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ANALYTICAL REPORT

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

Laboratory Job ID: 460-186578-1
Client Project/Site: 60584654, Penn Yan Former MGP Phase 2

For:
AECOM
40 British American Blvd
Latham, New York 12110

Attn: Mr. Matt Thorpe

Authorized for release by:
7/19/2019 6:21:00 PM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

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

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Definitions/Glossary

Client: AECOM
Job ID: 460-186578-1
Project/Site: 60584654, Penn Yan Former MGP Phase 2

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

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
Job ID: 460-186578-1
Project/Site: 60584654, Penn Yan Former MGP Phase 2

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Laboratory: Eurofins TestAmerica, Edison

Narrative

Job Narrative
460-186578-1

Receipt
The sample was received on 7/13/2019 10:45 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 460-625284 was outside the method criteria for the following analytes: 1,2,4-Trichlorobenzene and Bromoform. 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) 8260C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 460-625284 recovered outside the lower control limit for 1,2,4-Trichlorobenzene.

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 460-624498 was outside the method criteria for the following analyte(s): 2-Nitroaniline, 2,4-Dinitrophenol, 4-Nitrophenol, Bis(2-ethylhexyl) phthalate, Hexachlorocyclopentadiene and Pentachlorophenol. 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.

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: 460-186578-1
Project/Site: 60584654, Penn Yan Former MGP Phase 2

Client Sample ID: PWFTWWNA089
Lab Sample ID: 460-186578-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibromochloromethane	2.4		1.0	0.28	ug/L	1		8260C	Total/NA
Chloroform	52		1.0	0.33	ug/L	1		8260C	Total/NA
Bromodichloromethane	12		1.0	0.34	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Job ID: 460-186578-1
Project/Site: 60584654, Penn Yan Former MGP Phase 2

Client Sample ID: PWFTWWNA089
Lab Sample ID: 460-186578-1
Date Collected: 07/12/19 08:05
Matrix: Water
Date Received: 07/13/19 10:45

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			07/17/19 23:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/17/19 23:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/17/19 23:37	1
1,1,2-Trichloroethane	ND		1.0	0.43	ug/L			07/17/19 23:37	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/17/19 23:37	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			07/17/19 23:37	1
1,2,4-Trichlorobenzene	ND	*	1.0	0.37	ug/L			07/17/19 23:37	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.38	ug/L			07/17/19 23:37	1
1,2-Dichlorobenzene	ND		1.0	0.43	ug/L			07/17/19 23:37	1
1,2-Dichloroethane	ND		1.0	0.43	ug/L			07/17/19 23:37	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/17/19 23:37	1
1,3-Dichlorobenzene	ND		1.0	0.34	ug/L			07/17/19 23:37	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			07/17/19 23:37	1
2-Butanone (MEK)	ND		5.0	1.9	ug/L			07/17/19 23:37	1
2-Hexanone	ND		5.0	1.1	ug/L			07/17/19 23:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.3	ug/L			07/17/19 23:37	1
Acetone	ND		5.0	4.4	ug/L			07/17/19 23:37	1
Benzene	ND		1.0	0.20	ug/L			07/17/19 23:37	1
Bromoform	ND		1.0	0.54	ug/L			07/17/19 23:37	1
Bromomethane	ND		1.0	0.55	ug/L			07/17/19 23:37	1
Carbon disulfide	ND		1.0	0.82	ug/L			07/17/19 23:37	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/17/19 23:37	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/17/19 23:37	1
Dibromochloromethane	**2.4**		1.0	0.28	ug/L			07/17/19 23:37	1
Chloroethane	ND		1.0	0.32	ug/L			07/17/19 23:37	1
Chloroform	**52**		1.0	0.33	ug/L			07/17/19 23:37	1
Chloromethane	ND		1.0	0.40	ug/L			07/17/19 23:37	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/17/19 23:37	1
Cyclohexane	ND		1.0	0.32	ug/L			07/17/19 23:37	1
Bromodichloromethane	**12**		1.0	0.34	ug/L			07/17/19 23:37	1
Dichlorodifluoromethane	ND		1.0	0.31	ug/L			07/17/19 23:37	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/17/19 23:37	1
1,2-Dibromoethane	ND		1.0	0.50	ug/L			07/17/19 23:37	1
Isopropylbenzene	ND		1.0	0.34	ug/L			07/17/19 23:37	1
Methyl acetate	ND		5.0	0.79	ug/L			07/17/19 23:37	1
Methyl tert-butyl ether	ND		1.0	0.47	ug/L			07/17/19 23:37	1
Methylcyclohexane	ND		1.0	0.26	ug/L			07/17/19 23:37	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/17/19 23:37	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/17/19 23:37	1
Toluene	ND		1.0	0.38	ug/L			07/17/19 23:37	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/17/19 23:37	1
trans-1,3-Dichloropropene	ND		1.0	0.49	ug/L			07/17/19 23:37	1
Trichloroethene	ND		1.0	0.31	ug/L			07/17/19 23:37	1
Trichlorofluoromethane	ND		1.0	0.32	ug/L			07/17/19 23:37	1
Vinyl chloride	ND		1.0	0.17	ug/L			07/17/19 23:37	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/17/19 23:37	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/17/19 23:37	1
Styrene	ND		1.0	0.42	ug/L			07/17/19 23:37	1

