ug/L		80	67 - 112
Hexachlorobenzene	80.0	70.2		ug/L		88	63 - 125
Hexachlorobutadiene	80.0	43.0		ug/L		54	34 - 99
Hexachlorocyclopentadiene	80.0	37.9		ug/L		47	18 - 99
Hexachloroethane	80.0	46.2		ug/L		58	39 - 92
Indeno[1,2,3-cd]pyrene	80.0	70.9		ug/L		89	57 - 142
Isophorone	80.0	69.1		ug/L		86	55 - 105
Naphthalene	80.0	59.8		ug/L		75	51 - 98
Nitrobenzene	80.0	70.2		ug/L		88	56 - 106
N-Nitrosodi-n-propylamine	80.0	65.7		ug/L		82	48 - 118
N-Nitrosodiphenylamine	80.0	71.1		ug/L		89	69 - 118
Pentachlorophenol	160	113		ug/L		71	54 - 120
Phenanthrene	80.0	70.1		ug/L		88	70 - 117
Phenol	80.0	32.6		ug/L		41	16 - 43
Pyrene	80.0	89.5		ug/L		112	63 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	81		51 - 108
Phenol-d5 (Surr)	34		14 - 39
2-Fluorophenol (Surr)	43		25 - 58
2,4,6-Tribromophenol (Surr)	74		26 - 139
2-Fluorobiphenyl (Surr)	77		45 - 107
Terphenyl-d14 (Surr)	99		40 - 148

QC Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-627115/4-A

Matrix: Water

Analysis Batch: 627272

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 627115

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Atrazine	160	168		ug/L		105	38 - 146
Benzaldehyde	160	168		ug/L		105	46 - 111
Caprolactam	160	53.9		ug/L		34	10 - 43

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	100		51 - 108
Phenol-d5 (Surr)	37		14 - 39
2-Fluorophenol (Surr)	47		25 - 58
2,4,6-Tribromophenol (Surr)	83		26 - 139
2-Fluorobiphenyl (Surr)	101		45 - 107
Terphenyl-d14 (Surr)	141		40 - 148

Lab Sample ID: LCSD 460-627115/5-A

Matrix: Water

Analysis Batch: 627272

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 627115

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Atrazine	160	178		ug/L		111	38 - 146	5	30
Benzaldehyde	160	179	*	ug/L		112	46 - 111	7	30
Caprolactam	160	51.0		ug/L		32	10 - 43	6	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Nitrobenzene-d5 (Surr)	104		51 - 108
Phenol-d5 (Surr)	38		14 - 39
2-Fluorophenol (Surr)	48		25 - 58
2,4,6-Tribromophenol (Surr)	85		26 - 139
2-Fluorobiphenyl (Surr)	102		45 - 107
Terphenyl-d14 (Surr)	145		40 - 148

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 460-627307/1-A

Matrix: Water

Analysis Batch: 627508

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 627307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050	0.0042	mg/L		07/25/19 20:15	07/26/19 13:56	1
Cadmium	ND		0.0050	0.0021	mg/L		07/25/19 20:15	07/26/19 13:56	1
Chromium	ND		0.010	0.0059	mg/L		07/25/19 20:15	07/26/19 13:56	1
Copper	ND		0.025	0.0055	mg/L		07/25/19 20:15	07/26/19 13:56	1
Lead	ND		0.0050	0.0038	mg/L		07/25/19 20:15	07/26/19 13:56	1
Molybdenum	ND		0.020	0.0047	mg/L		07/25/19 20:15	07/26/19 13:56	1
Nickel	ND		0.040	0.0063	mg/L		07/25/19 20:15	07/26/19 13:56	1
Selenium	ND		0.0050	0.0042	mg/L		07/25/19 20:15	07/26/19 13:56	1
Zinc	ND		0.030	0.0054	mg/L		07/25/19 20:15	07/26/19 13:56	1

Eurofins TestAmerica, Edison

QC Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 460-627307/2-A

Matrix: Water

Analysis Batch: 627508

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 627307

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	2.00	1.94		mg/L		97	85 - 115
Cadmium	0.0500	0.0468		mg/L		94	85 - 115
Chromium	0.200	0.177		mg/L		88	85 - 115
Copper	0.250	0.214		mg/L		86	85 - 115
Lead	0.500	0.469		mg/L		94	85 - 115
Molybdenum	0.500	0.509		mg/L		102	85 - 115
Nickel	0.500	0.469		mg/L		94	85 - 115
Selenium	2.00	1.91		mg/L		96	85 - 115
Zinc	0.500	0.494		mg/L		99	85 - 115

