

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-28175-1

Client Project/Site: Olin Niagara Falls site

For:

AMEC Environment & Infrastructure, Inc.

1075 Big Shanty Road, NW

Suite 100

Kennesaw, Georgia 30144

Attn: Mr. Tony Englund



Authorized for release by:

11/29/2012 2:24:35 PM

Brian Fischer

Project Manager II

brian.fischer@testamericainc.com

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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.

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Detection Summary	5
Client Sample Results	10
Surrogate Summary	25
QC Sample Results	27
QC Association Summary	35
Lab Chronicle	39
Certification Summary	43
Method Summary	44
Sample Summary	45
Receipt Checklists	46
Chain of Custody	47

Definitions/Glossary

Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Qualifiers

GC/MS VOA

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.
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time
F	MS or MSD exceeds the control limits
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

GC Semi VOA

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.
X	Surrogate is outside control 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.

☒	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

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Case Narrative

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Job ID: 480-28175-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-28175-1

Comments

No additional comments.

Receipt

The samples were received on 11/9/2012 4:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.9° C, 3.5° C, 3.7° C and 4.0° C.

GC/MS VOA

Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: PR-12-1112 (480-28175-3), RW-1-1112 (480-28175-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: INFLUENT-1112 (480-28175-1), OBA-9AR-1112 (480-28175-2), PR-12-1112 (480-28175-3), RW-4-1112 (480-28175-8), RW-5-1112 (480-28175-9), SP-1-1112 (480-28175-10), SP-3-1112 (480-28175-11), SP-4-1112 (480-28175-12). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 92349 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8260B: The following sample(s) required a dilution which was performed outside of the analytical holding time: RW-2-1112 (480-28175-6). Dilution results are consistent with initial undiluted analysis.

Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: RW-2-1112 (480-28175-6). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC Semi VOA

Method(s) 8081A: The following samples were diluted due to an abundance of target analytes : INFLUENT-1112 (480-28175-1), PR-4-1112 (480-28175-4), RW-3-1112 (480-28175-7), RW-4-1112 (480-28175-8), RW-5-1112 (480-28175-9), RW-5D-1112 (480-28175-14). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

Method(s) 8081A: The following samples were diluted due to an abundance of target analytes : OBA-9AR-1112 (480-28175-2), PR-12-1112 (480-28175-3), RW-1-1112 (480-28175-5), SP-1-1112 (480-28175-10). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

Method(s) 8081A: The following samples were diluted to bring the concentration of target analytes within the calibration range: SP-3-1112 (480-28175-11), SP-4-1112 (480-28175-12). Elevated reporting limits (RLs) are provided.

Method(s) 8081A: For method 8081, the recovery of the one surrogate in samples SP-3-1112 (480-28175-11) exceeds quality control limits due to the sample matrix. The recovery of the secondary surrogate is within quality control criteria; no corrective action is required.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
 Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: INFLUENT-1112

Lab Sample ID: 480-28175-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2,2-Tetrachloroethane	1600		250	53	ug/L	250		8260B	Total/NA
1,2,4-Trichlorobenzene	980		250	100	ug/L	250		8260B	Total/NA
Benzene	110	J	250	100	ug/L	250		8260B	Total/NA
cis-1,2-Dichloroethene	3500		250	200	ug/L	250		8260B	Total/NA
Methylene Chloride	220	J	250	110	ug/L	250		8260B	Total/NA
Tetrachloroethene	6800		250	90	ug/L	250		8260B	Total/NA
Trichloroethene	16000		250	120	ug/L	250		8260B	Total/NA
alpha-BHC	49		9.4	1.2	ug/L	200		8081A	Total/NA
beta-BHC	5.5	J	9.4	4.7	ug/L	200		8081A	Total/NA
delta-BHC	5.0	J	9.4	1.9	ug/L	200		8081A	Total/NA
gamma-BHC (Lindane)	36		9.4	1.1	ug/L	200		8081A	Total/NA

Client Sample ID: OBA-9AR-1112

Lab Sample ID: 480-28175-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2,2-Tetrachloroethane	990		500	110	ug/L	500		8260B	Total/NA
1,2,4-Trichlorobenzene	7900		500	210	ug/L	500		8260B	Total/NA
1,2-Dichlorobenzene	8000		500	400	ug/L	500		8260B	Total/NA
1,3-Dichlorobenzene	1200		500	390	ug/L	500		8260B	Total/NA
1,4-Dichlorobenzene	7100		500	420	ug/L	500		8260B	Total/NA
Benzene	320	J	500	210	ug/L	500		8260B	Total/NA
Chlorobenzene	650		500	380	ug/L	500		8260B	Total/NA
cis-1,2-Dichloroethene	920		500	410	ug/L	500		8260B	Total/NA
Tetrachloroethene	6100		500	180	ug/L	500		8260B	Total/NA
Trichloroethene	31000		500	230	ug/L	500		8260B	Total/NA
alpha-BHC	450		47	6.2	ug/L	1000		8081A	Total/NA
beta-BHC	40	J	47	23	ug/L	1000		8081A	Total/NA
delta-BHC	19	J	47	9.4	ug/L	1000		8081A	Total/NA
gamma-BHC (Lindane)	300		47	5.7	ug/L	1000		8081A	Total/NA

Client Sample ID: PR-12-1112

Lab Sample ID: 480-28175-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	87		20	16	ug/L	20		8260B	Total/NA
1,1,2,2-Tetrachloroethane	880		20	4.2	ug/L	20		8260B	Total/NA
1,1,2-Trichloroethane	45		20	4.6	ug/L	20		8260B	Total/NA
1,1-Dichloroethene	43		20	5.8	ug/L	20		8260B	Total/NA
1,3-Dichlorobenzene	970		20	16	ug/L	20		8260B	Total/NA
Benzene	230		20	8.2	ug/L	20		8260B	Total/NA
Carbon tetrachloride	8.4	J	20	5.4	ug/L	20		8260B	Total/NA
Chlorobenzene	480		20	15	ug/L	20		8260B	Total/NA
cis-1,2-Dichloroethene	970		20	16	ug/L	20		8260B	Total/NA
Methylene Chloride	22		20	8.8	ug/L	20		8260B	Total/NA
trans-1,2-Dichloroethene	49		20	18	ug/L	20		8260B	Total/NA
Vinyl chloride	100		20	18	ug/L	20		8260B	Total/NA
1,2,4-Trichlorobenzene - DL	8600		400	160	ug/L	400		8260B	Total/NA
1,2-Dichlorobenzene - DL	8000		400	320	ug/L	400		8260B	Total/NA
1,4-Dichlorobenzene - DL	7400		400	340	ug/L	400		8260B	Total/NA
Tetrachloroethene - DL	6500		400	140	ug/L	400		8260B	Total/NA
Trichloroethene - DL	33000		400	180	ug/L	400		8260B	Total/NA
alpha-BHC	48		4.7	0.63	ug/L	100		8081A	Total/NA
beta-BHC	5.3		4.7	2.4	ug/L	100		8081A	Total/NA

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Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
 Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: PR-12-1112 (Continued)

Lab Sample ID: 480-28175-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
delta-BHC	3.0	J	4.7	0.95	ug/L	100		8081A	Total/NA
gamma-BHC (Lindane)	30		4.7	0.57	ug/L	100		8081A	Total/NA
Mercury	0.00018	J	0.00020	0.00012	mg/L	1		7470A	Total/NA
Mercury	0.00014	J	0.00020	0.00012	mg/L	1		7470A	Dissolved

Client Sample ID: PR-4-1112

Lab Sample ID: 480-28175-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	1000		50	21	ug/L	50		8260B	Total/NA
1,2-Dichlorobenzene	67		50	40	ug/L	50		8260B	Total/NA
1,3-Dichlorobenzene	400		50	39	ug/L	50		8260B	Total/NA
1,4-Dichlorobenzene	270		50	42	ug/L	50		8260B	Total/NA
Benzene	35	J	50	21	ug/L	50		8260B	Total/NA
Chlorobenzene	120		50	38	ug/L	50		8260B	Total/NA
cis-1,2-Dichloroethene	170		50	41	ug/L	50		8260B	Total/NA
Tetrachloroethene	110		50	18	ug/L	50		8260B	Total/NA
Trichloroethene	200		50	23	ug/L	50		8260B	Total/NA
Vinyl chloride	77		50	45	ug/L	50		8260B	Total/NA
alpha-BHC	91		9.7	1.3	ug/L	200		8081A	Total/NA
beta-BHC	8.7	J	9.7	4.8	ug/L	200		8081A	Total/NA
delta-BHC	9.4	J	9.7	1.9	ug/L	200		8081A	Total/NA
gamma-BHC (Lindane)	68		9.7	1.2	ug/L	200		8081A	Total/NA

Client Sample ID: RW-1-1112

Lab Sample ID: 480-28175-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	5600		400	160	ug/L	400		8260B	Total/NA
1,2-Dichlorobenzene	430		400	320	ug/L	400		8260B	Total/NA
1,3-Dichlorobenzene	480		400	310	ug/L	400		8260B	Total/NA
1,4-Dichlorobenzene	390	J	400	340	ug/L	400		8260B	Total/NA
Benzene	220	J	400	160	ug/L	400		8260B	Total/NA
cis-1,2-Dichloroethene	2900		400	320	ug/L	400		8260B	Total/NA
Methylene Chloride	190	J	400	180	ug/L	400		8260B	Total/NA
Tetrachloroethene	3900		400	140	ug/L	400		8260B	Total/NA
Trichloroethene	12000		400	180	ug/L	400		8260B	Total/NA
Vinyl chloride	450		400	360	ug/L	400		8260B	Total/NA
alpha-BHC	27		4.8	0.63	ug/L	100		8081A	Total/NA
beta-BHC	4.7	J	4.8	2.4	ug/L	100		8081A	Total/NA
gamma-BHC (Lindane)	3.1	J	4.8	0.57	ug/L	100		8081A	Total/NA
Mercury	0.00054		0.00020	0.00012	mg/L	1		7470A	Total/NA
Mercury	0.00037		0.00020	0.00012	mg/L	1		7470A	Dissolved

Client Sample ID: RW-2-1112

Lab Sample ID: 480-28175-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2,2-Tetrachloroethane	7.2		1.0	0.21	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.60	J	1.0	0.29	ug/L	1		8260B	Total/NA
1,2,4-Trichlorobenzene	8.0		1.0	0.41	ug/L	1		8260B	Total/NA
1,3-Dichlorobenzene	0.84	J	1.0	0.78	ug/L	1		8260B	Total/NA
Benzene	0.48	J	1.0	0.41	ug/L	1		8260B	Total/NA
Carbon tetrachloride	0.67	J	1.0	0.27	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	68		1.0	0.81	ug/L	1		8260B	Total/NA

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Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: RW-2-1112 (Continued)

Lab Sample ID: 480-28175-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	110	E	1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	180	E	1.0	0.46	ug/L	1		8260B	Total/NA
Tetrachloroethene - DL	140	H	4.0	1.4	ug/L	4		8260B	Total/NA
Trichloroethene - DL	200	H	4.0	1.8	ug/L	4		8260B	Total/NA
alpha-BHC	0.52		0.047	0.0063	ug/L	1		8081A	Total/NA
beta-BHC	0.22		0.047	0.024	ug/L	1		8081A	Total/NA
delta-BHC	0.053		0.047	0.0095	ug/L	1		8081A	Total/NA
gamma-BHC (Lindane)	0.43		0.047	0.0057	ug/L	1		8081A	Total/NA

Client Sample ID: RW-3-1112

Lab Sample ID: 480-28175-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2,2-Tetrachloroethane	4.9		1.0	0.21	ug/L	1		8260B	Total/NA
1,2,4-Trichlorobenzene	41		1.0	0.41	ug/L	1		8260B	Total/NA
1,2-Dichlorobenzene	8.1		1.0	0.79	ug/L	1		8260B	Total/NA
1,3-Dichlorobenzene	33		1.0	0.78	ug/L	1		8260B	Total/NA
1,4-Dichlorobenzene	34		1.0	0.84	ug/L	1		8260B	Total/NA
Benzene	1.9		1.0	0.41	ug/L	1		8260B	Total/NA
Chlorobenzene	9.4		1.0	0.75	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	23		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	44		1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	49		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.7		1.0	0.90	ug/L	1		8260B	Total/NA
alpha-BHC	3.7		0.98	0.13	ug/L	20		8081A	Total/NA
beta-BHC	1.5		0.98	0.48	ug/L	20		8081A	Total/NA
delta-BHC	5.4		0.98	0.20	ug/L	20		8081A	Total/NA
gamma-BHC (Lindane)	7.0		0.98	0.12	ug/L	20		8081A	Total/NA