Client Sample ID: PWFTWWNA089
Lab Sample ID: 460-186578-1

Date Collected: 07/12/19 08:05
Matrix: Water
Date Received: 07/13/19 10:45

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					07/17/19 23:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		74 - 132		07/17/19 23:37	1
Toluene-d8 (Surr)	111		80 - 120		07/17/19 23:37	1
Dibromofluoromethane (Surr)	105		72 - 131		07/17/19 23:37	1
4-Bromofluorobenzene	93		77 - 124		07/17/19 23:37	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		07/14/19 07:08	07/15/19 00:07	1
bis (2-chloroisopropyl) ether	ND		10	0.63	ug/L		07/14/19 07:08	07/15/19 00:07	1
2,4,5-Trichlorophenol	ND		10	0.28	ug/L		07/14/19 07:08	07/15/19 00:07	1
2,4,6-Trichlorophenol	ND		10	0.30	ug/L		07/14/19 07:08	07/15/19 00:07	1
2,4-Dichlorophenol	ND		10	0.42	ug/L		07/14/19 07:08	07/15/19 00:07	1
2,4-Dimethylphenol	ND		10	0.24	ug/L		07/14/19 07:08	07/15/19 00:07	1
2,4-Dinitrophenol	ND		20	14	ug/L		07/14/19 07:08	07/15/19 00:07	1
2,4-Dinitrotoluene	ND		2.0	1.0	ug/L		07/14/19 07:08	07/15/19 00:07	1
2,6-Dinitrotoluene	ND		2.0	0.39	ug/L		07/14/19 07:08	07/15/19 00:07	1
2-Chloronaphthalene	ND		10	1.2	ug/L		07/14/19 07:08	07/15/19 00:07	1
2-Chlorophenol	ND		10	0.38	ug/L		07/14/19 07:08	07/15/19 00:07	1
2-Methylnaphthalene	ND		10	1.1	ug/L		07/14/19 07:08	07/15/19 00:07	1
2-Methylphenol	ND		10	0.26	ug/L		07/14/19 07:08	07/15/19 00:07	1
2-Nitroaniline	ND		10	0.47	ug/L		07/14/19 07:08	07/15/19 00:07	1
2-Nitrophenol	ND		10	0.75	ug/L		07/14/19 07:08	07/15/19 00:07	1
3,3'-Dichlorobenzidine	ND		10	1.4	ug/L		07/14/19 07:08	07/15/19 00:07	1
3-Nitroaniline	ND		10	0.96	ug/L		07/14/19 07:08	07/15/19 00:07	1
4,6-Dinitro-2-methylphenol	ND		20	13	ug/L		07/14/19 07:08	07/15/19 00:07	1
4-Bromophenyl phenyl ether	ND		10	0.75	ug/L		07/14/19 07:08	07/15/19 00:07	1
4-Chloro-3-methylphenol	ND		10	0.58	ug/L		07/14/19 07:08	07/15/19 00:07	1
4-Chloroaniline	ND		10	1.9	ug/L		07/14/19 07:08	07/15/19 00:07	1
4-Chlorophenyl phenyl ether	ND		10	1.3	ug/L		07/14/19 07:08	07/15/19 00:07	1
4-Methylphenol	ND		10	0.24	ug/L		07/14/19 07:08	07/15/19 00:07	1
4-Nitroaniline	ND		10	0.54	ug/L		07/14/19 07:08	07/15/19 00:07	1
4-Nitrophenol	ND		20	0.69	ug/L		07/14/19 07:08	07/15/19 00:07	1
Acenaphthene	ND		10	1.1	ug/L		07/14/19 07:08	07/15/19 00:07	1
Acenaphthylene	ND		10	0.82	ug/L		07/14/19 07:08	07/15/19 00:07	1
Acetophenone	ND		10	0.79	ug/L		07/14/19 07:08	07/15/19 00:07	1
Anthracene	ND		10	0.63	ug/L		07/14/19 07:08	07/15/19 00:07	1
Atrazine	ND		2.0	1.3	ug/L		07/14/19 07:08	07/15/19 00:07	1
Benzaldehyde	ND		10	0.59	ug/L		07/14/19 07:08	07/15/19 00:07	1
Benzo[a]anthracene	ND		1.0	0.59	ug/L		07/14/19 07:08	07/15/19 00:07	1
Benzo[a]pyrene	ND		1.0	0.41	ug/L		07/14/19 07:08	07/15/19 00:07	1
Benzo[b]fluoranthene	ND		2.0	1.1	ug/L		07/14/19 07:08	07/15/19 00:07	1
Benzo[g,h,i]perylene	ND		10	1.4	ug/L		07/14/19 07:08	07/15/19 00:07	1
Benzo[k]fluoranthene	ND		1.0	0.67	ug/L		07/14/19 07:08	07/15/19 00:07	1
Bis(2-chloroethoxy)methane	ND		10	0.24	ug/L		07/14/19 07:08	07/15/19 00:07	1
Bis(2-chloroethyl)ether	ND		1.0	0.30	ug/L		07/14/19 07:08	07/15/19 00:07	1
Bis(2-ethylhexyl) phthalate	ND		2.0	1.7	ug/L		07/14/19 07:08	07/15/19 00:07	1
Butyl benzyl phthalate	ND		10	0.85	ug/L		07/14/19 07:08	07/15/19 00:07	1

Client: AECOM
Job ID: 460-186578-1
Project/Site: 60584654, Penn Yan Former MGP Phase 2

Client Sample ID: PWFTWWNA089
Lab Sample ID: 460-186578-1
Date Collected: 07/12/19 08:05
Matrix: Water
Date Received: 07/13/19 10:45

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		07/14/19 07:08	07/15/19 00:07	1
Carbazole	ND		10	0.68	ug/L		07/14/19 07:08	07/15/19 00:07	1
Chrysene	ND		2.0	0.91	ug/L		07/14/19 07:08	07/15/19 00:07	1
Dibenz(a,h)anthracene	ND		1.0	0.72	ug/L		07/14/19 07:08	07/15/19 00:07	1
Dibenzofuran	ND		10	1.1	ug/L		07/14/19 07:08	07/15/19 00:07	1
Diethyl phthalate	ND		10	0.98	ug/L		07/14/19 07:08	07/15/19 00:07	1
Dimethyl phthalate	ND		10	0.77	ug/L		07/14/19 07:08	07/15/19 00:07	1
Di-n-butyl phthalate	ND		10	0.84	ug/L		07/14/19 07:08	07/15/19 00:07	1
Di-n-octyl phthalate	ND		10	4.8	ug/L		07/14/19 07:08	07/15/19 00:07	1
Fluoranthene	ND		10	0.84	ug/L		07/14/19 07:08	07/15/19 00:07	1
Fluorene	ND		10	0.91	ug/L		07/14/19 07:08	07/15/19 00:07	1
Hexachlorobenzene	ND		1.0	0.40	ug/L		07/14/19 07:08	07/15/19 00:07	1
Hexachlorobutadiene	ND		1.0	0.78	ug/L		07/14/19 07:08	07/15/19 00:07	1
Hexachlorocyclopentadiene	ND		10	1.7	ug/L		07/14/19 07:08	07/15/19 00:07	1
Hexachloroethane	ND		2.0	1.2	ug/L		07/14/19 07:08	07/15/19 00:07	1
Indeno[1,2,3-cd]pyrene	ND		2.0	1.3	ug/L		07/14/19 07:08	07/15/19 00:07	1
Isophorone	ND		10	0.80	ug/L		07/14/19 07:08	07/15/19 00:07	1
Naphthalene	ND		10	1.1	ug/L		07/14/19 07:08	07/15/19 00:07	1
Nitrobenzene	ND		1.0	0.57	ug/L		07/14/19 07:08	07/15/19 00:07	1
N-Nitrosodi-n-propylamine	ND		1.0	0.43	ug/L		07/14/19 07:08	07/15/19 00:07	1
N-Nitrosodiphenylamine	ND		10	0.89	ug/L		07/14/19 07:08	07/15/19 00:07	1
Pentachlorophenol	ND		20	1.4	ug/L		07/14/19 07:08	07/15/19 00:07	1
Phenanthrene	ND		10	0.58	ug/L		07/14/19 07:08	07/15/19 00:07	1
Phenol	ND		10	0.29	ug/L		07/14/19 07:08	07/15/19 00:07	1
Pyrene	ND		10	1.6	ug/L		07/14/19 07:08	07/15/19 00:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*7.1*	*T J*	*ug/L*		*3.89*		*07/14/19 07:08*	*07/15/19 00:07*	*1*
p-Terphenyl-d14	*81*	*T J N*	*ug/L*		*9.92*	*1718-51-0*	*07/14/19 07:08*	*07/15/19 00:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*88*		*51 - 108*	*07/14/19 07:08*	*07/15/19 00:07*	*1*
Phenol-d5 (Surr)	*25*		*14 - 39*	*07/14/19 07:08*	*07/15/19 00:07*	*1*
2-Fluorophenol (Surr)	*40*		*25 - 58*	*07/14/19 07:08*	*07/15/19 00:07*	*1*
2,4,6-Tribromophenol (Surr)	*76*		*26 - 139*	*07/14/19 07:08*	*07/15/19 00:07*	*1*
2-Fluorobiphenyl (Surr)	*80*		*45 - 107*	*07/14/19 07:08*	*07/15/19 00:07*	*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		07/13/19 16:20	07/14/19 16:58	1
Cadmium	ND		0.0050	0.0021	mg/L		07/13/19 16:20	07/14/19 16:58	1
Chromium	ND		0.010	0.0059	mg/L		07/13/19 16:20	07/14/19 16:58	1
Copper	ND		0.025	0.0055	mg/L		07/13/19 16:20	07/14/19 16:58	1
Lead	ND		0.0050	0.0038	mg/L		07/13/19 16:20	07/14/19 16:58	1
Molybdenum	ND		0.020	0.0047	mg/L		07/13/19 16:20	07/14/19 16:58	1
Nickel	ND		0.040	0.0063	mg/L		07/13/19 16:20	07/14/19 16:58	1
Selenium	ND		0.0050	0.0042	mg/L		07/13/19 16:20	07/14/19 16:58	1
Zinc	ND		0.030	0.0054	mg/L		07/13/19 16:20	07/14/19 16:58	1