Lab Sample ID: 460-187370-1 MS

Matrix: Water

Analysis Batch: 627508

Client Sample ID: PWFTWWNA090

Prep Type: Total Recoverable

Prep Batch: 627307

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Arsenic	ND		2.00	2.04		mg/L		102	70 - 130
Cadmium	ND		0.0500	0.0477		mg/L		95	70 - 130
Chromium	ND		0.200	0.181		mg/L		91	70 - 130
Copper	ND		0.250	0.222		mg/L		89	70 - 130
Lead	ND		0.500	0.477		mg/L		95	70 - 130
Molybdenum	0.0094	J	0.500	0.533		mg/L		105	70 - 130
Nickel	ND		0.500	0.474		mg/L		95	70 - 130
Selenium	ND		2.00	1.97		mg/L		99	70 - 130
Zinc	ND		0.500	0.499		mg/L		100	70 - 130

Lab Sample ID: 460-187370-1 DU

Matrix: Water

Analysis Batch: 627508

Client Sample ID: PWFTWWNA090

Prep Type: Total Recoverable

Prep Batch: 627307

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	ND		ND		mg/L		NC	20
Cadmium	ND		ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20
Copper	ND		ND		mg/L		NC	20
Lead	ND		ND		mg/L		NC	20
Molybdenum	0.0094	J	0.0104	J	mg/L		10	20
Nickel	ND		ND		mg/L		NC	20
Selenium	ND		ND		mg/L		NC	20
Zinc	ND		ND		mg/L		NC	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 460-627497/1-A

Matrix: Water

Analysis Batch: 627550

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 627497

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.12	ug/L		07/26/19 12:39	07/26/19 13:56	1

Eurofins TestAmerica, Edison

QC Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 460-627497/2-A
Matrix: Water
Analysis Batch: 627550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 627497

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.971		ug/L		97	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 460-628290/1-A
Matrix: Water
Analysis Batch: 628305

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0040	mg/L		07/30/19 12:02	07/30/19 13:20	1

Lab Sample ID: LCS 460-628290/2-A
Matrix: Water
Analysis Batch: 628305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0995		mg/L		100	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 460-627413/1
Matrix: Water
Analysis Batch: 627413

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		2.5	2.5	mg/L			07/26/19 08:36	1

Lab Sample ID: LCSSRM 460-627413/2
Matrix: Water
Analysis Batch: 627413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	49.3	48.00		mg/L		97.4	77.3 - 114.6

QC Association Summary

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

GC/MS VOA

Analysis Batch: 627146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187370-1	PWFTWWNA090	Total/NA	Water	8260C	
MB 460-627146/10	Method Blank	Total/NA	Water	8260C	
LCS 460-627146/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-627146/5	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 627115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187370-1	PWFTWWNA090	Total/NA	Water	3510C	
MB 460-627115/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-627115/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-627115/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-627115/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 627272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187370-1	PWFTWWNA090	Total/NA	Water	8270D	627115
MB 460-627115/1-A	Method Blank	Total/NA	Water	8270D	627115
LCS 460-627115/2-A	Lab Control Sample	Total/NA	Water	8270D	627115
LCS 460-627115/4-A	Lab Control Sample	Total/NA	Water	8270D	627115
LCSD 460-627115/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	627115

Metals

Prep Batch: 627307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187370-1	PWFTWWNA090	Total Recoverable	Water	200.7	
MB 460-627307/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 460-627307/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
460-187370-1 MS	PWFTWWNA090	Total Recoverable	Water	200.7	
460-187370-1 DU	PWFTWWNA090	Total Recoverable	Water	200.7	