Client Sample ID: RW-4-1112

Lab Sample ID: 480-28175-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2,2-Tetrachloroethane	3.0		2.0	0.42	ug/L	2		8260B	Total/NA
1,2,4-Trichlorobenzene	110		2.0	0.82	ug/L	2		8260B	Total/NA
1,2-Dichlorobenzene	5.5		2.0	1.6	ug/L	2		8260B	Total/NA
1,3-Dichlorobenzene	53		2.0	1.6	ug/L	2		8260B	Total/NA
1,4-Dichlorobenzene	35		2.0	1.7	ug/L	2		8260B	Total/NA
Benzene	5.6		2.0	0.82	ug/L	2		8260B	Total/NA
Chlorobenzene	27		2.0	1.5	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	47		2.0	1.6	ug/L	2		8260B	Total/NA
Tetrachloroethene	73		2.0	0.72	ug/L	2		8260B	Total/NA
Trichloroethene	89		2.0	0.92	ug/L	2		8260B	Total/NA
Vinyl chloride	18		2.0	1.8	ug/L	2		8260B	Total/NA
alpha-BHC	7.9		0.95	0.13	ug/L	20		8081A	Total/NA
beta-BHC	1.1		0.95	0.47	ug/L	20		8081A	Total/NA
delta-BHC	0.99		0.95	0.19	ug/L	20		8081A	Total/NA
gamma-BHC (Lindane)	4.6		0.95	0.11	ug/L	20		8081A	Total/NA
Mercury	0.00029		0.00020	0.00012	mg/L	1		7470A	Total/NA

Client Sample ID: RW-5-1112

Lab Sample ID: 480-28175-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2,2-Tetrachloroethane	4300		800	170	ug/L	800		8260B	Total/NA

TestAmerica Buffalo

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
 Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: RW-5-1112 (Continued)

Lab Sample ID: 480-28175-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	3500		800	330	ug/L	800		8260B	Total/NA
cis-1,2-Dichloroethene	9500		800	650	ug/L	800		8260B	Total/NA
Methylene Chloride	700	J	800	350	ug/L	800		8260B	Total/NA
Tetrachloroethene	20000		800	290	ug/L	800		8260B	Total/NA
Trichloroethene	48000		800	370	ug/L	800		8260B	Total/NA
Vinyl chloride	760	J	800	720	ug/L	800		8260B	Total/NA
alpha-BHC	110		9.5	1.3	ug/L	200		8081A	Total/NA
beta-BHC	11		9.5	4.7	ug/L	200		8081A	Total/NA
delta-BHC	8.6	J	9.5	1.9	ug/L	200		8081A	Total/NA
gamma-BHC (Lindane)	83		9.5	1.1	ug/L	200		8081A	Total/NA

Client Sample ID: SP-1-1112

Lab Sample ID: 480-28175-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2,2-Tetrachloroethane	140		2.0	0.42	ug/L	2		8260B	Total/NA
1,1,2-Trichloroethane	1.3	J	2.0	0.46	ug/L	2		8260B	Total/NA
1,2,4-Trichlorobenzene	25		2.0	0.82	ug/L	2		8260B	Total/NA
1,2-Dichlorobenzene	2.4		2.0	1.6	ug/L	2		8260B	Total/NA
1,3-Dichlorobenzene	2.7		2.0	1.6	ug/L	2		8260B	Total/NA
1,4-Dichlorobenzene	3.0		2.0	1.7	ug/L	2		8260B	Total/NA
Benzene	1.3	J	2.0	0.82	ug/L	2		8260B	Total/NA
Chlorobenzene	1.7	J	2.0	1.5	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	63		2.0	1.6	ug/L	2		8260B	Total/NA
Methylene Chloride	5.3		2.0	0.88	ug/L	2		8260B	Total/NA
Tetrachloroethene	40		2.0	0.72	ug/L	2		8260B	Total/NA
Trichloroethene	150		2.0	0.92	ug/L	2		8260B	Total/NA
alpha-BHC	35		4.8	0.63	ug/L	100		8081A	Total/NA
beta-BHC	6.5		4.8	2.4	ug/L	100		8081A	Total/NA
delta-BHC	4.2	J	4.8	0.96	ug/L	100		8081A	Total/NA
gamma-BHC (Lindane)	28		4.8	0.57	ug/L	100		8081A	Total/NA
Mercury	0.00035		0.00020	0.00012	mg/L	1		7470A	Total/NA

Client Sample ID: SP-3-1112

Lab Sample ID: 480-28175-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2,2-Tetrachloroethane	140		4.0	0.84	ug/L	4		8260B	Total/NA
1,1,2-Trichloroethane	1.6	J	4.0	0.92	ug/L	4		8260B	Total/NA
1,2,4-Trichlorobenzene	3.9	J	4.0	1.6	ug/L	4		8260B	Total/NA
cis-1,2-Dichloroethene	60		4.0	3.2	ug/L	4		8260B	Total/NA
Methylene Chloride	2.2	J	4.0	1.8	ug/L	4		8260B	Total/NA
Tetrachloroethene	37		4.0	1.4	ug/L	4		8260B	Total/NA
Trichloroethene	220		4.0	1.8	ug/L	4		8260B	Total/NA
alpha-BHC	0.30		0.24	0.031	ug/L	5		8081A	Total/NA
beta-BHC	4.1		0.24	0.12	ug/L	5		8081A	Total/NA
delta-BHC	2.2		0.24	0.047	ug/L	5		8081A	Total/NA
gamma-BHC (Lindane)	0.82		0.24	0.028	ug/L	5		8081A	Total/NA
Mercury	0.00017	J	0.00020	0.00012	mg/L	1		7470A	Total/NA

Client Sample ID: SP-4-1112

Lab Sample ID: 480-28175-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2,2-Tetrachloroethane	140		4.0	0.84	ug/L	4		8260B	Total/NA

TestAmerica Buffalo

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
 Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: SP-4-1112 (Continued)

Lab Sample ID: 480-28175-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	1.4	J	4.0	0.92	ug/L	4		8260B	Total/NA
cis-1,2-Dichloroethene	58		4.0	3.2	ug/L	4		8260B	Total/NA
Tetrachloroethene	32		4.0	1.4	ug/L	4		8260B	Total/NA
Trichloroethene	270		4.0	1.8	ug/L	4		8260B	Total/NA
alpha-BHC	0.18	J	0.24	0.032	ug/L	5		8081A	Total/NA
beta-BHC	2.8		0.24	0.12	ug/L	5		8081A	Total/NA
delta-BHC	1.1		0.24	0.048	ug/L	5		8081A	Total/NA
gamma-BHC (Lindane)	0.44		0.24	0.029	ug/L	5		8081A	Total/NA

Client Sample ID: TB-11335-110812

Lab Sample ID: 480-28175-13

No Detections

Client Sample ID: RW-5D-1112

Lab Sample ID: 480-28175-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2,2-Tetrachloroethane	5300	J	8000	1700	ug/L	8000		8260B	Total/NA
cis-1,2-Dichloroethene	10000		8000	6500	ug/L	8000		8260B	Total/NA
Tetrachloroethene	21000		8000	2900	ug/L	8000		8260B	Total/NA
Trichloroethene	51000		8000	3700	ug/L	8000		8260B	Total/NA
alpha-BHC	100		9.6	1.3	ug/L	200		8081A	Total/NA
beta-BHC	10		9.6	4.7	ug/L	200		8081A	Total/NA
delta-BHC	8.4	J	9.6	1.9	ug/L	200		8081A	Total/NA
gamma-BHC (Lindane)	81		9.6	1.1	ug/L	200		8081A	Total/NA

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: INFLUENT-1112

Lab Sample ID: 480-28175-1

Matrix: Water

Date Collected: 11/08/12 14:00

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250	210	ug/L			11/22/12 00:53	250
1,1,2,2-Tetrachloroethane	1600		250	53	ug/L			11/22/12 00:53	250
1,1,2-Trichloroethane	ND		250	58	ug/L			11/22/12 00:53	250
1,1-Dichloroethene	ND		250	73	ug/L			11/22/12 00:53	250
1,2,4-Trichlorobenzene	980		250	100	ug/L			11/22/12 00:53	250
1,2-Dichlorobenzene	ND		250	200	ug/L			11/22/12 00:53	250
1,3-Dichlorobenzene	ND		250	200	ug/L			11/22/12 00:53	250
1,4-Dichlorobenzene	ND		250	210	ug/L			11/22/12 00:53	250
Benzene	110 J		250	100	ug/L			11/22/12 00:53	250
Carbon tetrachloride	ND		250	68	ug/L			11/22/12 00:53	250
Chlorobenzene	ND		250	190	ug/L			11/22/12 00:53	250
Chloromethane	ND		250	88	ug/L			11/22/12 00:53	250
cis-1,2-Dichloroethene	3500		250	200	ug/L			11/22/12 00:53	250
Methylene Chloride	220 J		250	110	ug/L			11/22/12 00:53	250
Tetrachloroethene	6800		250	90	ug/L			11/22/12 00:53	250
trans-1,2-Dichloroethene	ND		250	230	ug/L			11/22/12 00:53	250
Trichloroethene	16000		250	120	ug/L			11/22/12 00:53	250
Vinyl chloride	ND		250	230	ug/L			11/22/12 00:53	250
Surrogate	%Recovery	Qualifier			Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83				66 - 137			11/22/12 00:53	250
4-Bromofluorobenzene (Surr)	89				73 - 120			11/22/12 00:53	250
Toluene-d8 (Surr)	98				71 - 126			11/22/12 00:53	250

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	49		9.4	1.2	ug/L		11/12/12 14:23	11/14/12 13:11	200
beta-BHC	5.5 J		9.4	4.7	ug/L		11/12/12 14:23	11/14/12 13:11	200
delta-BHC	5.0 J		9.4	1.9	ug/L		11/12/12 14:23	11/14/12 13:11	200
gamma-BHC (Lindane)	36		9.4	1.1	ug/L		11/12/12 14:23	11/14/12 13:11	200
Surrogate	%Recovery	Qualifier			Limits		Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X			16 - 120		11/12/12 14:23	11/14/12 13:11	200
Tetrachloro-m-xylene	0	X			35 - 120		11/12/12 14:23	11/14/12 13:11	200

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/12/12 10:30	11/12/12 14:12	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 12:58	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: OBA-9AR-1112

Lab Sample ID: 480-28175-2

Matrix: Water

Date Collected: 11/08/12 14:10

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
1,1,1-Trichloroethane	ND		500	410	ug/L			11/22/12 01:21	500	
1,1,2,2-Tetrachloroethane	990		500	110	ug/L			11/22/12 01:21	500	
1,1,2-Trichloroethane	ND		500	120	ug/L			11/22/12 01:21	500	
1,1-Dichloroethene	ND		500	150	ug/L			11/22/12 01:21	500	
1,2,4-Trichlorobenzene	7900		500	210	ug/L			11/22/12 01:21	500	
1,2-Dichlorobenzene	8000		500	400	ug/L			11/22/12 01:21	500	
1,3-Dichlorobenzene	1200		500	390	ug/L			11/22/12 01:21	500	
1,4-Dichlorobenzene	7100		500	420	ug/L			11/22/12 01:21	500	
Benzene	320 J		500	210	ug/L			11/22/12 01:21	500	
Carbon tetrachloride	ND		500	140	ug/L			11/22/12 01:21	500	
Chlorobenzene	650		500	380	ug/L			11/22/12 01:21	500	
Chloromethane	ND		500	180	ug/L			11/22/12 01:21	500	
cis-1,2-Dichloroethene	920		500	410	ug/L			11/22/12 01:21	500	
Methylene Chloride	ND		500	220	ug/L			11/22/12 01:21	500	
Tetrachloroethene	6100		500	180	ug/L			11/22/12 01:21	500	
trans-1,2-Dichloroethene	ND		500	450	ug/L			11/22/12 01:21	500	
Trichloroethene	31000		500	230	ug/L			11/22/12 01:21	500	
Vinyl chloride	ND		500	450	ug/L			11/22/12 01:21	500	
Surrogate	%Recovery	Qualifier			Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87				66 - 137				11/22/12 01:21	500
4-Bromofluorobenzene (Surr)	89				73 - 120				11/22/12 01:21	500
Toluene-d8 (Surr)	98				71 - 126				11/22/12 01:21	500

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
alpha-BHC	450		47	6.2	ug/L		11/12/12 14:23	11/16/12 11:44	1000	
beta-BHC	40 J		47	23	ug/L		11/12/12 14:23	11/16/12 11:44	1000	
delta-BHC	19 J		47	9.4	ug/L		11/12/12 14:23	11/16/12 11:44	1000	
gamma-BHC (Lindane)	300		47	5.7	ug/L		11/12/12 14:23	11/16/12 11:44	1000	
Surrogate	%Recovery	Qualifier			Limits			Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0 X				16 - 120			11/12/12 14:23	11/16/12 11:44	1000
Tetrachloro-m-xylene	0 X				35 - 120			11/12/12 14:23	11/16/12 11:44	1000

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/12/12 10:30	11/12/12 14:14	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 13:00	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: PR-12-1112