Client: AECOM
Job ID: 460-186578-1
Project/Site: 60584654, Penn Yan Former MGP Phase 2

Client Sample ID: PWFTWWNA089
Lab Sample ID: 460-186578-1
Date Collected: 07/12/19 08:05
Matrix: Water
Date Received: 07/13/19 10:45

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.12	ug/L		07/17/19 11:55	07/17/19 13:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0040	mg/L		07/14/19 14:59	07/15/19 13:14	1
Biochemical Oxygen Demand	ND		1.0	1.0	mg/L			07/13/19 17:45	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		2.8	2.8	mg/L			07/17/19 07:28	1

Surrogate Summary

Client: AECOM
Job ID: 460-186578-1
Project/Site: 60584654, Penn Yan Former MGP Phase 2

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (74-132)	TOL (80-120)	DBFM (72-131)	BFB (77-124)
460-186578-1	PWFTWWNA089	119	111	105	93
LCS 460-625284/4	Lab Control Sample	115	111	103	93
LCSD 460-625284/5	Lab Control Sample Dup	114	110	102	93
MB 460-625284/9	Method Blank	117	112	104	94

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**

		Percent Surrogate Recovery (Acceptance Limits)				
Lab Sample ID	Client Sample ID	NBZ (51-108)	PHL (14-39)	2FP (25-58)	TBP (26-139)	FBP (45-107)
460-186578-1	PWFTWWNA089	88	25	40	76	80
LCS 460-624445/2-A	Lab Control Sample	77	24	35	79	77
LCS 460-624445/4-A	Lab Control Sample	97	39	54	90	92
LCSD 460-624445/3-A	Lab Control Sample Dup	82	25	35	86	85
LCSD 460-624445/5-A	Lab Control Sample Dup	89	35	50	82	87
MB 460-624445/1-A	Method Blank	99	34	51	92	103

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)

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

Lab Sample ID: MB 460-625284/9
Matrix: Water
Analysis Batch: 625284

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			07/17/19 19:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/17/19 19:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/17/19 19:19	1
1,1,2-Trichloroethane	ND		1.0	0.43	ug/L			07/17/19 19:19	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/17/19 19:19	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			07/17/19 19:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.37	ug/L			07/17/19 19:19	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.38	ug/L			07/17/19 19:19	1
1,2-Dichlorobenzene	ND		1.0	0.43	ug/L			07/17/19 19:19	1
1,2-Dichloroethane	ND		1.0	0.43	ug/L			07/17/19 19:19	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/17/19 19:19	1
1,3-Dichlorobenzene	ND		1.0	0.34	ug/L			07/17/19 19:19	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			07/17/19 19:19	1
2-Butanone (MEK)	ND		5.0	1.9	ug/L			07/17/19 19:19	1
2-Hexanone	ND		5.0	1.1	ug/L			07/17/19 19:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.3	ug/L			07/17/19 19:19	1
Acetone	ND		5.0	4.4	ug/L			07/17/19 19:19	1
Benzene	ND		1.0	0.20	ug/L			07/17/19 19:19	1
Bromoform	ND		1.0	0.54	ug/L			07/17/19 19:19	1
Bromomethane	ND		1.0	0.55	ug/L			07/17/19 19:19	1
Carbon disulfide	ND		1.0	0.82	ug/L			07/17/19 19:19	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/17/19 19:19	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/17/19 19:19	1
Dibromochloromethane	ND		1.0	0.28	ug/L			07/17/19 19:19	1
Chloroethane	ND		1.0	0.32	ug/L			07/17/19 19:19	1
Chloroform	ND		1.0	0.33	ug/L			07/17/19 19:19	1
Chloromethane	ND		1.0	0.40	ug/L			07/17/19 19:19	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/17/19 19:19	1
Cyclohexane	ND		1.0	0.32	ug/L			07/17/19 19:19	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/17/19 19:19	1
Dichlorodifluoromethane	ND		1.0	0.31	ug/L			07/17/19 19:19	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/17/19 19:19	1
1,2-Dibromoethane	ND		1.0	0.50	ug/L			07/17/19 19:19	1
Isopropylbenzene	ND		1.0	0.34	ug/L			07/17/19 19:19	1
Methyl acetate	ND		5.0	0.79	ug/L			07/17/19 19:19	1
Methyl tert-butyl ether	ND		1.0	0.47	ug/L			07/17/19 19:19	1
Methylcyclohexane	ND		1.0	0.26	ug/L			07/17/19 19:19	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/17/19 19:19	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/17/19 19:19	1
Toluene	ND		1.0	0.38	ug/L			07/17/19 19:19	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/17/19 19:19	1
trans-1,3-Dichloropropene	ND		1.0	0.49	ug/L			07/17/19 19:19	1
Trichloroethene	ND		1.0	0.31	ug/L			07/17/19 19:19	1
Trichlorofluoromethane	ND		1.0	0.32	ug/L			07/17/19 19:19	1
Vinyl chloride	ND		1.0	0.17	ug/L			07/17/19 19:19	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/17/19 19:19	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/17/19 19:19	1
Styrene	ND		1.0	0.42	ug/L			07/17/19 19:19	1

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

Lab Sample ID: MB 460-625284/9
Matrix: Water
Analysis Batch: 625284

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

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					07/17/19 19:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		74 - 132		07/17/19 19:19	1
Toluene-d8 (Surr)	112		80 - 120		07/17/19 19:19	1
Dibromofluoromethane (Surr)	104		72 - 131		07/17/19 19:19	1
4-Bromofluorobenzene	94		77 - 124		07/17/19 19:19	1

Lab Sample ID: LCS 460-625284/4
Matrix: Water
Analysis Batch: 625284

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.3		ug/L		102	75 - 125
1,1,2,2-Tetrachloroethane	20.0	19.7		ug/L		99	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.9		ug/L		105	59 - 150
1,1,2-Trichloroethane	20.0	20.8		ug/L		104	78 - 120
1,1-Dichloroethane	20.0	22.0		ug/L		110	77 - 123
1,1-Dichloroethene	20.0	19.3		ug/L		96	74 - 123
1,2,4-Trichlorobenzene	20.0	15.5	*	ug/L		77	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	16.9		ug/L		85	55 - 134
1,2-Dichlorobenzene	20.0	19.7		ug/L		98	80 - 120
1,2-Dichloroethane	20.0	21.6		ug/L		108	76 - 121
1,2-Dichloropropane	20.0	20.7		ug/L		103	77 - 123
1,3-Dichlorobenzene	20.0	20.0		ug/L		100	80 - 120
1,4-Dichlorobenzene	20.0	19.8		ug/L		99	80 - 120
2-Butanone (MEK)	100	101		ug/L		101	64 - 120
2-Hexanone	100	93.3		ug/L		93	71 - 125
4-Methyl-2-pentanone (MIBK)	100	93.7		ug/L		94	78 - 124
Acetone	100	107		ug/L		107	39 - 150
Benzene	20.0	22.4		ug/L		112	77 - 121
Bromoform	20.0	14.1		ug/L		71	53 - 120
Bromomethane	20.0	21.4		ug/L		107	10 - 150
Carbon disulfide	20.0	22.1		ug/L		111	69 - 133
Carbon tetrachloride	20.0	18.5		ug/L		92	70 - 132
Chlorobenzene	20.0	19.8		ug/L		99	80 - 120
Dibromochloromethane	20.0	17.3		ug/L		86	73 - 120
Chloroethane	20.0	21.4		ug/L		107	52 - 150
Chloroform	20.0	21.3		ug/L		106	80 - 120
Chloromethane	20.0	22.9		ug/L		114	56 - 131
cis-1,2-Dichloroethene	20.0	19.8		ug/L		99	80 - 120
Cyclohexane	20.0	18.8		ug/L		94	56 - 150
Bromodichloromethane	20.0	18.8		ug/L		94	76 - 120
Dichlorodifluoromethane	20.0	16.1		ug/L		81	50 - 131
Ethylbenzene	20.0	20.9		ug/L		104	80 - 120
1,2-Dibromoethane	20.0	19.0		ug/L		95	80 - 120
Isopropylbenzene	20.0	21.0		ug/L		105	80 - 123