Prep Batch: 627497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187370-1	PWFTWWNA090	Total/NA	Water	245.1	
MB 460-627497/1-A	Method Blank	Total/NA	Water	245.1	
LCS 460-627497/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 627508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187370-1	PWFTWWNA090	Total Recoverable	Water	200.7 Rev 4.4	627307
MB 460-627307/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	627307
LCS 460-627307/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	627307
460-187370-1 MS	PWFTWWNA090	Total Recoverable	Water	200.7 Rev 4.4	627307
460-187370-1 DU	PWFTWWNA090	Total Recoverable	Water	200.7 Rev 4.4	627307

Analysis Batch: 627550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187370-1	PWFTWWNA090	Total/NA	Water	245.1	627497
MB 460-627497/1-A	Method Blank	Total/NA	Water	245.1	627497
LCS 460-627497/2-A	Lab Control Sample	Total/NA	Water	245.1	627497

Eurofins TestAmerica, Edison

QC Association Summary

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

General Chemistry

Analysis Batch: 627413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187370-1	PWFTWWNA090	Total/NA	Water	SM 2540D	
MB 460-627413/1	Method Blank	Total/NA	Water	SM 2540D	
LCSSRM 460-627413/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Prep Batch: 628290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187370-1	PWFTWWNA090	Total/NA	Water	Distill/CN	
MB 460-628290/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 460-628290/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 628305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187370-1	PWFTWWNA090	Total/NA	Water	335.4	628290
MB 460-628290/1-A	Method Blank	Total/NA	Water	335.4	628290
LCS 460-628290/2-A	Lab Control Sample	Total/NA	Water	335.4	628290

Lab Chronicle

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Client Sample ID: PWFTWWNA090

Lab Sample ID: 460-187370-1

Date Collected: 07/23/19 14:07

Matrix: Water

Date Received: 07/24/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	627146	07/25/19 14:33	MZS	TAL EDI
Total/NA	Prep	3510C			627115	07/25/19 09:06	DXB	TAL EDI
Total/NA	Analysis	8270D		1	627272	07/26/19 00:26	SK	TAL EDI
Total Recoverable	Prep	200.7			627307	07/25/19 20:15	GAE	TAL EDI
Total Recoverable	Analysis	200.7 Rev 4.4		1	627508	07/26/19 14:08	YZH	TAL EDI
Total/NA	Prep	245.1			627497	07/26/19 12:39	RBS	TAL EDI
Total/NA	Analysis	245.1		1	627550	07/26/19 14:44	RBS	TAL EDI
Total/NA	Prep	Distill/CN			628290	07/30/19 12:02	IAA	TAL EDI
Total/NA	Analysis	335.4		1	628305	07/30/19 13:29	AJP	TAL EDI
Total/NA	Analysis	SM 2540D		1	627413	07/26/19 08:36	PLS	TAL EDI

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: AECOM

Job ID: 460-187370-1

Project/Site: 150 Water Street, Penn Yan NY

Laboratory: Eurofins TestAmerica, Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11452	04-01-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Copper

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-20

Method Summary

Client: AECOM

Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
200.7 Rev 4.4	Metals (ICP)	EPA	TAL EDI
245.1	Mercury (CVAA)	EPA	TAL EDI
335.4	Cyanide, Total	MCAWW	TAL EDI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL EDI
200.7	Preparation, Total Recoverable Metals	EPA	TAL EDI
245.1	Preparation, Mercury	EPA	TAL EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI
Distill/CN	Distillation, Cyanide	None	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: AECOM

Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-187370-1	PWFTWWNA090	Water	07/23/19 14:07	07/24/19 09:20	

Phone (732) 549-3900

TestAmerica

Ver: 01/16/2019

Job Number:

187370

Number of Coolers:

IR Gun #

Cooler Temperatures

TALS Sample Number[illegible]

If pH adjustments are required record the information below:

Sample No(s). adjusted:

Preservative Name/Conc.:

Volume of Preservative used (ml):

Lot # of Preservative(s):

Expiration Date:

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis

Initials:

ACCF

Date _____

7/24/19

Login Sample Receipt Checklist

Client: AECOM

Job Number: 460-187370-1

Login Number: 187370

List Source: Eurofins TestAmerica, Edison

List Number: 1

Creator: DiGuardia, Joseph L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 460-187370-1

Login Number: 187370

List Source: Eurofins TestAmerica, Edison

List Number: 2

Creator: DiGuardia, Joseph L

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background		
The cooler's custody seal, if present, is intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the sample IDs on the containers and the COC.		
Samples are received within Holding Time (Excluding tests with immediate HTs)..		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.		
If necessary, staff have been informed of any short hold time or quick TAT needs		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Sampling Company provided.		
Samples received within 48 hours of sampling.		
Samples requiring field filtration have been filtered in the field.		
Chlorine Residual checked.		