Lab Sample ID: 480-28175-3

Matrix: Water

Date Collected: 11/08/12 13:10

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	87		20	16	ug/L			11/21/12 14:48	20
1,1,2,2-Tetrachloroethane	880		20	4.2	ug/L			11/21/12 14:48	20
1,1,2-Trichloroethane	45		20	4.6	ug/L			11/21/12 14:48	20
1,1-Dichloroethene	43		20	5.8	ug/L			11/21/12 14:48	20
1,3-Dichlorobenzene	970		20	16	ug/L			11/21/12 14:48	20
Benzene	230		20	8.2	ug/L			11/21/12 14:48	20
Carbon tetrachloride	8.4 J		20	5.4	ug/L			11/21/12 14:48	20
Chlorobenzene	480		20	15	ug/L			11/21/12 14:48	20
Chloromethane	ND		20	7.0	ug/L			11/21/12 14:48	20
cis-1,2-Dichloroethene	970		20	16	ug/L			11/21/12 14:48	20
Methylene Chloride	22		20	8.8	ug/L			11/21/12 14:48	20
trans-1,2-Dichloroethene	49		20	18	ug/L			11/21/12 14:48	20
Vinyl chloride	100		20	18	ug/L			11/21/12 14:48	20
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94			66 - 137				11/21/12 14:48	20
4-Bromofluorobenzene (Surr)	90			73 - 120				11/21/12 14:48	20
Toluene-d8 (Surr)	99			71 - 126				11/21/12 14:48	20

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	8600		400	160	ug/L			11/22/12 01:48	400
1,2-Dichlorobenzene	8000		400	320	ug/L			11/22/12 01:48	400
1,4-Dichlorobenzene	7400		400	340	ug/L			11/22/12 01:48	400
Tetrachloroethene	6500		400	140	ug/L			11/22/12 01:48	400
Trichloroethene	33000		400	180	ug/L			11/22/12 01:48	400
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87			66 - 137				11/22/12 01:48	400
4-Bromofluorobenzene (Surr)	89			73 - 120				11/22/12 01:48	400
Toluene-d8 (Surr)	97			71 - 126				11/22/12 01:48	400

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	48		4.7	0.63	ug/L		11/12/12 14:23	11/16/12 12:25	100
beta-BHC	5.3		4.7	2.4	ug/L		11/12/12 14:23	11/16/12 12:25	100
delta-BHC	3.0 J		4.7	0.95	ug/L		11/12/12 14:23	11/16/12 12:25	100
gamma-BHC (Lindane)	30		4.7	0.57	ug/L		11/12/12 14:23	11/16/12 12:25	100
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0 X			16 - 120			11/12/12 14:23	11/16/12 12:25	100
Tetrachloro-m-xylene	0 X			35 - 120			11/12/12 14:23	11/16/12 12:25	100

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00018 J		0.00020	0.00012	mg/L		11/12/12 10:30	11/12/12 14:16	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00014 J		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 13:06	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: PR-4-1112

Lab Sample ID: 480-28175-4

Matrix: Water

Date Collected: 11/08/12 13:20

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	41	ug/L			11/22/12 02:16	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			11/22/12 02:16	50
1,1,2-Trichloroethane	ND		50	12	ug/L			11/22/12 02:16	50
1,1-Dichloroethene	ND		50	15	ug/L			11/22/12 02:16	50
1,2,4-Trichlorobenzene	1000		50	21	ug/L			11/22/12 02:16	50
1,2-Dichlorobenzene	67		50	40	ug/L			11/22/12 02:16	50
1,3-Dichlorobenzene	400		50	39	ug/L			11/22/12 02:16	50
1,4-Dichlorobenzene	270		50	42	ug/L			11/22/12 02:16	50
Benzene	35 J		50	21	ug/L			11/22/12 02:16	50
Carbon tetrachloride	ND		50	14	ug/L			11/22/12 02:16	50
Chlorobenzene	120		50	38	ug/L			11/22/12 02:16	50
Chloromethane	ND		50	18	ug/L			11/22/12 02:16	50
cis-1,2-Dichloroethene	170		50	41	ug/L			11/22/12 02:16	50
Methylene Chloride	ND		50	22	ug/L			11/22/12 02:16	50
Tetrachloroethene	110		50	18	ug/L			11/22/12 02:16	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			11/22/12 02:16	50
Trichloroethene	200		50	23	ug/L			11/22/12 02:16	50
Vinyl chloride	77		50	45	ug/L			11/22/12 02:16	50
Surrogate	%Recovery	Qualifier			Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90				66 - 137			11/22/12 02:16	50
4-Bromofluorobenzene (Surr)	92				73 - 120			11/22/12 02:16	50
Toluene-d8 (Surr)	97				71 - 126			11/22/12 02:16	50

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	91		9.7	1.3	ug/L		11/12/12 14:23	11/14/12 15:14	200
beta-BHC	8.7 J		9.7	4.8	ug/L		11/12/12 14:23	11/14/12 15:14	200
delta-BHC	9.4 J		9.7	1.9	ug/L		11/12/12 14:23	11/14/12 15:14	200
gamma-BHC (Lindane)	68		9.7	1.2	ug/L		11/12/12 14:23	11/14/12 15:14	200
Surrogate	%Recovery	Qualifier			Limits		Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0 X				16 - 120		11/12/12 14:23	11/14/12 15:14	200
Tetrachloro-m-xylene	0 X				35 - 120		11/12/12 14:23	11/14/12 15:14	200

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/12/12 10:30	11/12/12 14:21	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 13:08	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: RW-1-1112

Lab Sample ID: 480-28175-5

Matrix: Water

Date Collected: 11/08/12 12:00

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
1,1,1-Trichloroethane	ND		400	330	ug/L			11/21/12 15:43	400	
1,1,2,2-Tetrachloroethane	ND		400	84	ug/L			11/21/12 15:43	400	
1,1,2-Trichloroethane	ND		400	92	ug/L			11/21/12 15:43	400	
1,1-Dichloroethene	ND		400	120	ug/L			11/21/12 15:43	400	
1,2,4-Trichlorobenzene	5600		400	160	ug/L			11/21/12 15:43	400	
1,2-Dichlorobenzene	430		400	320	ug/L			11/21/12 15:43	400	
1,3-Dichlorobenzene	480		400	310	ug/L			11/21/12 15:43	400	
1,4-Dichlorobenzene	390 J		400	340	ug/L			11/21/12 15:43	400	
Benzene	220 J		400	160	ug/L			11/21/12 15:43	400	
Carbon tetrachloride	ND		400	110	ug/L			11/21/12 15:43	400	
Chlorobenzene	ND		400	300	ug/L			11/21/12 15:43	400	
Chloromethane	ND		400	140	ug/L			11/21/12 15:43	400	
cis-1,2-Dichloroethene	2900		400	320	ug/L			11/21/12 15:43	400	
Methylene Chloride	190 J		400	180	ug/L			11/21/12 15:43	400	
Tetrachloroethene	3900		400	140	ug/L			11/21/12 15:43	400	
trans-1,2-Dichloroethene	ND		400	360	ug/L			11/21/12 15:43	400	
Trichloroethene	12000		400	180	ug/L			11/21/12 15:43	400	
Vinyl chloride	450		400	360	ug/L			11/21/12 15:43	400	
Surrogate	%Recovery	Qualifier			Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92				66 - 137				11/21/12 15:43	400
4-Bromofluorobenzene (Surr)	90				73 - 120				11/21/12 15:43	400
Toluene-d8 (Surr)	98				71 - 126				11/21/12 15:43	400

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
alpha-BHC	27		4.8	0.63	ug/L			11/12/12 14:23	11/16/12 13:06	100
beta-BHC	4.7 J		4.8	2.4	ug/L			11/12/12 14:23	11/16/12 13:06	100
delta-BHC	ND		4.8	0.95	ug/L			11/12/12 14:23	11/16/12 13:06	100
gamma-BHC (Lindane)	3.1 J		4.8	0.57	ug/L			11/12/12 14:23	11/16/12 13:06	100
Surrogate	%Recovery	Qualifier			Limits			Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0 X				16 - 120			11/12/12 14:23	11/16/12 13:06	100
Tetrachloro-m-xylene	0 X				35 - 120			11/12/12 14:23	11/16/12 13:06	100

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00054		0.00020	0.00012	mg/L		11/12/12 10:30	11/12/12 14:23	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00037		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 13:09	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: RW-2-1112

Lab Sample ID: 480-28175-6

Matrix: Water

Date Collected: 11/08/12 12:15

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/22/12 03:11	1
1,1,2,2-Tetrachloroethane	7.2		1.0	0.21	ug/L			11/22/12 03:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/22/12 03:11	1
1,1-Dichloroethene	0.60 J		1.0	0.29	ug/L			11/22/12 03:11	1
1,2,4-Trichlorobenzene	8.0		1.0	0.41	ug/L			11/22/12 03:11	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/22/12 03:11	1
1,3-Dichlorobenzene	0.84 J		1.0	0.78	ug/L			11/22/12 03:11	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/22/12 03:11	1
Benzene	0.48 J		1.0	0.41	ug/L			11/22/12 03:11	1
Carbon tetrachloride	0.67 J		1.0	0.27	ug/L			11/22/12 03:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/22/12 03:11	1
Chloromethane	ND		1.0	0.35	ug/L			11/22/12 03:11	1
cis-1,2-Dichloroethene	68		1.0	0.81	ug/L			11/22/12 03:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/22/12 03:11	1
Tetrachloroethene	110 E		1.0	0.36	ug/L			11/22/12 03:11	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/22/12 03:11	1
Trichloroethene	180 E		1.0	0.46	ug/L			11/22/12 03:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/22/12 03:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		66 - 137					11/22/12 03:11	1
4-Bromofluorobenzene (Surr)	90		73 - 120					11/22/12 03:11	1
Toluene-d8 (Surr)	97		71 - 126					11/22/12 03:11	1

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	140	H	4.0	1.4	ug/L			11/23/12 21:22	4
Trichloroethene	200	H	4.0	1.8	ug/L			11/23/12 21:22	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		66 - 137					11/23/12 21:22	4
4-Bromofluorobenzene (Surr)	106		73 - 120					11/23/12 21:22	4
Toluene-d8 (Surr)	115		71 - 126					11/23/12 21:22	4

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	0.52		0.047	0.0063	ug/L			11/12/12 14:23	1
beta-BHC	0.22		0.047	0.024	ug/L			11/12/12 14:23	1
delta-BHC	0.053		0.047	0.0095	ug/L			11/12/12 14:23	1
gamma-BHC (Lindane)	0.43		0.047	0.0057	ug/L			11/12/12 14:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	91		16 - 120					11/12/12 14:23	1
Tetrachloro-m-xylene	87		35 - 120					11/12/12 14:23	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L			11/12/12 10:30	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: RW-2-1112

Lab Sample ID: 480-28175-6

Date Collected: 11/08/12 12:15

Matrix: Water

Date Received: 11/09/12 16:30

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 13:12	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: RW-3-1112

Lab Sample ID: 480-28175-7

Matrix: Water

Date Collected: 11/08/12 12:30

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/21/12 18:01	1
1,1,2,2-Tetrachloroethane	4.9		1.0	0.21	ug/L			11/21/12 18:01	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/21/12 18:01	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/21/12 18:01	1
1,2,4-Trichlorobenzene	41		1.0	0.41	ug/L			11/21/12 18:01	1
1,2-Dichlorobenzene	8.1		1.0	0.79	ug/L			11/21/12 18:01	1
1,3-Dichlorobenzene	33		1.0	0.78	ug/L			11/21/12 18:01	1
1,4-Dichlorobenzene	34		1.0	0.84	ug/L			11/21/12 18:01	1
Benzene	1.9		1.0	0.41	ug/L			11/21/12 18:01	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/21/12 18:01	1
Chlorobenzene	9.4		1.0	0.75	ug/L			11/21/12 18:01	1
Chloromethane	ND		1.0	0.35	ug/L			11/21/12 18:01	1
cis-1,2-Dichloroethene	23		1.0	0.81	ug/L			11/21/12 18:01	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/21/12 18:01	1
Tetrachloroethene	44		1.0	0.36	ug/L			11/21/12 18:01	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/21/12 18:01	1
Trichloroethene	49		1.0	0.46	ug/L			11/21/12 18:01	1
Vinyl chloride	1.7		1.0	0.90	ug/L			11/21/12 18:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		66 - 137					11/21/12 18:01	1
4-Bromofluorobenzene (Surr)	90		73 - 120					11/21/12 18:01	1
Toluene-d8 (Surr)	99		71 - 126					11/21/12 18:01	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	3.7		0.98	0.13	ug/L			11/12/12 14:23	11/14/12 19:59
beta-BHC	1.5		0.98	0.48	ug/L			11/12/12 14:23	11/14/12 19:59
delta-BHC	5.4		0.98	0.20	ug/L			11/12/12 14:23	11/14/12 19:59
gamma-BHC (Lindane)	7.0		0.98	0.12	ug/L			11/12/12 14:23	11/14/12 19:59
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	16 - 120					11/12/12 14:23	11/14/12 19:59
Tetrachloro-m-xylene	142	X	35 - 120					11/12/12 14:23	11/14/12 19:59