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

Lab Sample ID: LCS 460-625284/4
Matrix: Water
Analysis Batch: 625284

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	41.0		ug/L		102	66 - 144
Methyl tert-butyl ether	20.0	20.6		ug/L		103	79 - 122
Methylcyclohexane	20.0	19.0		ug/L		95	61 - 145
Methylene Chloride	20.0	20.1		ug/L		100	77 - 123
Tetrachloroethene	20.0	18.6		ug/L		93	78 - 122
Toluene	20.0	21.2		ug/L		106	80 - 120
trans-1,2-Dichloroethene	20.0	19.7		ug/L		98	79 - 120
trans-1,3-Dichloropropene	20.0	19.4		ug/L		97	76 - 120
Trichloroethene	20.0	19.3		ug/L		97	77 - 120
Trichlorofluoromethane	20.0	21.6		ug/L		108	71 - 143
Vinyl chloride	20.0	22.8		ug/L		114	62 - 138
cis-1,3-Dichloropropene	20.0	20.2		ug/L		101	77 - 120
Styrene	20.0	20.0		ug/L		100	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*74 - 132*
Toluene-d8 (Surr)	*111*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*72 - 131*
4-Bromofluorobenzene	*93*		*77 - 124*

Lab Sample ID: LCSD 460-625284/5
Matrix: Water
Analysis Batch: 625284

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	19.5		ug/L		98	75 - 125	4	30
1,1,2,2-Tetrachloroethane	20.0	20.1		ug/L		101	74 - 120	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.4		ug/L		102	59 - 150	3	30
1,1,2-Trichloroethane	20.0	20.2		ug/L		101	78 - 120	3	30
1,1-Dichloroethane	20.0	21.3		ug/L		107	77 - 123	3	30
1,1-Dichloroethene	20.0	19.1		ug/L		96	74 - 123	1	30
1,2,4-Trichlorobenzene	20.0	15.7	*	ug/L		79	80 - 124	2	30
1,2-Dibromo-3-Chloropropane	20.0	15.6		ug/L		78	55 - 134	8	30
1,2-Dichlorobenzene	20.0	19.4		ug/L		97	80 - 120	1	30
1,2-Dichloroethane	20.0	21.6		ug/L		108	76 - 121	0	30
1,2-Dichloropropane	20.0	20.3		ug/L		102	77 - 123	2	30
1,3-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120	2	30
1,4-Dichlorobenzene	20.0	19.5		ug/L		98	80 - 120	1	30
2-Butanone (MEK)	100	99.1		ug/L		99	64 - 120	2	30
2-Hexanone	100	93.2		ug/L		93	71 - 125	0	30
4-Methyl-2-pentanone (MIBK)	100	94.0		ug/L		94	78 - 124	0	30
Acetone	100	109		ug/L		109	39 - 150	2	30
Benzene	20.0	21.7		ug/L		109	77 - 121	3	30
Bromoform	20.0	13.8		ug/L		69	53 - 120	2	30
Bromomethane	20.0	20.7		ug/L		104	10 - 150	3	30
Carbon disulfide	20.0	21.3		ug/L		106	69 - 133	4	30
Carbon tetrachloride	20.0	18.0		ug/L		90	70 - 132	3	30
Chlorobenzene	20.0	19.4		ug/L		97	80 - 120	2	30

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

Lab Sample ID: LCSD 460-625284/5
Matrix: Water
Analysis Batch: 625284

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	17.6		ug/L		88	73 - 120	2	30
Chloroethane	20.0	20.7		ug/L		103	52 - 150	3	30
Chloroform	20.0	20.8		ug/L		104	80 - 120	2	30
Chloromethane	20.0	22.3		ug/L		112	56 - 131	3	30
cis-1,2-Dichloroethene	20.0	18.9		ug/L		95	80 - 120	5	30
Cyclohexane	20.0	18.4		ug/L		92	56 - 150	2	30
Bromodichloromethane	20.0	18.9		ug/L		94	76 - 120	0	30
Dichlorodifluoromethane	20.0	15.3		ug/L		77	50 - 131	5	30
Ethylbenzene	20.0	20.2		ug/L		101	80 - 120	3	30
1,2-Dibromoethane	20.0	19.1		ug/L		96	80 - 120	0	30
Isopropylbenzene	20.0	20.2		ug/L		101	80 - 123	4	30
Methyl acetate	40.0	41.1		ug/L		103	66 - 144	0	30
Methyl tert-butyl ether	20.0	20.8		ug/L		104	79 - 122	1	30
Methylcyclohexane	20.0	18.2		ug/L		91	61 - 145	4	30
Methylene Chloride	20.0	20.0		ug/L		100	77 - 123	0	30
Tetrachloroethene	20.0	17.9		ug/L		89	78 - 122	4	30
Toluene	20.0	20.4		ug/L		102	80 - 120	4	30
trans-1,2-Dichloroethene	20.0	19.2		ug/L		96	79 - 120	3	30
trans-1,3-Dichloropropene	20.0	19.3		ug/L		96	76 - 120	1	30
Trichloroethene	20.0	18.7		ug/L		93	77 - 120	3	30
Trichlorofluoromethane	20.0	20.9		ug/L		105	71 - 143	3	30
Vinyl chloride	20.0	22.1		ug/L		110	62 - 138	3	30
cis-1,3-Dichloropropene	20.0	20.2		ug/L		101	77 - 120	0	30
Styrene	20.0	19.8		ug/L		99	80 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*74 - 132*
Toluene-d8 (Surr)	*110*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*72 - 131*
4-Bromofluorobenzene	*93*		*77 - 124*

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

Lab Sample ID: MB 460-624445/1-A
Matrix: Water
Analysis Batch: 624498

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 624445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		10	1.2	ug/L		07/14/19 07:08	07/14/19 22:23	1
bis (2-chloroisopropyl) ether	ND		10	0.63	ug/L		07/14/19 07:08	07/14/19 22:23	1
2,4,5-Trichlorophenol	ND		10	0.28	ug/L		07/14/19 07:08	07/14/19 22:23	1
2,4,6-Trichlorophenol	ND		10	0.30	ug/L		07/14/19 07:08	07/14/19 22:23	1
2,4-Dichlorophenol	ND		10	0.42	ug/L		07/14/19 07:08	07/14/19 22:23	1
2,4-Dimethylphenol	ND		10	0.24	ug/L		07/14/19 07:08	07/14/19 22:23	1
2,4-Dinitrophenol	ND		20	14	ug/L		07/14/19 07:08	07/14/19 22:23	1
2,4-Dinitrotoluene	ND		2.0	1.0	ug/L		07/14/19 07:08	07/14/19 22:23	1
2,6-Dinitrotoluene	ND		2.0	0.39	ug/L		07/14/19 07:08	07/14/19 22:23	1
2-Chloronaphthalene	ND		10	1.2	ug/L		07/14/19 07:08	07/14/19 22:23	1
2-Chlorophenol	ND		10	0.38	ug/L		07/14/19 07:08	07/14/19 22:23	1