ANALYTICAL REPORT

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-187370-2

Client Project/Site: 150 Water Street, Penn Yan NY

For:

AECOM
40 British American Blvd
Latham, New York 12110

Attn: Mr. Matt Thorpe



Authorized for release by:
7/31/2019 9:48:55 AM

Julianna DuHart, Project Management Assistant I
julianna.duhart@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: AECOM

Job ID: 460-187370-2

Project/Site: 150 Water Street, Penn Yan NY

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-2

Job ID: 460-187370-2

Laboratory: Eurofins TestAmerica, Edison

Narrative

Job Narrative 460-187370-2

Receipt

The sample was received on 7/24/2019 9:20 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: AECOM

Job ID: 460-187370-2

Project/Site: 150 Water Street, Penn Yan NY

Client Sample ID: PWFTWWNA090

Lab Sample ID: 460-187370-1

☐ No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

Client Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-2

Client Sample ID: PWFTWWNA090

Lab Sample ID: 460-187370-1

Date Collected: 07/23/19 14:07

Matrix: Water

Date Received: 07/24/19 09:20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		1.0	1.0	mg/L			07/24/19 18:42	1

QC Sample Results

Client: AECOM
Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 460-626912/24

Matrix: Water

Analysis Batch: 626912

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		1.0	1.0	mg/L			07/24/19 14:12	1

Lab Sample ID: LCS 460-626912/25

Matrix: Water

Analysis Batch: 626912

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	132	126.0		mg/L		95	84.6 - 115. 4

QC Association Summary

Client: AECOM

Job ID: 460-187370-2

Project/Site: 150 Water Street, Penn Yan NY

General Chemistry

Analysis Batch: 626912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187370-1	PWFTWWNA090	Total/NA	Water	SM 5210B	
USB 460-626912/24	Method Blank	Total/NA	Water	SM 5210B	
LCS 460-626912/25	Lab Control Sample	Total/NA	Water	SM 5210B	

Lab Chronicle

Client: AECOM

Job ID: 460-187370-2

Project/Site: 150 Water Street, Penn Yan NY

Client Sample ID: PWFTWWNA090

Lab Sample ID: 460-187370-1

Date Collected: 07/23/19 14:07

Matrix: Water

Date Received: 07/24/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5210B		1	626912	07/24/19 18:42	MBE	TAL EDI

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: AECOM

Job ID: 460-187370-2

Project/Site: 150 Water Street, Penn Yan NY

Laboratory: Eurofins TestAmerica, Edison

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11452	04-01-20

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-20

Method Summary

Client: AECOM

Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL EDI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: AECOM

Project/Site: 150 Water Street, Penn Yan NY

Job ID: 460-187370-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-187370-1	PWFTWWNA090	Water	07/23/19 14:07	07/24/19 09:20	

Chain of Custody Record

TestAmerica

[illegible]

Job Number:

187370

Number of Coolers:

IR Gun #

Cooler Temperatures

TALS Sample Number

If pH adjustments are required record the information below:

Sample No(s). adjusted:

Preservative Name/Conc.:

Volume of Preservative used (ml):

Lot # of Preservative(s):

Expiration Date:

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials:

ACCF

Date:

7/24/19

Login Sample Receipt Checklist

Client: AECOM

Job Number: 460-187370-2

Login Number: 187370

List Source: Eurofins TestAmerica, Edison

List Number: 1

Creator: DiGuardia, Joseph L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 460-187370-2

Login Number: 187370

List Source: Eurofins TestAmerica, Edison

List Number: 2

Creator: DiGuardia, Joseph L

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background		
The cooler's custody seal, if present, is intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the sample IDs on the containers and the COC.		
Samples are received within Holding Time (Excluding tests with immediate HTs)..		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.		
If necessary, staff have been informed of any short hold time or quick TAT needs		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Sampling Company provided.		
Samples received within 48 hours of sampling.		
Samples requiring field filtration have been filtered in the field.		
Chlorine Residual checked.		