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/12/12 10:30	11/12/12 14:32	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 13:18	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: RW-4-1112

Lab Sample ID: 480-28175-8

Matrix: Water

Date Collected: 11/08/12 12:40

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			11/22/12 04:34	2	
1,1,2,2-Tetrachloroethane	3.0		2.0	0.42	ug/L			11/22/12 04:34	2	
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			11/22/12 04:34	2	
1,1-Dichloroethene	ND		2.0	0.58	ug/L			11/22/12 04:34	2	
1,2,4-Trichlorobenzene	110		2.0	0.82	ug/L			11/22/12 04:34	2	
1,2-Dichlorobenzene	5.5		2.0	1.6	ug/L			11/22/12 04:34	2	
1,3-Dichlorobenzene	53		2.0	1.6	ug/L			11/22/12 04:34	2	
1,4-Dichlorobenzene	35		2.0	1.7	ug/L			11/22/12 04:34	2	
Benzene	5.6		2.0	0.82	ug/L			11/22/12 04:34	2	
Carbon tetrachloride	ND		2.0	0.54	ug/L			11/22/12 04:34	2	
Chlorobenzene	27		2.0	1.5	ug/L			11/22/12 04:34	2	
Chloromethane	ND		2.0	0.70	ug/L			11/22/12 04:34	2	
cis-1,2-Dichloroethene	47		2.0	1.6	ug/L			11/22/12 04:34	2	
Methylene Chloride	ND		2.0	0.88	ug/L			11/22/12 04:34	2	
Tetrachloroethene	73		2.0	0.72	ug/L			11/22/12 04:34	2	
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			11/22/12 04:34	2	
Trichloroethene	89		2.0	0.92	ug/L			11/22/12 04:34	2	
Vinyl chloride	18		2.0	1.8	ug/L			11/22/12 04:34	2	
Surrogate	%Recovery	Qualifier			Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83				66 - 137				11/22/12 04:34	2
4-Bromofluorobenzene (Surr)	89				73 - 120				11/22/12 04:34	2
Toluene-d8 (Surr)	97				71 - 126				11/22/12 04:34	2

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
alpha-BHC	7.9		0.95	0.13	ug/L			11/12/12 14:23	11/14/12 20:40	20
beta-BHC	1.1		0.95	0.47	ug/L			11/12/12 14:23	11/14/12 20:40	20
delta-BHC	0.99		0.95	0.19	ug/L			11/12/12 14:23	11/14/12 20:40	20
gamma-BHC (Lindane)	4.6		0.95	0.11	ug/L			11/12/12 14:23	11/14/12 20:40	20
Surrogate	%Recovery	Qualifier			Limits			Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X			16 - 120			11/12/12 14:23	11/14/12 20:40	20
Tetrachloro-m-xylene	117				35 - 120			11/12/12 14:23	11/14/12 20:40	20

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00029		0.00020	0.00012	mg/L		11/12/12 10:30	11/12/12 14:34	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 13:21	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: RW-5-1112

Lab Sample ID: 480-28175-9

Matrix: Water

Date Collected: 11/08/12 12:50

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		800	660	ug/L			11/22/12 05:01	800
1,1,2,2-Tetrachloroethane	4300		800	170	ug/L			11/22/12 05:01	800
1,1,2-Trichloroethane	ND		800	180	ug/L			11/22/12 05:01	800
1,1-Dichloroethene	ND		800	230	ug/L			11/22/12 05:01	800
1,2,4-Trichlorobenzene	3500		800	330	ug/L			11/22/12 05:01	800
1,2-Dichlorobenzene	ND		800	630	ug/L			11/22/12 05:01	800
1,3-Dichlorobenzene	ND		800	620	ug/L			11/22/12 05:01	800
1,4-Dichlorobenzene	ND		800	670	ug/L			11/22/12 05:01	800
Benzene	ND		800	330	ug/L			11/22/12 05:01	800
Carbon tetrachloride	ND		800	220	ug/L			11/22/12 05:01	800
Chlorobenzene	ND		800	600	ug/L			11/22/12 05:01	800
Chloromethane	ND		800	280	ug/L			11/22/12 05:01	800
cis-1,2-Dichloroethene	9500		800	650	ug/L			11/22/12 05:01	800
Methylene Chloride	700 J		800	350	ug/L			11/22/12 05:01	800
Tetrachloroethene	20000		800	290	ug/L			11/22/12 05:01	800
trans-1,2-Dichloroethene	ND		800	720	ug/L			11/22/12 05:01	800
Trichloroethene	48000		800	370	ug/L			11/22/12 05:01	800
Vinyl chloride	760 J		800	720	ug/L			11/22/12 05:01	800
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		66 - 137					11/22/12 05:01	800
4-Bromofluorobenzene (Surr)	89		73 - 120					11/22/12 05:01	800
Toluene-d8 (Surr)	97		71 - 126					11/22/12 05:01	800

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	110		9.5	1.3	ug/L			11/12/12 14:23	11/14/12 21:21
beta-BHC	11		9.5	4.7	ug/L			11/12/12 14:23	11/14/12 21:21
delta-BHC	8.6 J		9.5	1.9	ug/L			11/12/12 14:23	11/14/12 21:21
gamma-BHC (Lindane)	83		9.5	1.1	ug/L			11/12/12 14:23	11/14/12 21:21
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0 X		16 - 120					11/12/12 14:23	11/14/12 21:21
Tetrachloro-m-xylene	0 X		35 - 120					11/12/12 14:23	11/14/12 21:21

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/12/12 10:30	11/12/12 14:36	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 13:23	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: SP-1-1112

Lab Sample ID: 480-28175-10

Matrix: Water

Date Collected: 11/08/12 13:30

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L		11/22/12 05:29		2
1,1,2,2-Tetrachloroethane	140		2.0	0.42	ug/L		11/22/12 05:29		2
1,1,2-Trichloroethane	1.3 J		2.0	0.46	ug/L		11/22/12 05:29		2
1,1-Dichloroethene	ND		2.0	0.58	ug/L		11/22/12 05:29		2
1,2,4-Trichlorobenzene	25		2.0	0.82	ug/L		11/22/12 05:29		2
1,2-Dichlorobenzene	2.4		2.0	1.6	ug/L		11/22/12 05:29		2
1,3-Dichlorobenzene	2.7		2.0	1.6	ug/L		11/22/12 05:29		2
1,4-Dichlorobenzene	3.0		2.0	1.7	ug/L		11/22/12 05:29		2
Benzene	1.3 J		2.0	0.82	ug/L		11/22/12 05:29		2
Carbon tetrachloride	ND		2.0	0.54	ug/L		11/22/12 05:29		2
Chlorobenzene	1.7 J		2.0	1.5	ug/L		11/22/12 05:29		2
Chloromethane	ND		2.0	0.70	ug/L		11/22/12 05:29		2
cis-1,2-Dichloroethene	63		2.0	1.6	ug/L		11/22/12 05:29		2
Methylene Chloride	5.3		2.0	0.88	ug/L		11/22/12 05:29		2
Tetrachloroethene	40		2.0	0.72	ug/L		11/22/12 05:29		2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L		11/22/12 05:29		2
Trichloroethene	150		2.0	0.92	ug/L		11/22/12 05:29		2
Vinyl chloride	ND		2.0	1.8	ug/L		11/22/12 05:29		2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		66 - 137					11/22/12 05:29	2
4-Bromofluorobenzene (Surr)	88		73 - 120					11/22/12 05:29	2
Toluene-d8 (Surr)	98		71 - 126					11/22/12 05:29	2

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	35		4.8	0.63	ug/L		11/12/12 14:23	11/16/12 13:47	100
beta-BHC	6.5		4.8	2.4	ug/L		11/12/12 14:23	11/16/12 13:47	100
delta-BHC	4.2 J		4.8	0.96	ug/L		11/12/12 14:23	11/16/12 13:47	100
gamma-BHC (Lindane)	28		4.8	0.57	ug/L		11/12/12 14:23	11/16/12 13:47	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0 X		16 - 120				11/12/12 14:23	11/16/12 13:47	100
Tetrachloro-m-xylene	0 X		35 - 120				11/12/12 14:23	11/16/12 13:47	100

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00035		0.00020	0.00012	mg/L		11/12/12 10:30	11/12/12 14:38	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 13:28	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: SP-3-1112

Lab Sample ID: 480-28175-11

Matrix: Water

Date Collected: 11/08/12 13:40

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			11/22/12 05:56	4	
1,1,2,2-Tetrachloroethane	140		4.0	0.84	ug/L			11/22/12 05:56	4	
1,1,2-Trichloroethane	1.6 J		4.0	0.92	ug/L			11/22/12 05:56	4	
1,1-Dichloroethene	ND		4.0	1.2	ug/L			11/22/12 05:56	4	
1,2,4-Trichlorobenzene	3.9 J		4.0	1.6	ug/L			11/22/12 05:56	4	
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			11/22/12 05:56	4	
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			11/22/12 05:56	4	
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			11/22/12 05:56	4	
Benzene	ND		4.0	1.6	ug/L			11/22/12 05:56	4	
Carbon tetrachloride	ND		4.0	1.1	ug/L			11/22/12 05:56	4	
Chlorobenzene	ND		4.0	3.0	ug/L			11/22/12 05:56	4	
Chloromethane	ND		4.0	1.4	ug/L			11/22/12 05:56	4	
cis-1,2-Dichloroethene	60		4.0	3.2	ug/L			11/22/12 05:56	4	
Methylene Chloride	2.2 J		4.0	1.8	ug/L			11/22/12 05:56	4	
Tetrachloroethene	37		4.0	1.4	ug/L			11/22/12 05:56	4	
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			11/22/12 05:56	4	
Trichloroethene	220		4.0	1.8	ug/L			11/22/12 05:56	4	
Vinyl chloride	ND		4.0	3.6	ug/L			11/22/12 05:56	4	
Surrogate	%Recovery	Qualifier			Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86				66 - 137				11/22/12 05:56	4
4-Bromofluorobenzene (Surr)	89				73 - 120				11/22/12 05:56	4
Toluene-d8 (Surr)	96				71 - 126				11/22/12 05:56	4

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
alpha-BHC	0.30		0.24	0.031	ug/L			11/12/12 14:23	11/16/12 14:27	5
beta-BHC	4.1		0.24	0.12	ug/L			11/12/12 14:23	11/16/12 14:27	5
delta-BHC	2.2		0.24	0.047	ug/L			11/12/12 14:23	11/16/12 14:27	5
gamma-BHC (Lindane)	0.82		0.24	0.028	ug/L			11/12/12 14:23	11/16/12 14:27	5
Surrogate	%Recovery	Qualifier			Limits			Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X			16 - 120			11/12/12 14:23	11/16/12 14:27	5
Tetrachloro-m-xylene	113				35 - 120			11/12/12 14:23	11/16/12 14:27	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J	0.00020	0.00012	mg/L		11/12/12 10:30	11/12/12 14:43	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 13:30	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: SP-4-1112

Lab Sample ID: 480-28175-12

Matrix: Water

Date Collected: 11/08/12 13:50

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			11/22/12 06:24	4
1,1,2,2-Tetrachloroethane	140		4.0	0.84	ug/L			11/22/12 06:24	4
1,1,2-Trichloroethane	1.4 J		4.0	0.92	ug/L			11/22/12 06:24	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			11/22/12 06:24	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			11/22/12 06:24	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			11/22/12 06:24	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			11/22/12 06:24	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			11/22/12 06:24	4
Benzene	ND		4.0	1.6	ug/L			11/22/12 06:24	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			11/22/12 06:24	4
Chlorobenzene	ND		4.0	3.0	ug/L			11/22/12 06:24	4
Chloromethane	ND		4.0	1.4	ug/L			11/22/12 06:24	4
cis-1,2-Dichloroethene	58		4.0	3.2	ug/L			11/22/12 06:24	4
Methylene Chloride	ND		4.0	1.8	ug/L			11/22/12 06:24	4
Tetrachloroethene	32		4.0	1.4	ug/L			11/22/12 06:24	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			11/22/12 06:24	4
Trichloroethene	270		4.0	1.8	ug/L			11/22/12 06:24	4
Vinyl chloride	ND		4.0	3.6	ug/L			11/22/12 06:24	4
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86			66 - 137				11/22/12 06:24	4
4-Bromofluorobenzene (Surr)	90			73 - 120				11/22/12 06:24	4
Toluene-d8 (Surr)	99			71 - 126				11/22/12 06:24	4