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

Lab Sample ID: MB 460-624445/1-A
Matrix: Water
Analysis Batch: 624498

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 624445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	1.1	ug/L		07/14/19 07:08	07/14/19 22:23	1
2-Methylphenol	ND		10	0.26	ug/L		07/14/19 07:08	07/14/19 22:23	1
2-Nitroaniline	ND		10	0.47	ug/L		07/14/19 07:08	07/14/19 22:23	1
2-Nitrophenol	ND		10	0.75	ug/L		07/14/19 07:08	07/14/19 22:23	1
3,3'-Dichlorobenzidine	ND		10	1.4	ug/L		07/14/19 07:08	07/14/19 22:23	1
3-Nitroaniline	ND		10	0.96	ug/L		07/14/19 07:08	07/14/19 22:23	1
4,6-Dinitro-2-methylphenol	ND		20	13	ug/L		07/14/19 07:08	07/14/19 22:23	1
4-Bromophenyl phenyl ether	ND		10	0.75	ug/L		07/14/19 07:08	07/14/19 22:23	1
4-Chloro-3-methylphenol	ND		10	0.58	ug/L		07/14/19 07:08	07/14/19 22:23	1
4-Chloroaniline	ND		10	1.9	ug/L		07/14/19 07:08	07/14/19 22:23	1
4-Chlorophenyl phenyl ether	ND		10	1.3	ug/L		07/14/19 07:08	07/14/19 22:23	1
4-Methylphenol	ND		10	0.24	ug/L		07/14/19 07:08	07/14/19 22:23	1
4-Nitroaniline	ND		10	0.54	ug/L		07/14/19 07:08	07/14/19 22:23	1
4-Nitrophenol	ND		20	0.69	ug/L		07/14/19 07:08	07/14/19 22:23	1
Acenaphthene	ND		10	1.1	ug/L		07/14/19 07:08	07/14/19 22:23	1
Acenaphthylene	ND		10	0.82	ug/L		07/14/19 07:08	07/14/19 22:23	1
Acetophenone	ND		10	0.79	ug/L		07/14/19 07:08	07/14/19 22:23	1
Anthracene	ND		10	0.63	ug/L		07/14/19 07:08	07/14/19 22:23	1
Atrazine	ND		2.0	1.3	ug/L		07/14/19 07:08	07/14/19 22:23	1
Benzaldehyde	ND		10	0.59	ug/L		07/14/19 07:08	07/14/19 22:23	1
Benzo[a]anthracene	ND		1.0	0.59	ug/L		07/14/19 07:08	07/14/19 22:23	1
Benzo[a]pyrene	ND		1.0	0.41	ug/L		07/14/19 07:08	07/14/19 22:23	1
Benzo[b]fluoranthene	ND		2.0	1.1	ug/L		07/14/19 07:08	07/14/19 22:23	1
Benzo[g,h,i]perylene	ND		10	1.4	ug/L		07/14/19 07:08	07/14/19 22:23	1
Benzo[k]fluoranthene	ND		1.0	0.67	ug/L		07/14/19 07:08	07/14/19 22:23	1
Bis(2-chloroethoxy)methane	ND		10	0.24	ug/L		07/14/19 07:08	07/14/19 22:23	1
Bis(2-chloroethyl)ether	ND		1.0	0.30	ug/L		07/14/19 07:08	07/14/19 22:23	1
Bis(2-ethylhexyl) phthalate	ND		2.0	1.7	ug/L		07/14/19 07:08	07/14/19 22:23	1
Butyl benzyl phthalate	ND		10	0.85	ug/L		07/14/19 07:08	07/14/19 22:23	1
Caprolactam	ND		10	0.68	ug/L		07/14/19 07:08	07/14/19 22:23	1
Carbazole	ND		10	0.68	ug/L		07/14/19 07:08	07/14/19 22:23	1
Chrysene	ND		2.0	0.91	ug/L		07/14/19 07:08	07/14/19 22:23	1
Dibenz(a,h)anthracene	ND		1.0	0.72	ug/L		07/14/19 07:08	07/14/19 22:23	1
Dibenzofuran	ND		10	1.1	ug/L		07/14/19 07:08	07/14/19 22:23	1
Diethyl phthalate	ND		10	0.98	ug/L		07/14/19 07:08	07/14/19 22:23	1
Dimethyl phthalate	ND		10	0.77	ug/L		07/14/19 07:08	07/14/19 22:23	1
Di-n-butyl phthalate	ND		10	0.84	ug/L		07/14/19 07:08	07/14/19 22:23	1
Di-n-octyl phthalate	ND		10	4.8	ug/L		07/14/19 07:08	07/14/19 22:23	1
Fluoranthene	ND		10	0.84	ug/L		07/14/19 07:08	07/14/19 22:23	1
Fluorene	ND		10	0.91	ug/L		07/14/19 07:08	07/14/19 22:23	1
Hexachlorobenzene	ND		1.0	0.40	ug/L		07/14/19 07:08	07/14/19 22:23	1
Hexachlorobutadiene	ND		1.0	0.78	ug/L		07/14/19 07:08	07/14/19 22:23	1
Hexachlorocyclopentadiene	ND		10	1.7	ug/L		07/14/19 07:08	07/14/19 22:23	1
Hexachloroethane	ND		2.0	1.2	ug/L		07/14/19 07:08	07/14/19 22:23	1
Indeno[1,2,3-cd]pyrene	ND		2.0	1.3	ug/L		07/14/19 07:08	07/14/19 22:23	1
Isophorone	ND		10	0.80	ug/L		07/14/19 07:08	07/14/19 22:23	1
Naphthalene	ND		10	1.1	ug/L		07/14/19 07:08	07/14/19 22:23	1
Nitrobenzene	ND		1.0	0.57	ug/L		07/14/19 07:08	07/14/19 22:23	1
N-Nitrosodi-n-propylamine	ND		1.0	0.43	ug/L		07/14/19 07:08	07/14/19 22:23	1

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

Lab Sample ID: MB 460-624445/1-A
Matrix: Water
Analysis Batch: 624498

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 624445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		10	0.89	ug/L		07/14/19 07:08	07/14/19 22:23	1
Pentachlorophenol	ND		20	1.4	ug/L		07/14/19 07:08	07/14/19 22:23	1
Phenanthrene	ND		10	0.58	ug/L		07/14/19 07:08	07/14/19 22:23	1
Phenol	ND		10	0.29	ug/L		07/14/19 07:08	07/14/19 22:23	1
Pyrene	ND		10	1.6	ug/L		07/14/19 07:08	07/14/19 22:23	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*07/14/19 07:08*	*07/14/19 22:23*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*99*		*51 - 108*	*07/14/19 07:08*	*07/14/19 22:23*	*1*
Phenol-d5 (Surr)	*34*		*14 - 39*	*07/14/19 07:08*	*07/14/19 22:23*	*1*
2-Fluorophenol (Surr)	*51*		*25 - 58*	*07/14/19 07:08*	*07/14/19 22:23*	*1*
2,4,6-Tribromophenol (Surr)	*92*		*26 - 139*	*07/14/19 07:08*	*07/14/19 22:23*	*1*
2-Fluorobiphenyl (Surr)	*103*		*45 - 107*	*07/14/19 07:08*	*07/14/19 22:23*	*1*