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	0.18	J	0.24	0.032	ug/L			11/12/12 14:23	11/16/12 15:08
beta-BHC	2.8		0.24	0.12	ug/L			11/12/12 14:23	11/16/12 15:08
delta-BHC	1.1		0.24	0.048	ug/L			11/12/12 14:23	11/16/12 15:08
gamma-BHC (Lindane)	0.44		0.24	0.029	ug/L			11/12/12 14:23	11/16/12 15:08
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	60			16 - 120				11/12/12 14:23	11/16/12 15:08
Tetrachloro-m-xylene	97			35 - 120				11/12/12 14:23	11/16/12 15:08

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/12/12 10:30	11/12/12 14:45	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 13:32	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: TB-11335-110812

Lab Sample ID: 480-28175-13

Date Collected: 11/08/12 00:00

Matrix: Water

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L		11/21/12 20:46		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L		11/21/12 20:46		1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L		11/21/12 20:46		1
1,1-Dichloroethene	ND		1.0	0.29	ug/L		11/21/12 20:46		1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L		11/21/12 20:46		1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L		11/21/12 20:46		1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L		11/21/12 20:46		1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L		11/21/12 20:46		1
Benzene	ND		1.0	0.41	ug/L		11/21/12 20:46		1
Carbon tetrachloride	ND		1.0	0.27	ug/L		11/21/12 20:46		1
Chlorobenzene	ND		1.0	0.75	ug/L		11/21/12 20:46		1
Chloromethane	ND		1.0	0.35	ug/L		11/21/12 20:46		1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L		11/21/12 20:46		1
Methylene Chloride	ND		1.0	0.44	ug/L		11/21/12 20:46		1
Tetrachloroethene	ND		1.0	0.36	ug/L		11/21/12 20:46		1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L		11/21/12 20:46		1
Trichloroethene	ND		1.0	0.46	ug/L		11/21/12 20:46		1
Vinyl chloride	ND		1.0	0.90	ug/L		11/21/12 20:46		1
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91			66 - 137			11/21/12 20:46		1
4-Bromofluorobenzene (Surr)	89			73 - 120			11/21/12 20:46		1
Toluene-d8 (Surr)	97			71 - 126			11/21/12 20:46		1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: RW-5D-1112

Lab Sample ID: 480-28175-14

Matrix: Water

Date Collected: 11/08/12 13:00

Date Received: 11/09/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		8000	6600	ug/L			11/22/12 06:52	8000
1,1,2,2-Tetrachloroethane	5300	J	8000	1700	ug/L			11/22/12 06:52	8000
1,1,2-Trichloroethane	ND		8000	1800	ug/L			11/22/12 06:52	8000
1,1-Dichloroethene	ND		8000	2300	ug/L			11/22/12 06:52	8000
1,2,4-Trichlorobenzene	ND		8000	3300	ug/L			11/22/12 06:52	8000
1,2-Dichlorobenzene	ND		8000	6300	ug/L			11/22/12 06:52	8000
1,3-Dichlorobenzene	ND		8000	6200	ug/L			11/22/12 06:52	8000
1,4-Dichlorobenzene	ND		8000	6700	ug/L			11/22/12 06:52	8000
Benzene	ND		8000	3300	ug/L			11/22/12 06:52	8000
Carbon tetrachloride	ND		8000	2200	ug/L			11/22/12 06:52	8000
Chlorobenzene	ND		8000	6000	ug/L			11/22/12 06:52	8000
Chloromethane	ND		8000	2800	ug/L			11/22/12 06:52	8000
cis-1,2-Dichloroethene	10000		8000	6500	ug/L			11/22/12 06:52	8000
Methylene Chloride	ND		8000	3500	ug/L			11/22/12 06:52	8000
Tetrachloroethene	21000		8000	2900	ug/L			11/22/12 06:52	8000
trans-1,2-Dichloroethene	ND		8000	7200	ug/L			11/22/12 06:52	8000
Trichloroethene	51000		8000	3700	ug/L			11/22/12 06:52	8000
Vinyl chloride	ND		8000	7200	ug/L			11/22/12 06:52	8000
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		66 - 137					11/22/12 06:52	8000
4-Bromofluorobenzene (Surr)	88		73 - 120					11/22/12 06:52	8000
Toluene-d8 (Surr)	97		71 - 126					11/22/12 06:52	8000

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	100		9.6	1.3	ug/L		11/12/12 14:23	11/15/12 00:04	200
beta-BHC	10		9.6	4.7	ug/L		11/12/12 14:23	11/15/12 00:04	200
delta-BHC	8.4	J	9.6	1.9	ug/L		11/12/12 14:23	11/15/12 00:04	200
gamma-BHC (Lindane)	81		9.6	1.1	ug/L		11/12/12 14:23	11/15/12 00:04	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	16 - 120				11/12/12 14:23	11/15/12 00:04	200
Tetrachloro-m-xylene	0	X	35 - 120				11/12/12 14:23	11/15/12 00:04	200

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/12/12 10:30	11/12/12 14:46	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 13:33	1

TestAmerica Buffalo

Surrogate Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (66-137)	BFB (73-120)	TOL (71-126)
480-28175-1	INFLUENT-1112	83	89	98
480-28175-2	OBA-9AR-1112	87	89	98
480-28175-3	PR-12-1112	94	90	99
480-28175-3 - DL	PR-12-1112	87	89	97
480-28175-4	PR-4-1112	90	92	97
480-28175-5	RW-1-1112	92	90	98
480-28175-6	RW-2-1112	86	90	97
480-28175-6 - DL	RW-2-1112	111	106	115
480-28175-6 MS	RW-2-1112	83	89	98
480-28175-6 MSD	RW-2-1112	85	89	98
480-28175-7	RW-3-1112	93	90	99
480-28175-8	RW-4-1112	83	89	97
480-28175-9	RW-5-1112	87	89	97
480-28175-10	SP-1-1112	87	88	98
480-28175-11	SP-3-1112	86	89	96
480-28175-12	SP-4-1112	86	90	99
480-28175-13	TB-11335-110812	91	89	97
480-28175-14	RW-5D-1112	86	88	97
LCS 480-92232/5	Lab Control Sample	90	91	99
LCS 480-92349/3	Lab Control Sample	90	91	98
LCS 480-92500/4	Lab Control Sample	108	108	114
MB 480-92232/4	Method Blank	95	89	100
MB 480-92349/5	Method Blank	92	89	98
MB 480-92500/5	Method Blank	107	103	112

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB2 (16-120)	TCX2 (35-120)
480-28175-1	INFLUENT-1112	0 X	0 X
480-28175-2	OBA-9AR-1112	0 X	0 X
480-28175-3	PR-12-1112	0 X	0 X
480-28175-4	PR-4-1112	0 X	0 X
480-28175-5	RW-1-1112	0 X	0 X
480-28175-6	RW-2-1112	91	87
480-28175-6 MS	RW-2-1112	77	89
480-28175-6 MSD	RW-2-1112	73	87
480-28175-7	RW-3-1112	0 X	142 X
480-28175-8	RW-4-1112	0 X	117
480-28175-9	RW-5-1112	0 X	0 X
480-28175-10	SP-1-1112	0 X	0 X
480-28175-11	SP-3-1112	0 X	113

TestAmerica Buffalo

Surrogate Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB2 (16-120)	TCX2 (35-120)
480-28175-12	SP-4-1112	60	97
480-28175-14	RW-5D-1112	0 X	0 X
LCS 480-90381/2-A	Lab Control Sample	79	72
MB 480-90381/1-A	Method Blank	75	74

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-92232/4

Matrix: Water

Analysis Batch: 92232

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	0.82	ug/L			11/21/12 11:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/21/12 11:55	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/21/12 11:55	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/21/12 11:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/21/12 11:55	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/21/12 11:55	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/21/12 11:55	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/21/12 11:55	1
Benzene	ND		1.0	0.41	ug/L			11/21/12 11:55	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/21/12 11:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/21/12 11:55	1
Chloromethane	ND		1.0	0.35	ug/L			11/21/12 11:55	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/21/12 11:55	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/21/12 11:55	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/21/12 11:55	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/21/12 11:55	1
Trichloroethene	ND		1.0	0.46	ug/L			11/21/12 11:55	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/21/12 11:55	1
Surrogate	MB %Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		66 - 137					11/21/12 11:55	1
4-Bromofluorobenzene (Surr)	89		73 - 120					11/21/12 11:55	1
Toluene-d8 (Surr)	100		71 - 126					11/21/12 11:55	1

Lab Sample ID: LCS 480-92232/5

Matrix: Water

Analysis Batch: 92232

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
1,1,1-Trichloroethane	25.0	25.1		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 126
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	76 - 122
1,1-Dichloroethene	25.0	25.7		ug/L		103	58 - 121
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	70 - 122
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	80 - 124
1,3-Dichlorobenzene	25.0	25.4		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	75 - 120
Benzene	25.0	25.1		ug/L		100	71 - 124
Carbon tetrachloride	25.0	24.7		ug/L		99	72 - 134
Chlorobenzene	25.0	25.4		ug/L		102	72 - 120
Chloromethane	25.0	22.6		ug/L		90	68 - 124
cis-1,2-Dichloroethene	25.0	25.2		ug/L		101	74 - 124
Methylene Chloride	25.0	24.5		ug/L		98	57 - 132
Tetrachloroethene	25.0	24.9		ug/L		100	74 - 122
trans-1,2-Dichloroethene	25.0	24.8		ug/L		99	73 - 127
Trichloroethene	25.0	25.6		ug/L		102	74 - 123
Vinyl chloride	25.0	24.9		ug/L		99	65 - 133

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

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

Lab Sample ID: LCS 480-92232/5

Matrix: Water

Analysis Batch: 92232

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		66 - 137
4-Bromofluorobenzene (Surr)	91		73 - 120
Toluene-d8 (Surr)	99		71 - 126

Lab Sample ID: MB 480-92349/5

Matrix: Water

Analysis Batch: 92349

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	0.82	ug/L			11/21/12 23:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/21/12 23:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/21/12 23:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/21/12 23:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/21/12 23:39	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/21/12 23:39	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/21/12 23:39	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/21/12 23:39	1
Benzene	ND		1.0	0.41	ug/L			11/21/12 23:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/21/12 23:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/21/12 23:39	1
Chloromethane	ND		1.0	0.35	ug/L			11/21/12 23:39	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/21/12 23:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/21/12 23:39	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/21/12 23:39	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/21/12 23:39	1
Trichloroethene	ND		1.0	0.46	ug/L			11/21/12 23:39	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/21/12 23:39	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		66 - 137		11/21/12 23:39	1
4-Bromofluorobenzene (Surr)	89		73 - 120		11/21/12 23:39	1
Toluene-d8 (Surr)	98		71 - 126		11/21/12 23:39	1

Lab Sample ID: LCS 480-92349/3

Matrix: Water

Analysis Batch: 92349

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	25.0	25.5		ug/L		102	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.1		ug/L		93	70 - 126
1,1,2-Trichloroethane	25.0	23.4		ug/L		93	76 - 122
1,1-Dichloroethene	25.0	25.3		ug/L		101	58 - 121
1,2,4-Trichlorobenzene	25.0	24.2		ug/L		97	70 - 122
1,2-Dichlorobenzene	25.0	25.4		ug/L		101	80 - 124
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	75 - 120
Benzene	25.0	25.6		ug/L		102	71 - 124
Carbon tetrachloride	25.0	25.9		ug/L		104	72 - 134

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

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

Lab Sample ID: LCS 480-92349/3

Matrix: Water

Analysis Batch: 92349

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

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
Chlorobenzene	25.0	25.3		ug/L		101	72 - 120
Chloromethane	25.0	23.4		ug/L		93	68 - 124
cis-1,2-Dichloroethene	25.0	25.5		ug/L		102	74 - 124
Methylene Chloride	25.0	23.8		ug/L		95	57 - 132
Tetrachloroethene	25.0	25.1		ug/L		100	74 - 122
trans-1,2-Dichloroethene	25.0	25.0		ug/L		100	73 - 127
Trichloroethene	25.0	25.8		ug/L		103	74 - 123
Vinyl chloride	25.0	25.3		ug/L		101	65 - 133

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	90		66 - 137
4-Bromofluorobenzene (Surr)	91		73 - 120
Toluene-d8 (Surr)	98		71 - 126

Lab Sample ID: 480-28175-6 MS

Matrix: Water

Analysis Batch: 92349

Client Sample ID: RW-2-1112
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	MS	MS				
1,1,1-Trichloroethane	ND		25.0	29.4		ug/L		118	73 - 126
1,1,2,2-Tetrachloroethane	7.2		25.0	30.1		ug/L		91	70 - 126
1,1,2-Trichloroethane	ND		25.0	23.6		ug/L		94	76 - 122
1,1-Dichloroethene	0.60 J		25.0	31.2 F		ug/L		122	58 - 121
1,2,4-Trichlorobenzene	8.0		25.0	31.4		ug/L		94	70 - 122
1,2-Dichlorobenzene	ND		25.0	27.7		ug/L		111	80 - 124
1,3-Dichlorobenzene	0.84 J		25.0	29.3		ug/L		114	77 - 120
1,4-Dichlorobenzene	ND		25.0	28.6		ug/L		115	75 - 120
Benzene	0.48 J		25.0	29.4		ug/L		116	71 - 124
Carbon tetrachloride	0.67 J		25.0	29.7		ug/L		116	72 - 134
Chlorobenzene	ND		25.0	28.7		ug/L		115	72 - 120
Chloromethane	ND		25.0	24.6		ug/L		99	68 - 124
cis-1,2-Dichloroethene	68		25.0	97.8		ug/L		118	74 - 124
Methylene Chloride	ND		25.0	26.7		ug/L		107	57 - 132
Tetrachloroethene	110 E		25.0	139 E 4		ug/L		101	74 - 122
trans-1,2-Dichloroethene	ND		25.0	30.6		ug/L		123	73 - 127
Trichloroethene	180 E		25.0	208 E 4		ug/L		121	74 - 123
Vinyl chloride	ND		25.0	29.5		ug/L		118	65 - 133

Surrogate	MS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	83		66 - 137
4-Bromofluorobenzene (Surr)	89		73 - 120
Toluene-d8 (Surr)	98		71 - 126

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

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

Lab Sample ID: 480-28175-6 MSD

Matrix: Water

Analysis Batch: 92349

Client Sample ID: RW-2-1112

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1-Trichloroethane	ND		25.0	30.3		ug/L	121	73 - 126	3	15	
1,1,2,2-Tetrachloroethane	7.2		25.0	30.2		ug/L	92	70 - 126	0	15	
1,1,2-Trichloroethane	ND		25.0	24.4		ug/L	98	76 - 122	3	15	
1,1-Dichloroethene	0.60	J	25.0	32.2	F	ug/L	126	58 - 121	3	16	
1,2,4-Trichlorobenzene	8.0		25.0	32.9		ug/L	100	70 - 122	5	20	
1,2-Dichlorobenzene	ND		25.0	28.0		ug/L	112	80 - 124	1	20	
1,3-Dichlorobenzene	0.84	J	25.0	29.6		ug/L	115	77 - 120	1	20	
1,4-Dichlorobenzene	ND		25.0	29.1		ug/L	116	75 - 120	2	20	
Benzene	0.48	J	25.0	29.6		ug/L	116	71 - 124	0	13	
Carbon tetrachloride	0.67	J	25.0	30.8		ug/L	121	72 - 134	4	15	
Chlorobenzene	ND		25.0	29.1		ug/L	116	72 - 120	2	25	
Chloromethane	ND		25.0	26.0		ug/L	104	68 - 124	5	15	
cis-1,2-Dichloroethene	68		25.0	98.7		ug/L	121	74 - 124	1	15	
Methylene Chloride	ND		25.0	27.6		ug/L	110	57 - 132	3	15	
Tetrachloroethene	110	E	25.0	139	E 4	ug/L	104	74 - 122	1	20	
trans-1,2-Dichloroethene	ND		25.0	31.0		ug/L	124	73 - 127	1	20	
Trichloroethene	180	E	25.0	211	E 4	ug/L	131	74 - 123	1	16	
Vinyl chloride	ND		25.0	30.7		ug/L	123	65 - 133	4	15	
Surrogate		MSD	MSD								
Surrogate		%Recovery	Qualifier	Limits							
1,2-Dichloroethane-d4 (Surr)		85		66 - 137							
4-Bromofluorobenzene (Surr)		89		73 - 120							
Toluene-d8 (Surr)		98		71 - 126							

Lab Sample ID: MB 480-92500/5

Matrix: Water

Analysis Batch: 92500

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
1,1,1-Trichloroethane	ND		ND		1.0	0.82	ug/L		11/23/12 20:01		1
1,1,2,2-Tetrachloroethane	ND		ND		1.0	0.21	ug/L		11/23/12 20:01		1
1,1,2-Trichloroethane	ND		ND		1.0	0.23	ug/L		11/23/12 20:01		1
1,1-Dichloroethene	ND		ND		1.0	0.29	ug/L		11/23/12 20:01		1
1,2,4-Trichlorobenzene	ND		ND		1.0	0.41	ug/L		11/23/12 20:01		1
1,2-Dichlorobenzene	ND		ND		1.0	0.79	ug/L		11/23/12 20:01		1
1,3-Dichlorobenzene	ND		ND		1.0	0.78	ug/L		11/23/12 20:01		1
1,4-Dichlorobenzene	ND		ND		1.0	0.84	ug/L		11/23/12 20:01		1
Benzene	ND		ND		1.0	0.41	ug/L		11/23/12 20:01		1
Carbon tetrachloride	ND		ND		1.0	0.27	ug/L		11/23/12 20:01		1
Chlorobenzene	ND		ND		1.0	0.75	ug/L		11/23/12 20:01		1
Chloromethane	ND		ND		1.0	0.35	ug/L		11/23/12 20:01		1
cis-1,2-Dichloroethene	ND		ND		1.0	0.81	ug/L		11/23/12 20:01		1
Methylene Chloride	ND		ND		1.0	0.44	ug/L		11/23/12 20:01		1
Tetrachloroethene	ND		ND		1.0	0.36	ug/L		11/23/12 20:01		1
trans-1,2-Dichloroethene	ND		ND		1.0	0.90	ug/L		11/23/12 20:01		1
Trichloroethene	ND		ND		1.0	0.46	ug/L		11/23/12 20:01		1
Vinyl chloride	ND		ND		1.0	0.90	ug/L		11/23/12 20:01		1

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

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

Lab Sample ID: MB 480-92500/5

Matrix: Water

Analysis Batch: 92500

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

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
1,2-Dichloroethane-d4 (Surr)	107		66 - 137				11/23/12 20:01	1
4-Bromofluorobenzene (Surr)	103		73 - 120				11/23/12 20:01	1
Toluene-d8 (Surr)	112		71 - 126				11/23/12 20:01	1

Lab Sample ID: LCS 480-92500/4

Matrix: Water

Analysis Batch: 92500

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

Analyte	MB	MB	Spike	LCS	LCS	Unit	D	%Rec	Limits
	%Recovery	Qualifier	Added	Result	Qualifier				
1,1,1-Trichloroethane			25.0	26.4		ug/L		106	73 - 126
1,1,2,2-Tetrachloroethane			25.0	25.8		ug/L		103	70 - 126
1,1,2-Trichloroethane			25.0	25.8		ug/L		103	76 - 122
1,1-Dichloroethene			25.0	27.4		ug/L		110	58 - 121
1,2,4-Trichlorobenzene			25.0	24.9		ug/L		100	70 - 122
1,2-Dichlorobenzene			25.0	25.6		ug/L		102	80 - 124
1,3-Dichlorobenzene			25.0	25.9		ug/L		103	77 - 120
1,4-Dichlorobenzene			25.0	25.4		ug/L		101	75 - 120
Benzene			25.0	25.4		ug/L		102	71 - 124
Carbon tetrachloride			25.0	27.4		ug/L		110	72 - 134
Chlorobenzene			25.0	24.9		ug/L		100	72 - 120
Chloromethane			25.0	25.7		ug/L		103	68 - 124
cis-1,2-Dichloroethene			25.0	25.4		ug/L		102	74 - 124
Methylene Chloride			25.0	25.4		ug/L		101	57 - 132
Tetrachloroethene			25.0	26.4		ug/L		106	74 - 122
trans-1,2-Dichloroethene			25.0	27.4		ug/L		110	73 - 127
Trichloroethene			25.0	25.3		ug/L		101	74 - 123
Vinyl chloride			25.0	26.2		ug/L		105	65 - 133

Surrogate	MB	MB	Spike	LCS	LCS	Unit	D	%Rec	Limits
	%Recovery	Qualifier	Added	Result	Qualifier				
1,2-Dichloroethane-d4 (Surr)	108			66 - 137					
4-Bromofluorobenzene (Surr)	108			73 - 120					
Toluene-d8 (Surr)	114			71 - 126					

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-90381/1-A

Matrix: Water

Analysis Batch: 90775

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 90381

Analyte	MB	MB	Spike	LCS	LCS	Unit	D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier	Added	Result	Qualifier					
alpha-BHC			ND	0.050	0.0066	ug/L		11/12/12 14:23	11/14/12 10:15	1
beta-BHC			ND	0.050	0.025	ug/L		11/12/12 14:23	11/14/12 10:15	1
delta-BHC			ND	0.050	0.010	ug/L		11/12/12 14:23	11/14/12 10:15	1
gamma-BHC (Lindane)			ND	0.050	0.0060	ug/L		11/12/12 14:23	11/14/12 10:15	1

Surrogate	MB	MB	Spike	LCS	LCS	Unit	D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier	Added	Result	Qualifier					
DCB Decachlorobiphenyl			75	16 - 120				11/12/12 14:23	11/14/12 10:15	1

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-90381/1-A

Matrix: Water

Analysis Batch: 90775

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 90381

Surrogate	MB	MB	%Recovery	Qualifier	Limits
Tetrachloro-m-xylene			74		35 - 120

Prepared: 11/12/12 14:23 **Analyzed:** 11/14/12 10:15 **Dil Fac:** 1

Lab Sample ID: LCS 480-90381/2-A

Matrix: Water

Analysis Batch: 90775

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 90381

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
alpha-BHC	0.500	0.442		ug/L		88	52 - 122
beta-BHC	0.500	0.476		ug/L		95	57 - 134
delta-BHC	0.500	0.416		ug/L		83	56 - 128
gamma-BHC (Lindane)	0.500	0.453		ug/L		91	57 - 128

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
	Added	Result			
DCB Decachlorobiphenyl	79	16 - 120			
Tetrachloro-m-xylene	72	35 - 120			

Lab Sample ID: 480-28175-6 MS

Matrix: Water

Analysis Batch: 90775

Client Sample ID: RW-2-1112

Prep Type: Total/NA

Prep Batch: 90381

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
alpha-BHC	0.52		0.481	0.770		ug/L		52	39 - 121
beta-BHC	0.22		0.481	0.686		ug/L		96	26 - 141
delta-BHC	0.053		0.481	0.468		ug/L		86	29 - 129
gamma-BHC (Lindane)	0.43		0.481	0.803		ug/L		77	53 - 120

Surrogate	MS	MS	%Recovery	Qualifier	Limits
	Added	Result			
DCB Decachlorobiphenyl	77	16 - 120			
Tetrachloro-m-xylene	89	35 - 120			

Lab Sample ID: 480-28175-6 MSD

Matrix: Water

Analysis Batch: 90775

Client Sample ID: RW-2-1112

Prep Type: Total/NA

Prep Batch: 90381

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
alpha-BHC	0.52		0.476	0.750		ug/L		49	39 - 121	3	15
beta-BHC	0.22		0.476	0.690		ug/L		98	26 - 141	1	22
delta-BHC	0.053		0.476	0.482		ug/L		90	29 - 129	3	10
gamma-BHC (Lindane)	0.43		0.476	0.791		ug/L		75	53 - 120	2	15

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
	Added	Result			
DCB Decachlorobiphenyl	73	16 - 120			
Tetrachloro-m-xylene	87	35 - 120			

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-90320/1-A

Matrix: Water

Analysis Batch: 90427

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 90320

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.00020	0.00012	mg/L		11/12/12 10:30	11/12/12 14:06	1

Lab Sample ID: LCS 480-90320/2-A

Matrix: Water

Analysis Batch: 90427

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 90320

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier					
Mercury	0.00667	0.00600		mg/L		90	80 - 120	

Lab Sample ID: LCSD 480-90320/3-A

Matrix: Water

Analysis Batch: 90427

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 90320

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier					
Mercury	0.00667	0.00602		mg/L		90	80 - 120	0

Lab Sample ID: 480-28175-6 MS

Matrix: Water

Analysis Batch: 90427

Client Sample ID: RW-2-1112

Prep Type: Total/NA

Prep Batch: 90320

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Mercury	ND		0.00667	0.00613		mg/L		92	75 - 125

Lab Sample ID: 480-28175-6 MSD

Matrix: Water

Analysis Batch: 90427

Client Sample ID: RW-2-1112

Prep Type: Total/NA

Prep Batch: 90320

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Mercury	ND		0.00667	0.00625		mg/L		94	75 - 125

Lab Sample ID: MB 480-90666/1-B

Matrix: Water

Analysis Batch: 90904

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 90761

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.00020	0.00012	mg/L		11/14/12 08:00	11/14/12 12:54	1

Lab Sample ID: LCS 480-90666/2-B

Matrix: Water

Analysis Batch: 90904

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 90761

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Mercury	0.00667	0.00623		mg/L		93	80 - 120

Lab Sample ID: 480-28175-6 MS

Matrix: Water

Analysis Batch: 90904

Client Sample ID: RW-2-1112

Prep Type: Dissolved

Prep Batch: 90761

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Mercury	ND		0.00667	0.00645		mg/L		97	75 - 125

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Lab Sample ID: 480-28175-6 MSD