Lab Sample ID: LCS 460-624445/2-A
Matrix: Water
Analysis Batch: 624498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 624445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	80.0	67.3		ug/L		84	54 - 108
bis (2-chloroisopropyl) ether	80.0	67.1		ug/L		84	50 - 108
2,4,5-Trichlorophenol	80.0	62.5		ug/L		78	59 - 117
2,4,6-Trichlorophenol	80.0	67.9		ug/L		85	62 - 120
2,4-Dichlorophenol	80.0	61.4		ug/L		77	62 - 102
2,4-Dimethylphenol	80.0	57.2		ug/L		72	61 - 95
2,4-Dinitrophenol	160	105		ug/L		66	45 - 125
2,4-Dinitrotoluene	80.0	70.7		ug/L		88	70 - 123
2,6-Dinitrotoluene	80.0	74.2		ug/L		93	68 - 121
2-Chloronaphthalene	80.0	65.9		ug/L		82	54 - 105
2-Chlorophenol	80.0	55.8		ug/L		70	54 - 92
2-Methylnaphthalene	80.0	63.4		ug/L		79	47 - 104
2-Methylphenol	80.0	45.7		ug/L		57	43 - 80
2-Nitroaniline	80.0	55.0		ug/L		69	46 - 124
2-Nitrophenol	80.0	65.9		ug/L		82	58 - 109
3,3'-Dichlorobenzidine	80.0	74.1		ug/L		93	68 - 123
3-Nitroaniline	80.0	63.9		ug/L		80	60 - 117
4,6-Dinitro-2-methylphenol	160	146		ug/L		91	59 - 132
4-Bromophenyl phenyl ether	80.0	66.5		ug/L		83	57 - 126
4-Chloro-3-methylphenol	80.0	55.6		ug/L		69	58 - 98
4-Chloroaniline	80.0	62.0		ug/L		78	51 - 108
4-Chlorophenyl phenyl ether	80.0	63.4		ug/L		79	60 - 114
4-Methylphenol	80.0	37.6		ug/L		47	34 - 78
4-Nitroaniline	80.0	61.8		ug/L		77	48 - 135
4-Nitrophenol	160	37.4		ug/L		23	11 - 47
Acenaphthene	80.0	61.5		ug/L		77	58 - 107
Acenaphthylene	80.0	67.9		ug/L		85	61 - 106

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

Lab Sample ID: LCS 460-624445/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 624498
Prep Batch: 624445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetophenone	80.0	63.2		ug/L		79	54 - 115
Anthracene	80.0	68.9		ug/L		86	70 - 118
Benzo[a]anthracene	80.0	72.3		ug/L		90	73 - 119
Benzo[a]pyrene	80.0	69.2		ug/L		87	76 - 125
Benzo[b]fluoranthene	80.0	73.2		ug/L		91	78 - 123
Benzo[g,h,i]perylene	80.0	74.8		ug/L		94	63 - 133
Benzo[k]fluoranthene	80.0	76.4		ug/L		96	71 - 126
Bis(2-chloroethoxy)methane	80.0	72.6		ug/L		91	67 - 104
Bis(2-chloroethyl)ether	80.0	74.1		ug/L		93	63 - 106
Bis(2-ethylhexyl) phthalate	80.0	92.0		ug/L		115	63 - 135
Butyl benzyl phthalate	80.0	84.5		ug/L		106	66 - 129
Carbazole	80.0	69.1		ug/L		86	68 - 121
Chrysene	80.0	75.7		ug/L		95	73 - 121
Dibenz(a,h)anthracene	80.0	77.8		ug/L		97	59 - 136
Dibenzofuran	80.0	64.9		ug/L		81	67 - 108
Diethyl phthalate	80.0	65.1		ug/L		81	61 - 129
Dimethyl phthalate	80.0	67.2		ug/L		84	65 - 121
Di-n-butyl phthalate	80.0	72.1		ug/L		90	64 - 130
Di-n-octyl phthalate	80.0	86.6		ug/L		108	64 - 131
Fluoranthene	80.0	66.2		ug/L		83	66 - 123
Fluorene	80.0	64.9		ug/L		81	67 - 112
Hexachlorobenzene	80.0	69.7		ug/L		87	63 - 125
Hexachlorobutadiene	80.0	53.4		ug/L		67	34 - 99
Hexachlorocyclopentadiene	80.0	35.4		ug/L		44	18 - 99
Hexachloroethane	80.0	55.4		ug/L		69	39 - 92
Indeno[1,2,3-cd]pyrene	80.0	78.0		ug/L		98	57 - 142
Isophorone	80.0	69.1		ug/L		86	55 - 105
Naphthalene	80.0	63.3		ug/L		79	51 - 98
Nitrobenzene	80.0	67.8		ug/L		85	56 - 106
N-Nitrosodi-n-propylamine	80.0	67.7		ug/L		85	48 - 118
N-Nitrosodiphenylamine	80.0	71.8		ug/L		90	69 - 118
Pentachlorophenol	160	109		ug/L		68	54 - 120
Phenanthrene	80.0	69.1		ug/L		86	70 - 117
Phenol	80.0	24.6		ug/L		31	16 - 43
Pyrene	80.0	81.2		ug/L		101	63 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*77*		*51 - 108*
Phenol-d5 (Surr)	*24*		*14 - 39*
2-Fluorophenol (Surr)	*35*		*25 - 58*
2,4,6-Tribromophenol (Surr)	*79*		*26 - 139*
2-Fluorobiphenyl (Surr)	*77*		*45 - 107*

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

Lab Sample ID: LCS 460-624445/4-A
Matrix: Water
Analysis Batch: 624498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 624445

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Atrazine			160	183		ug/L		115	38 - 146		
Benzaldehyde			160	166		ug/L		104	46 - 111		
Caprolactam			160	56.0		ug/L		35	10 - 43		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*97*		*51 - 108*
Phenol-d5 (Surr)	*39*		*14 - 39*
2-Fluorophenol (Surr)	*54*		*25 - 58*
2,4,6-Tribromophenol (Surr)	*90*		*26 - 139*
2-Fluorobiphenyl (Surr)	*92*		*45 - 107*

Lab Sample ID: LCSD 460-624445/3-A
Matrix: Water
Analysis Batch: 624498

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 624445

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biphenyl			80.0	68.2		ug/L		85	54 - 108	1	30
bis (2-chloroisopropyl) ether			80.0	68.3		ug/L		85	50 - 108	2	30
2,4,5-Trichlorophenol			80.0	62.8		ug/L		78	59 - 117	0	30
2,4,6-Trichlorophenol			80.0	67.8		ug/L		85	62 - 120	0	30
2,4-Dichlorophenol			80.0	61.1		ug/L		76	62 - 102	0	30
2,4-Dimethylphenol			80.0	57.4		ug/L		72	61 - 95	0	30
2,4-Dinitrophenol			160	104		ug/L		65	45 - 125	2	30
2,4-Dinitrotoluene			80.0	70.4		ug/L		88	70 - 123	0	30
2,6-Dinitrotoluene			80.0	73.4		ug/L		92	68 - 121	1	30
2-Chloronaphthalene			80.0	66.6		ug/L		83	54 - 105	1	30
2-Chlorophenol			80.0	56.6		ug/L		71	54 - 92	1	30
2-Methylnaphthalene			80.0	64.7		ug/L		81	47 - 104	2	30
2-Methylphenol			80.0	45.8		ug/L		57	43 - 80	0	30
2-Nitroaniline			80.0	54.8		ug/L		69	46 - 124	0	30
2-Nitrophenol			80.0	65.4		ug/L		82	58 - 109	1	30
3,3'-Dichlorobenzidine			80.0	74.3		ug/L		93	68 - 123	0	30
3-Nitroaniline			80.0	63.2		ug/L		79	60 - 117	1	30
4,6-Dinitro-2-methylphenol			160	145		ug/L		91	59 - 132	0	30
4-Bromophenyl phenyl ether			80.0	68.6		ug/L		86	57 - 126	3	30
4-Chloro-3-methylphenol			80.0	54.9		ug/L		69	58 - 98	1	30
4-Chloroaniline			80.0	62.6		ug/L		78	51 - 108	1	30
4-Chlorophenyl phenyl ether			80.0	64.7		ug/L		81	60 - 114	2	30
4-Methylphenol			80.0	36.4		ug/L		46	34 - 78	3	30
4-Nitroaniline			80.0	61.9		ug/L		77	48 - 135	0	30
4-Nitrophenol			160	34.5		ug/L		22	11 - 47	8	30
Acenaphthene			80.0	62.7		ug/L		78	58 - 107	2	30
Acenaphthylene			80.0	68.7		ug/L		86	61 - 106	1	30
Acetophenone			80.0	64.4		ug/L		80	54 - 115	2	30
Anthracene			80.0	69.7		ug/L		87	70 - 118	1	30
Benzo[a]anthracene			80.0	72.3		ug/L		90	73 - 119	0	30
Benzo[a]pyrene			80.0	68.0		ug/L		85	76 - 125	2	30
Benzo[b]fluoranthene			80.0	72.8		ug/L		91	78 - 123	0	30

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

Lab Sample ID: LCSD 460-624445/3-A
Matrix: Water
Analysis Batch: 624498

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 624445

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene			80.0	74.5		ug/L		93	63 - 133	0	30
Benzo[k]fluoranthene			80.0	71.6		ug/L		90	71 - 126	6	30
Bis(2-chloroethoxy)methane			80.0	73.3		ug/L		92	67 - 104	1	30
Bis(2-chloroethyl)ether			80.0	76.0		ug/L		95	63 - 106	3	30
Bis(2-ethylhexyl) phthalate			80.0	92.4		ug/L		116	63 - 135	1	30
Butyl benzyl phthalate			80.0	84.8		ug/L		106	66 - 129	0	30
Carbazole			80.0	69.1		ug/L		86	68 - 121	0	30
Chrysene			80.0	76.0		ug/L		95	73 - 121	0	30
Dibenz(a,h)anthracene			80.0	80.4		ug/L		101	59 - 136	3	30
Dibenzofuran			80.0	65.7		ug/L		82	67 - 108	1	30
Diethyl phthalate			80.0	65.6		ug/L		82	61 - 129	1	30
Dimethyl phthalate			80.0	67.3		ug/L		84	65 - 121	0	30
Di-n-butyl phthalate			80.0	72.1		ug/L		90	64 - 130	0	30
Di-n-octyl phthalate			80.0	84.5		ug/L		106	64 - 131	2	30
Fluoranthene			80.0	66.8		ug/L		84	66 - 123	1	30
Fluorene			80.0	64.9		ug/L		81	67 - 112	0	30
Hexachlorobenzene			80.0	72.1		ug/L		90	63 - 125	3	30
Hexachlorobutadiene			80.0	54.6		ug/L		68	34 - 99	2	30
Hexachlorocyclopentadiene			80.0	36.3		ug/L		45	18 - 99	3	30
Hexachloroethane			80.0	58.1		ug/L		73	39 - 92	5	30
Indeno[1,2,3-cd]pyrene			80.0	77.2		ug/L		97	57 - 142	1	30
Isophorone			80.0	70.5		ug/L		88	55 - 105	2	30
Naphthalene			80.0	65.0		ug/L		81	51 - 98	3	30
Nitrobenzene			80.0	69.3		ug/L		87	56 - 106	2	30
N-Nitrosodi-n-propylamine			80.0	68.2		ug/L		85	48 - 118	1	30
N-Nitrosodiphenylamine			80.0	71.9		ug/L		90	69 - 118	0	30
Pentachlorophenol			160	109		ug/L		68	54 - 120	1	30
Phenanthrene			80.0	69.0		ug/L		86	70 - 117	0	30
Phenol			80.0	23.5		ug/L		29	16 - 43	5	30
Pyrene			80.0	83.4		ug/L		104	63 - 129	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*82*		*51 - 108*
Phenol-d5 (Surr)	*25*		*14 - 39*
2-Fluorophenol (Surr)	*35*		*25 - 58*
2,4,6-Tribromophenol (Surr)	*86*		*26 - 139*
2-Fluorobiphenyl (Surr)	*85*		*45 - 107*

Lab Sample ID: LCSD 460-624445/5-A
Matrix: Water
Analysis Batch: 624498

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 624445

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Atrazine			160	166		ug/L		104	38 - 146	10	30
Benzaldehyde			160	155		ug/L		97	46 - 111	7	30
Caprolactam			160	47.7		ug/L		30	10 - 43	16	30

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

Lab Sample ID: LCSD 460-624445/5-A
Matrix: Water
Analysis Batch: 624498

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 624445

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*89*		*51 - 108*
Phenol-d5 (Surr)	*35*		*14 - 39*
2-Fluorophenol (Surr)	*50*		*25 - 58*
2,4,6-Tribromophenol (Surr)	*82*		*26 - 139*
2-Fluorobiphenyl (Surr)	*87*		*45 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 460-624377/1-A
Matrix: Water
Analysis Batch: 624478

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 624377

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050	0.0042	mg/L		07/13/19 16:20	07/14/19 16:22	1
Cadmium	ND		0.0050	0.0021	mg/L		07/13/19 16:20	07/14/19 16:22	1
Chromium	ND		0.010	0.0059	mg/L		07/13/19 16:20	07/14/19 16:22	1
Copper	ND		0.025	0.0055	mg/L		07/13/19 16:20	07/14/19 16:22	1
Lead	ND		0.0050	0.0038	mg/L		07/13/19 16:20	07/14/19 16:22	1
Molybdenum	ND		0.020	0.0047	mg/L		07/13/19 16:20	07/14/19 16:22	1
Nickel	ND		0.040	0.0063	mg/L		07/13/19 16:20	07/14/19 16:22	1
Selenium	ND		0.0050	0.0042	mg/L		07/13/19 16:20	07/14/19 16:22	1
Zinc	ND		0.030	0.0054	mg/L		07/13/19 16:20	07/14/19 16:22	1

Lab Sample ID: LCS 460-624377/2-A
Matrix: Water
Analysis Batch: 624478

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 624377

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	1.97		mg/L		98	85 - 115
Cadmium	0.0500	0.0474		mg/L		95	85 - 115
Chromium	0.200	0.187		mg/L		93	85 - 115
Copper	0.250	0.224		mg/L		89	85 - 115
Lead	0.500	0.463		mg/L		93	85 - 115
Molybdenum	0.500	0.507		mg/L		101	85 - 115
Nickel	0.500	0.477		mg/L		95	85 - 115
Selenium	2.00	1.89		mg/L		95	85 - 115
Zinc	0.500	0.486		mg/L		97	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 460-625217/1-A
Matrix: Water
Analysis Batch: 625277

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 625217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.12	ug/L		07/17/19 11:55	07/17/19 13:22	1

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 460-625217/2-A
Matrix: Water
Analysis Batch: 625277

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 625217

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			1.00	0.977		ug/L		98	85 - 115		

Lab Sample ID: 460-186578-1 MS
Matrix: Water
Analysis Batch: 625277

Client Sample ID: PWFTWWNA089
Prep Type: Total/NA
Prep Batch: 625217

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND		1.00	0.934		ug/L		93	70 - 130		

Lab Sample ID: 460-186578-1 DU
Matrix: Water
Analysis Batch: 625277

Client Sample ID: PWFTWWNA089
Prep Type: Total/NA
Prep Batch: 625217

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	ND			ND		ug/L				NC	20

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 460-624480/1-A
Matrix: Water
Analysis Batch: 624645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 624480

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0040	mg/L		07/14/19 14:59	07/15/19 13:03	1

Lab Sample ID: LCS 460-624480/2-A
Matrix: Water
Analysis Batch: 624645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 624480

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			0.100	0.110		mg/L		110	90 - 110		

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

Lab Sample ID: MB 460-625141/1
Matrix: Water
Analysis Batch: 625141

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			07/17/19 07:28	1

Lab Sample ID: LCSSRM 460-625141/2
Matrix: Water
Analysis Batch: 625141

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	52.00		mg/L		105.5	77.3 - 114.6		

Client: AECOM
Job ID: 460-186578-1
Project/Site: 60584654, Penn Yan Former MGP Phase 2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 460-624337/24
Matrix: Water
Analysis Batch: 624337