Matrix: Water

Analysis Batch: 90904

Client Sample ID: RW-2-1112

Prep Type: Dissolved

Prep Batch: 90761

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
Mercury	ND		0.00667	0.00630		mg/L	94	75 - 125	2	2	20	

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TestAmerica Buffalo

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

GC/MS VOA

Analysis Batch: 92232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-28175-3	PR-12-1112	Total/NA	Water	8260B	5
480-28175-5	RW-1-1112	Total/NA	Water	8260B	5
480-28175-7	RW-3-1112	Total/NA	Water	8260B	5
480-28175-13	TB-11335-110812	Total/NA	Water	8260B	6
LCS 480-92232/5	Lab Control Sample	Total/NA	Water	8260B	7
MB 480-92232/4	Method Blank	Total/NA	Water	8260B	7

Analysis Batch: 92349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-28175-1	INFLUENT-1112	Total/NA	Water	8260B	9
480-28175-2	OBA-9AR-1112	Total/NA	Water	8260B	9
480-28175-3 - DL	PR-12-1112	Total/NA	Water	8260B	10
480-28175-4	PR-4-1112	Total/NA	Water	8260B	11
480-28175-6	RW-2-1112	Total/NA	Water	8260B	11
480-28175-6 MS	RW-2-1112	Total/NA	Water	8260B	12
480-28175-6 MSD	RW-2-1112	Total/NA	Water	8260B	12
480-28175-8	RW-4-1112	Total/NA	Water	8260B	13
480-28175-9	RW-5-1112	Total/NA	Water	8260B	13
480-28175-10	SP-1-1112	Total/NA	Water	8260B	14
480-28175-11	SP-3-1112	Total/NA	Water	8260B	14
480-28175-12	SP-4-1112	Total/NA	Water	8260B	14
480-28175-14	RW-5D-1112	Total/NA	Water	8260B	15
LCS 480-92349/3	Lab Control Sample	Total/NA	Water	8260B	
MB 480-92349/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 92500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-28175-6 - DL	RW-2-1112	Total/NA	Water	8260B	
LCS 480-92500/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-92500/5	Method Blank	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 90381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-28175-1	INFLUENT-1112	Total/NA	Water	3510C	
480-28175-2	OBA-9AR-1112	Total/NA	Water	3510C	
480-28175-3	PR-12-1112	Total/NA	Water	3510C	
480-28175-4	PR-4-1112	Total/NA	Water	3510C	
480-28175-5	RW-1-1112	Total/NA	Water	3510C	
480-28175-6	RW-2-1112	Total/NA	Water	3510C	
480-28175-6 MS	RW-2-1112	Total/NA	Water	3510C	
480-28175-6 MSD	RW-2-1112	Total/NA	Water	3510C	
480-28175-7	RW-3-1112	Total/NA	Water	3510C	
480-28175-8	RW-4-1112	Total/NA	Water	3510C	
480-28175-9	RW-5-1112	Total/NA	Water	3510C	
480-28175-10	SP-1-1112	Total/NA	Water	3510C	
480-28175-11	SP-3-1112	Total/NA	Water	3510C	
480-28175-12	SP-4-1112	Total/NA	Water	3510C	
480-28175-14	RW-5D-1112	Total/NA	Water	3510C	

TestAmerica Buffalo

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

GC Semi VOA (Continued)

Prep Batch: 90381 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-90381/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-90381/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 90775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-28175-1	INFLUENT-1112	Total/NA	Water	8081A	90381
480-28175-4	PR-4-1112	Total/NA	Water	8081A	90381
480-28175-6	RW-2-1112	Total/NA	Water	8081A	90381
480-28175-6 MS	RW-2-1112	Total/NA	Water	8081A	90381
480-28175-6 MSD	RW-2-1112	Total/NA	Water	8081A	90381
480-28175-7	RW-3-1112	Total/NA	Water	8081A	90381
480-28175-8	RW-4-1112	Total/NA	Water	8081A	90381
480-28175-9	RW-5-1112	Total/NA	Water	8081A	90381
480-28175-14	RW-5D-1112	Total/NA	Water	8081A	90381
LCS 480-90381/2-A	Lab Control Sample	Total/NA	Water	8081A	90381
MB 480-90381/1-A	Method Blank	Total/NA	Water	8081A	90381

Analysis Batch: 91336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-28175-2	OBA-9AR-1112	Total/NA	Water	8081A	90381
480-28175-3	PR-12-1112	Total/NA	Water	8081A	90381
480-28175-5	RW-1-1112	Total/NA	Water	8081A	90381
480-28175-10	SP-1-1112	Total/NA	Water	8081A	90381
480-28175-11	SP-3-1112	Total/NA	Water	8081A	90381
480-28175-12	SP-4-1112	Total/NA	Water	8081A	90381

Metals

Prep Batch: 90320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-28175-1	INFLUENT-1112	Total/NA	Water	7470A	
480-28175-2	OBA-9AR-1112	Total/NA	Water	7470A	
480-28175-3	PR-12-1112	Total/NA	Water	7470A	
480-28175-4	PR-4-1112	Total/NA	Water	7470A	
480-28175-5	RW-1-1112	Total/NA	Water	7470A	
480-28175-6	RW-2-1112	Total/NA	Water	7470A	
480-28175-6 MS	RW-2-1112	Total/NA	Water	7470A	
480-28175-6 MSD	RW-2-1112	Total/NA	Water	7470A	
480-28175-7	RW-3-1112	Total/NA	Water	7470A	
480-28175-8	RW-4-1112	Total/NA	Water	7470A	
480-28175-9	RW-5-1112	Total/NA	Water	7470A	
480-28175-10	SP-1-1112	Total/NA	Water	7470A	
480-28175-11	SP-3-1112	Total/NA	Water	7470A	
480-28175-12	SP-4-1112	Total/NA	Water	7470A	
480-28175-14	RW-5D-1112	Total/NA	Water	7470A	
LCS 480-90320/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 480-90320/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 480-90320/1-A	Method Blank	Total/NA	Water	7470A	

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Metals (Continued)

Analysis Batch: 90427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-28175-1	INFLUENT-1112	Total/NA	Water	7470A	90320
480-28175-2	OBA-9AR-1112	Total/NA	Water	7470A	90320
480-28175-3	PR-12-1112	Total/NA	Water	7470A	90320
480-28175-4	PR-4-1112	Total/NA	Water	7470A	90320
480-28175-5	RW-1-1112	Total/NA	Water	7470A	90320
480-28175-6	RW-2-1112	Total/NA	Water	7470A	90320
480-28175-6 MS	RW-2-1112	Total/NA	Water	7470A	90320
480-28175-6 MSD	RW-2-1112	Total/NA	Water	7470A	90320
480-28175-7	RW-3-1112	Total/NA	Water	7470A	90320
480-28175-8	RW-4-1112	Total/NA	Water	7470A	90320
480-28175-9	RW-5-1112	Total/NA	Water	7470A	90320
480-28175-10	SP-1-1112	Total/NA	Water	7470A	90320
480-28175-11	SP-3-1112	Total/NA	Water	7470A	90320
480-28175-12	SP-4-1112	Total/NA	Water	7470A	90320
480-28175-14	RW-5D-1112	Total/NA	Water	7470A	90320
LCS 480-90320/2-A	Lab Control Sample	Total/NA	Water	7470A	90320
LCSD 480-90320/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	90320
MB 480-90320/1-A	Method Blank	Total/NA	Water	7470A	90320

Prep Batch: 90761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-28175-1	INFLUENT-1112	Dissolved	Water	7470A	12
480-28175-2	OBA-9AR-1112	Dissolved	Water	7470A	12
480-28175-3	PR-12-1112	Dissolved	Water	7470A	12
480-28175-4	PR-4-1112	Dissolved	Water	7470A	12
480-28175-5	RW-1-1112	Dissolved	Water	7470A	12
480-28175-6	RW-2-1112	Dissolved	Water	7470A	12
480-28175-6 MS	RW-2-1112	Dissolved	Water	7470A	12
480-28175-6 MSD	RW-2-1112	Dissolved	Water	7470A	12
480-28175-7	RW-3-1112	Dissolved	Water	7470A	12
480-28175-8	RW-4-1112	Dissolved	Water	7470A	12
480-28175-9	RW-5-1112	Dissolved	Water	7470A	12
480-28175-10	SP-1-1112	Dissolved	Water	7470A	12
480-28175-11	SP-3-1112	Dissolved	Water	7470A	12
480-28175-12	SP-4-1112	Dissolved	Water	7470A	12
480-28175-14	RW-5D-1112	Dissolved	Water	7470A	12
LCS 480-90666/2-B	Lab Control Sample	Dissolved	Water	7470A	12
MB 480-90666/1-B	Method Blank	Dissolved	Water	7470A	12

Analysis Batch: 90904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-28175-1	INFLUENT-1112	Dissolved	Water	7470A	90761
480-28175-2	OBA-9AR-1112	Dissolved	Water	7470A	90761
480-28175-3	PR-12-1112	Dissolved	Water	7470A	90761
480-28175-4	PR-4-1112	Dissolved	Water	7470A	90761
480-28175-5	RW-1-1112	Dissolved	Water	7470A	90761
480-28175-6	RW-2-1112	Dissolved	Water	7470A	90761
480-28175-6 MS	RW-2-1112	Dissolved	Water	7470A	90761
480-28175-6 MSD	RW-2-1112	Dissolved	Water	7470A	90761
480-28175-7	RW-3-1112	Dissolved	Water	7470A	90761
480-28175-8	RW-4-1112	Dissolved	Water	7470A	90761

TestAmerica Buffalo

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Metals (Continued)

Analysis Batch: 90904 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-28175-9	RW-5-1112	Dissolved	Water	7470A	90761
480-28175-10	SP-1-1112	Dissolved	Water	7470A	90761
480-28175-11	SP-3-1112	Dissolved	Water	7470A	90761
480-28175-12	SP-4-1112	Dissolved	Water	7470A	90761
480-28175-14	RW-5D-1112	Dissolved	Water	7470A	90761
LCS 480-90666/2-B	Lab Control Sample	Dissolved	Water	7470A	90761
MB 480-90666/1-B	Method Blank	Dissolved	Water	7470A	90761

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Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: INFLUENT-1112

Lab Sample ID: 480-28175-1

Matrix: Water

Date Collected: 11/08/12 14:00

Date Received: 11/09/12 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	92349	11/22/12 00:53	LH	TAL BUF
Total/NA	Prep	3510C			90381	11/12/12 14:23	KB	TAL BUF
Total/NA	Analysis	8081A		200	90775	11/14/12 13:11	LW	TAL BUF
Total/NA	Prep	7470A			90320	11/12/12 10:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	90427	11/12/12 14:12	JRK	TAL BUF
Dissolved	Prep	7470A			90761	11/14/12 08:00	JRK	TAL BUF
Dissolved	Analysis	7470A		1	90904	11/14/12 12:58	JRK	TAL BUF

Client Sample ID: OBA-9AR-1112

Lab Sample ID: 480-28175-2

Matrix: Water

Date Collected: 11/08/12 14:10

Date Received: 11/09/12 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	92349	11/22/12 01:21	LH	TAL BUF
Total/NA	Prep	3510C			90381	11/12/12 14:23	KB	TAL BUF
Total/NA	Analysis	8081A		1000	91336	11/16/12 11:44	LW	TAL BUF
Total/NA	Prep	7470A			90320	11/12/12 10:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	90427	11/12/12 14:14	JRK	TAL BUF
Dissolved	Prep	7470A			90761	11/14/12 08:00	JRK	TAL BUF
Dissolved	Analysis	7470A		1	90904	11/14/12 13:00	JRK	TAL BUF

Client Sample ID: PR-12-1112

Lab Sample ID: 480-28175-3

Matrix: Water

Date Collected: 11/08/12 13:10

Date Received: 11/09/12 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	92232	11/21/12 14:48	CDC	TAL BUF
Total/NA	Analysis	8260B	DL	400	92349	11/22/12 01:48	LH	TAL BUF
Total/NA	Prep	3510C			90381	11/12/12 14:23	KB	TAL BUF
Total/NA	Analysis	8081A		100	91336	11/16/12 12:25	LW	TAL BUF
Total/NA	Prep	7470A			90320	11/12/12 10:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	90427	11/12/12 14:16	JRK	TAL BUF
Dissolved	Prep	7470A			90761	11/14/12 08:00	JRK	TAL BUF
Dissolved	Analysis	7470A		1	90904	11/14/12 13:06	JRK	TAL BUF

Client Sample ID: PR-4-1112

Lab Sample ID: 480-28175-4

Matrix: Water

Date Collected: 11/08/12 13:20

Date Received: 11/09/12 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	92349	11/22/12 02:16	LH	TAL BUF
Total/NA	Prep	3510C			90381	11/12/12 14:23	KB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: PR-4-1112