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			07/13/19 17:35	1

Lab Sample ID: LCS 460-624337/25
Matrix: Water
Analysis Batch: 624337

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	124.0		mg/L		94	84.6 - 115.4		

Lab Sample ID: 460-186578-1 DU
Matrix: Water
Analysis Batch: 624337

Client Sample ID: PWFTWWNA089
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	ND			ND		mg/L				NC	30

GC/MS VOA

Analysis Batch: 625284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-186578-1	PWFTWWNA089	Total/NA	Water	8260C	
MB 460-625284/9	Method Blank	Total/NA	Water	8260C	
LCS 460-625284/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-625284/5	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 624445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-186578-1	PWFTWWNA089	Total/NA	Water	3510C	
MB 460-624445/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-624445/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-624445/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-624445/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 460-624445/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 624498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-186578-1	PWFTWWNA089	Total/NA	Water	8270D	624445
MB 460-624445/1-A	Method Blank	Total/NA	Water	8270D	624445
LCS 460-624445/2-A	Lab Control Sample	Total/NA	Water	8270D	624445
LCS 460-624445/4-A	Lab Control Sample	Total/NA	Water	8270D	624445
LCSD 460-624445/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	624445
LCSD 460-624445/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	624445

Metals

Prep Batch: 624377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-186578-1	PWFTWWNA089	Total Recoverable	Water	200.7	
MB 460-624377/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 460-624377/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 624478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-186578-1	PWFTWWNA089	Total Recoverable	Water	200.7 Rev 4.4	624377
MB 460-624377/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	624377
LCS 460-624377/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	624377

Prep Batch: 625217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-186578-1	PWFTWWNA089	Total/NA	Water	245.1	
MB 460-625217/1-A	Method Blank	Total/NA	Water	245.1	
LCS 460-625217/2-A	Lab Control Sample	Total/NA	Water	245.1	
460-186578-1 MS	PWFTWWNA089	Total/NA	Water	245.1	
460-186578-1 DU	PWFTWWNA089	Total/NA	Water	245.1	

Analysis Batch: 625277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-186578-1	PWFTWWNA089	Total/NA	Water	245.1	625217
MB 460-625217/1-A	Method Blank	Total/NA	Water	245.1	625217
LCS 460-625217/2-A	Lab Control Sample	Total/NA	Water	245.1	625217

Metals (Continued)

Analysis Batch: 625277 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-186578-1 MS	PWFTWWNA089	Total/NA	Water	245.1	625217
460-186578-1 DU	PWFTWWNA089	Total/NA	Water	245.1	625217

General Chemistry

Analysis Batch: 624337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-186578-1	PWFTWWNA089	Total/NA	Water	SM 5210B	
USB 460-624337/24	Method Blank	Total/NA	Water	SM 5210B	
LCS 460-624337/25	Lab Control Sample	Total/NA	Water	SM 5210B	
460-186578-1 DU	PWFTWWNA089	Total/NA	Water	SM 5210B	

Prep Batch: 624480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-186578-1	PWFTWWNA089	Total/NA	Water	Distill/CN	
MB 460-624480/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 460-624480/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 624645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-186578-1	PWFTWWNA089	Total/NA	Water	335.4	624480
MB 460-624480/1-A	Method Blank	Total/NA	Water	335.4	624480
LCS 460-624480/2-A	Lab Control Sample	Total/NA	Water	335.4	624480

Analysis Batch: 625141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-186578-1	PWFTWWNA089	Total/NA	Water	SM 2540D	
MB 460-625141/1	Method Blank	Total/NA	Water	SM 2540D	
LCSSRM 460-625141/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: AECOM
Job ID: 460-186578-1
Project/Site: 60584654, Penn Yan Former MGP Phase 2

Client Sample ID: PWFTWWNA089
Lab Sample ID: 460-186578-1
Date Collected: 07/12/19 08:05
Matrix: Water
Date Received: 07/13/19 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	625284	07/17/19 23:37	VBP	TAL EDI
Total/NA	Prep	3510C			624445	07/14/19 07:08	DXD	TAL EDI
Total/NA	Analysis	8270D		1	624498	07/15/19 00:07	MME	TAL EDI
Total Recoverable	Prep	200.7			624377	07/13/19 16:20	GAE	TAL EDI
Total Recoverable	Analysis	200.7 Rev 4.4		1	624478	07/14/19 16:58	CDC	TAL EDI
Total/NA	Prep	245.1			625217	07/17/19 11:55	RBS	TAL EDI
Total/NA	Analysis	245.1		1	625277	07/17/19 13:25	RBS	TAL EDI
Total/NA	Prep	Distill/CN			624480	07/14/19 14:59	MBE	TAL EDI
Total/NA	Analysis	335.4		1	624645	07/15/19 13:14	AJP	TAL EDI
Total/NA	Analysis	SM 2540D		1	625141	07/17/19 07:28	PLS	TAL EDI
Total/NA	Analysis	SM 5210B		1	624337	07/13/19 17:45	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: 460-186578-1
Project/Site: 60584654, Penn Yan Former MGP Phase 2

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
Job ID: 460-186578-1
Project/Site: 60584654, Penn Yan Former MGP Phase 2

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
SM 5210B	BOD, 5-Day	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
Job ID: 460-186578-1
Project/Site: 60584654, Penn Yan Former MGP Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-186578-1	PWFTWWNA089	Water	07/12/19 08:05	07/13/19 10:45	

TestAmerica Buffalo
777 New Durham Rd.
Edison, New Jersey
Phone (732) 549-3900

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

7/19/2019

Client Information	Sampler: GEORGE HERMANCE	Lab PM: Deyo, Melissa L	Carrier Tracking No(s):	COC No: 480-127595-28824.1
Client Contact: Mr. Matt Thorpe	Phone: 716-861-7882	E-Mail: melissa.deyo@testamericainc.com		Page: Page 1 of 1
Company: AECOM				Job #: 460-186578
Address: 40 British American Blvd	Due Date Requested: 7/17/2019			
City: Latham	TAT Requested (days): 3 Per M. Deyo			
State, Zip: NY, 12110				
Phone: 518-426-4383(Tel)	PO #: 107852			
Email: matthew.thorpe@aecom.com	WO #: Matthew.Thorpe@aecom.com			
Project Name: 60584654, Penn Yan Former MGP Phase 2	Project #: 48015558			
Site: 150 Water Street, Penn Yan, NY	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D - TCL SVOCs + 20 TICs	200.7, 245.1	8260C - TCL VOCs + 10 TICs	5210B - BOD	2540D - TSS	335.4 - Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	A	N	N	B	X	
PWFTWWNA089	7/12/19	0805	G	Water	N		X	X	X	X	X	X	9	#4 1

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable Skin Irritant ☐ Poison B Unknown Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by: George Hermance	Date/Time: 7/12/19 1500	Company: AECOM	Received by: FedEx	Date/Time:	Company
Relinquished by: Fedex	Date/Time: 7/13/19	Company	Received by: [illegible] ETA	Date/Time: 7/13/19 1045	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.: 864795	Cooler Temperature(s) °C and Other Remarks: 2.4 2.4

Ver: 01/16/2019

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 460-186578

Number of Coolers: 1 IR Gun #: 42

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.4 °C	°C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1				12								712			

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: CH Date: 7/13/19

Login Sample Receipt Checklist

Client: AECOM

Job Number: 460-186578-1

Login Number: 186578
List Number: 1
Creator: Hall, Alonzo

List Source: Eurofins TestAmerica, Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	864795
Sample custody seals, if present, are intact.	N/A	
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 460-186578-1

Login Number: 186578
List Number: 2
Creator: Hall, Alonzo

List Source: Eurofins TestAmerica, Edison

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.		