Date Collected: 11/08/12 13:20

Date Received: 11/09/12 16:30

Lab Sample ID: 480-28175-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8081A		200	90775	11/14/12 15:14	LW	TAL BUF
Total/NA	Prep	7470A			90320	11/12/12 10:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	90427	11/12/12 14:21	JRK	TAL BUF
Dissolved	Prep	7470A			90761	11/14/12 08:00	JRK	TAL BUF
Dissolved	Analysis	7470A		1	90904	11/14/12 13:08	JRK	TAL BUF

Client Sample ID: RW-1-1112

Date Collected: 11/08/12 12:00

Date Received: 11/09/12 16:30

Lab Sample ID: 480-28175-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		400	92232	11/21/12 15:43	CDC	TAL BUF
Total/NA	Prep	3510C			90381	11/12/12 14:23	KB	TAL BUF
Total/NA	Analysis	8081A		100	91336	11/16/12 13:06	LW	TAL BUF
Total/NA	Prep	7470A			90320	11/12/12 10:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	90427	11/12/12 14:23	JRK	TAL BUF
Dissolved	Prep	7470A			90761	11/14/12 08:00	JRK	TAL BUF
Dissolved	Analysis	7470A		1	90904	11/14/12 13:09	JRK	TAL BUF

Client Sample ID: RW-2-1112

Date Collected: 11/08/12 12:15

Date Received: 11/09/12 16:30

Lab Sample ID: 480-28175-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	92349	11/22/12 03:11	LH	TAL BUF
Total/NA	Analysis	8260B	DL	4	92500	11/23/12 21:22	LH	TAL BUF
Total/NA	Prep	3510C			90381	11/12/12 14:23	KB	TAL BUF
Total/NA	Analysis	8081A		1	90775	11/14/12 12:30	LW	TAL BUF
Total/NA	Prep	7470A			90320	11/12/12 10:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	90427	11/12/12 14:25	JRK	TAL BUF
Dissolved	Prep	7470A			90761	11/14/12 08:00	JRK	TAL BUF
Dissolved	Analysis	7470A		1	90904	11/14/12 13:12	JRK	TAL BUF

Client Sample ID: RW-3-1112

Date Collected: 11/08/12 12:30

Date Received: 11/09/12 16:30

Lab Sample ID: 480-28175-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	92232	11/21/12 18:01	CDC	TAL BUF
Total/NA	Prep	3510C			90381	11/12/12 14:23	KB	TAL BUF
Total/NA	Analysis	8081A		20	90775	11/14/12 19:59	LW	TAL BUF
Total/NA	Prep	7470A			90320	11/12/12 10:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	90427	11/12/12 14:32	JRK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: RW-3-1112

Date Collected: 11/08/12 12:30
Date Received: 11/09/12 16:30

Lab Sample ID: 480-28175-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	7470A			90761	11/14/12 08:00	JRK	TAL BUF
Dissolved	Analysis	7470A		1	90904	11/14/12 13:18	JRK	TAL BUF

Client Sample ID: RW-4-1112

Date Collected: 11/08/12 12:40
Date Received: 11/09/12 16:30

Lab Sample ID: 480-28175-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	92349	11/22/12 04:34	LH	TAL BUF
Total/NA	Prep	3510C			90381	11/12/12 14:23	KB	TAL BUF
Total/NA	Analysis	8081A		20	90775	11/14/12 20:40	LW	TAL BUF
Total/NA	Prep	7470A			90320	11/12/12 10:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	90427	11/12/12 14:34	JRK	TAL BUF
Dissolved	Prep	7470A			90761	11/14/12 08:00	JRK	TAL BUF
Dissolved	Analysis	7470A		1	90904	11/14/12 13:21	JRK	TAL BUF

Client Sample ID: RW-5-1112

Date Collected: 11/08/12 12:50
Date Received: 11/09/12 16:30

Lab Sample ID: 480-28175-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		800	92349	11/22/12 05:01	LH	TAL BUF
Total/NA	Prep	3510C			90381	11/12/12 14:23	KB	TAL BUF
Total/NA	Analysis	8081A		200	90775	11/14/12 21:21	LW	TAL BUF
Total/NA	Prep	7470A			90320	11/12/12 10:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	90427	11/12/12 14:36	JRK	TAL BUF
Dissolved	Prep	7470A			90761	11/14/12 08:00	JRK	TAL BUF
Dissolved	Analysis	7470A		1	90904	11/14/12 13:23	JRK	TAL BUF

Client Sample ID: SP-1-1112

Date Collected: 11/08/12 13:30
Date Received: 11/09/12 16:30

Lab Sample ID: 480-28175-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	92349	11/22/12 05:29	LH	TAL BUF
Total/NA	Prep	3510C			90381	11/12/12 14:23	KB	TAL BUF
Total/NA	Analysis	8081A		100	91336	11/16/12 13:47	LW	TAL BUF
Total/NA	Prep	7470A			90320	11/12/12 10:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	90427	11/12/12 14:38	JRK	TAL BUF
Dissolved	Prep	7470A			90761	11/14/12 08:00	JRK	TAL BUF
Dissolved	Analysis	7470A		1	90904	11/14/12 13:28	JRK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Client Sample ID: SP-3-1112

Date Collected: 11/08/12 13:40

Date Received: 11/09/12 16:30

Lab Sample ID: 480-28175-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	92349	11/22/12 05:56	LH	TAL BUF
Total/NA	Prep	3510C			90381	11/12/12 14:23	KB	TAL BUF
Total/NA	Analysis	8081A		5	91336	11/16/12 14:27	LW	TAL BUF
Total/NA	Prep	7470A			90320	11/12/12 10:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	90427	11/12/12 14:43	JRK	TAL BUF
Dissolved	Prep	7470A			90761	11/14/12 08:00	JRK	TAL BUF
Dissolved	Analysis	7470A		1	90904	11/14/12 13:30	JRK	TAL BUF

Client Sample ID: SP-4-1112

Date Collected: 11/08/12 13:50

Date Received: 11/09/12 16:30

Lab Sample ID: 480-28175-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	92349	11/22/12 06:24	LH	TAL BUF
Total/NA	Prep	3510C			90381	11/12/12 14:23	KB	TAL BUF
Total/NA	Analysis	8081A		5	91336	11/16/12 15:08	LW	TAL BUF
Total/NA	Prep	7470A			90320	11/12/12 10:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	90427	11/12/12 14:45	JRK	TAL BUF
Dissolved	Prep	7470A			90761	11/14/12 08:00	JRK	TAL BUF
Dissolved	Analysis	7470A		1	90904	11/14/12 13:32	JRK	TAL BUF

Client Sample ID: TB-11335-110812

Date Collected: 11/08/12 00:00

Date Received: 11/09/12 16:30

Lab Sample ID: 480-28175-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	92232	11/21/12 20:46	CDC	TAL BUF

Client Sample ID: RW-5D-1112

Date Collected: 11/08/12 13:00

Date Received: 11/09/12 16:30

Lab Sample ID: 480-28175-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		8000	92349	11/22/12 06:52	LH	TAL BUF
Total/NA	Prep	3510C			90381	11/12/12 14:23	KB	TAL BUF
Total/NA	Analysis	8081A		200	90775	11/15/12 00:04	LW	TAL BUF
Total/NA	Prep	7470A			90320	11/12/12 10:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	90427	11/12/12 14:46	JRK	TAL BUF
Dissolved	Prep	7470A			90761	11/14/12 08:00	JRK	TAL BUF
Dissolved	Analysis	7470A		1	90904	11/14/12 13:33	JRK	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TestAmerica Buffalo

Certification Summary

Client: AMEC Environment & Infrastructure, Inc.
 Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAC	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAC	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-13
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	06-30-13
Illinois	NELAC	5	200003	09-30-13
Iowa	State Program	7	374	03-01-13
Kansas	NELAC	7	E-10187	01-31-13
Kentucky	State Program	4	90029	12-31-12
Kentucky (UST)	State Program	4	30	04-01-13
Louisiana	NELAC	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-12
Maryland	State Program	3	294	03-31-13
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13
Minnesota	NELAC	5	036-999-337	12-31-12
New Hampshire	NELAC	1	2973	09-11-13
New Hampshire	NELAC	1	2337	11-17-13
New Jersey	NELAC	2	NY455	06-30-13
New York	NELAC	2	10026	03-31-13
North Dakota	State Program	8	R-176	03-31-13
Oklahoma	State Program	6	9421	08-31-13
Oregon	NELAC	10	NY200003	06-09-13
Pennsylvania	NELAC	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-13
Texas	NELAC	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAC	3	460185	09-14-13
Washington	State Program	10	C784	02-10-13
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Method Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081A	Organochlorine Pesticides (GC)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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Sample Summary

Client: AMEC Environment & Infrastructure, Inc.
 Project/Site: Olin Niagara Falls site

TestAmerica Job ID: 480-28175-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-28175-1	INFLUENT-1112	Water	11/08/12 14:00	11/09/12 16:30
480-28175-2	OBA-9AR-1112	Water	11/08/12 14:10	11/09/12 16:30
480-28175-3	PR-12-1112	Water	11/08/12 13:10	11/09/12 16:30
480-28175-4	PR-4-1112	Water	11/08/12 13:20	11/09/12 16:30
480-28175-5	RW-1-1112	Water	11/08/12 12:00	11/09/12 16:30
480-28175-6	RW-2-1112	Water	11/08/12 12:15	11/09/12 16:30
480-28175-7	RW-3-1112	Water	11/08/12 12:30	11/09/12 16:30
480-28175-8	RW-4-1112	Water	11/08/12 12:40	11/09/12 16:30
480-28175-9	RW-5-1112	Water	11/08/12 12:50	11/09/12 16:30
480-28175-10	SP-1-1112	Water	11/08/12 13:30	11/09/12 16:30
480-28175-11	SP-3-1112	Water	11/08/12 13:40	11/09/12 16:30
480-28175-12	SP-4-1112	Water	11/08/12 13:50	11/09/12 16:30
480-28175-13	TB-11335-110812	Water	11/08/12 00:00	11/09/12 16:30
480-28175-14	RW-5D-1112	Water	11/08/12 13:00	11/09/12 16:30

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Login Sample Receipt Checklist

Client: AMEC Environment & Infrastructure, Inc.

Job Number: 480-28175-1

Login Number: 28175

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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 sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	olin
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

EVENT COMPLETE

CHAIN-OF-CUSTODY/Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Client Information	
OLIN	Report To:
NIAGARA FALLS SITE	Copy To:
NIAGARA FALLS, NEW YORK	Invoice To:
Phone:	PO:
Fax:	Project Name: OLIN QRTY RW SAMPLING
Email:	Project Number: 11335-95-2B

Lab Information	
Laboratory: TEST AMERICA BUFFALO	
Laboratory Location: 10 HAZELWOOD DRIVE AMHERST, NY 14228	
Laboratory Contact: BRIAN FISCHER	
Requested Due Date: TAT: 10	
QA/QC Requirements:	

Event Information	
ID#: OLIN QUARTERLY RW SAMPLING-1	SSOW Ref#:
Sampler Name: SHAWN GARDNER	

Sample Identification	Valid Matrix Code WG Groundwater WB Borehole Water WS Surface Water SO Soil SE Sediment	Matrix Code	Date Collected	Time Collected	Hg Diss(HNO3)	Hg(HNO3)	Pest(None)	VOCs(HCl)	Remarks	Sample Condition		
										Temp in C	Received on ice	Sealed Cooler
INFLUENT-1112	WG	11/08/2012	14:00	1	1	1	2	3	ALL HG SAMPLES SENT UNPRESERVED			
OBA-9AR-1112	WG	11/08/2012	14:10	1	1	1	2	3	BOTTLES WERE TRIPLE RISED TO			
PR-12-1112	WG	11/08/2012	13:10	1	1	1	2	3	REMOVE SULFURIC ACID PRESERVATIVE			
PR-4-1112	WG	11/08/2012	13:20	1	1	1	2	3	PRIOR TO SAMPLING			
RW-1-1112	WG	11/08/2012	12:00	1	1	1	2	3				
RW-2-1112	WG	11/08/2012	12:15	3	3	3	6	9	MSMSD			
RW-3-1112	WG	11/08/2012	12:30	1	1	1	2	3				
RW-4-1112	WG	11/08/2012	12:40	1	1	1	2	3				
RW-5-1112	WG	11/08/2012	12:50	1	1	1	2	3				
SP-1-1112	WG	11/08/2012	13:30	1	1	1	2	3				
SP-3-1112	WG	11/08/2012	13:40	1	1	1	2	3				
SP-4-1112	WG	11/08/2012	13:50	1	1	1	2	3				
TB-11335-110812	WG Q	11/08/2012	00:00	0	0	0	0	3				
RW-5D-1112	WG	11/08/2012	13:00	1	1	1	2	3				
Total Bottles					15	15	30	48	Grand Total:108			

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
Lab Courier	4	<i>Shawn Gardner</i>	11/8/12	1630	<i>Craig Murchison</i>
AIRBILL#					

W.W. 3.7 (3.5) 7.9 4.1

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