2012 ANNUAL PROGRESS REPORT AND REMEDIAL PROGRESS EVALUATION

FORMER TAYLOR INSTRUMENTS SITE
95 AMES STREET
ROCHESTER, NEW YORK

PREPARED FOR:

ABB, INC.
5 WATERSIDE CROSSING
WINDSOR, CT 06095

PREPARED BY:

AMEC ENVIRONMENT & INFRASTRUCTURE, INC.
9725 COGDILL ROAD
KNOXVILLE, TN 37932

AMEC PROJECT 3031052006

March 2013

March 13, 2013

Mr. Frank Sowers
Project Manager
NYSDEC
Region 8 - Division of Environmental Remediation
6274 East Avon-Lima Road
Avon, NY 14414-9519

Subject: **2012 Annual Progress Report and Remedial Progress Evaluation**
Voluntary Cleanup Agreement (VCA) Index B8-0508-97-02
Former Taylor Instruments Facility
Rochester, New York
AMEC Project 3031052006

Dear Mr. Sowers:

In accordance with Section X.I.B. of the Taylor Instruments Site Voluntary Cleanup Agreement, enclosed please find one hard copy and one electronic copy of the 2012 Annual Progress Report and Remedial Progress Evaluation. The Periodic Review Report is included as an Appendix.

If you have any questions, please call me at (865) 671-6774.

Sincerely,

AMEC Environment & Infrastructure, Inc.

Ricky A. Ryan, P.E.
Senior Principal Project Manager

K. Joe Deatherage
Senior Environmental Engineer

Enclosures

cc: Bart Putzig, NYSDEC (w/o enclosure [*electronic*])
James D. Charles, NYSDEC (w/o enclosure [*electronic*])
Jeffrey M. Kosmala, MCDOH (w/o enclosure)
Katherine Fish, NYSDOH (w/ 1 electronic enclosure)
Jean McCreary, Nixon Peabody LLP (w/ 1 electronic enclosure)
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2012 ANNUAL PROGRESS REPORT AND REMEDIAL PROGRESS EVALUATION

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and Remedial Progress Evaluation
Former Taylor Instruments Site
Rochester, New York

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Figures are contained in Appendix A.

LIST OF TABLES

Table No. **Description**

Tables are contained in Appendix C.

LIST OF ACRONYMS

µg/L	micrograms per liter
µmole/L	micromoles per liter
3DMe®	3-D Microemulsion®
AMEC	AMEC Environment & Infrastructure, Inc.
COC	contaminant of concern
1,1-DCE	1,1-dichloroethene
cis-1,2-DCE	cis-1,2-dichloroethene
trans-1,2-DCE	trans-1,2-dichloroethene
EPA	Environmental Protection Agency
MS	matrix spike
MS/MSD	matrix spike/matrix spike duplicate
MSD	matrix spike duplicate
NYSDEC	New York State Department of Environmental Conservation
PARCC	precision, accuracy, representativeness, completeness, and comparability
PCE	tetrachloroethene
QC	quality control
RPD	relative percent difference
TCE	trichloroethene
VOC	volatile organic compound

1.0 INTRODUCTION

This annual progress report summarizes the results from site wide groundwater sampling events conducted in May and October/November 2012. These activities occurred at the former Taylor Instruments Site – New York State Department of Environmental Conservation (NYSDEC) Site #828028a located at 95 Ames Street in Rochester, New York (Figure 1 in Appendix A), pursuant to a Voluntary Cleanup Agreement (NYSDEC, 1997). The 2012 sampling events were the second year of sampling since AMEC Environment & Infrastructure, Inc. (AMEC) completed an expanded accelerated bioremediation injection using 3-D Microemulsion® (3DMe®) in 2010 as the final required active Site remediation. This continued remedial evaluation is consistent with the statement of remedial action objectives in Section 2.2 of the approved *Remedial Work Plan* (Harding Lawson Associates, 2000); to demonstrate a downward trend in volatile organic compound (VOC) concentrations achieved using a combination of active, passive, and accelerated biodegradation remedial technology approaches. All activities described herein are also consistent with an assignable release for the Site, granted by the NYSDEC via letter dated September 2, 2005 (NYSDEC, 2005). In the same letter, NYSDEC approved previous remedial activities as implemented and determined that no further investigation or response would be required at the Site to render it safe for contemplated uses.

Details of the Site investigation and remedial history, including the certification of engineering and institutional controls, are presented in the *Periodic Review Report,* which is provided in Appendix B of this report as requested by NYSDEC (NYSDEC, 2013).

The first semi-annual sampling event for 2012 was conducted in May and the second in October/November. A summary of the sampling event results for the baseline event, as well as events from 2001-2012, are also included.

Following decommissioning of the remedial treatment system and selected monitoring wells in 2010, fourteen monitoring wells remain on the Site, as shown in Figure 1 (Appendix A). Unless otherwise agreed to by NYSDEC, contaminant conditions will continue to be monitored until groundwater concentrations of the contaminants of concern (COCs) are at or below the NYSDEC Class GA Standards.

2.0 GROUNDWATER MONITORING

2.1 SCOPE OF WORK

AMEC personnel performed the May and October/November sampling events to provide an inclusive set of groundwater analytical data for the 2012 reporting period. During each event, 20 samples were collected and submitted to Test America, Inc. for VOC analyses by U.S. Environmental Protection Agency (EPA) Method 8260B (Table 1, Appendix C). As detailed in AMEC's *Revised Operations, Maintenance, and Monitoring Manual* (MACTEC, 2010), the samples were analyzed for the six primary COCs remaining at the Site: tetrachloroethene (PCE); trichloroethene (TCE); cis-1,2-dichloroethene (cis-1,2-DCE); trans-1,2-dichloroethene (trans-1,2-DCE); 1,1-dichloroethene (1,1-DCE); and vinyl chloride. Data for dissolved oxygen, oxygen reduction potential, pH, and temperature were also collected in the field during the sampling events. Six of the 20 samples collected for each event were associated with quality control efforts. All environmental samples, including field duplicates and matrix spike/matrix spike duplicate (MS/MSD) samples, were collected using a low-flow peristaltic pump at flow rates <400 milliliters per minute.

Analytical results from the 14 remaining Site wells are presented in Figures 2 and 3 (Appendix A). Laboratory reports and chain-of-custody forms for the 2012 samples are located in Appendices D and E, respectively. Purge and sample field data are presented on the field data records located in Appendix F.

2.2 SUMMARY OF RESULTS

This section presents the results of the groundwater sampling events conducted during 2012. As detailed below, the results from both the May and October/November events showed the effects of subsequent enhanced biodegradation from the 3DMe® injection. The results summary focuses primarily on the current October/November 2012 results. Tables 1 and 2 (Appendix C) summarize the monitoring well locations with COCs exceeding NYSDEC Class GA Standards for overburden and bedrock monitoring wells, respectively. Tables 3 and 4 (Appendix C) show a historical summary of analytical results for the remaining overburden and bedrock monitoring wells, respectively, shown on Figure 1 (Appendix A). Sample VOC results are also presented in "flag boxes" shown on Figures 2 and 3 (Appendix A), representing overburden monitoring wells and bedrock monitoring wells, respectively. Complete laboratory analytical data reports for the

2012 events are included in Appendix D. Well construction information is provided in Appendix G.

PCE was not detected over the Class GA Standard of 5 micrograms per liter (µg/L) in the Site monitoring wells in the May sampling event. During the October/November 2012 sampling event, PCE and 1,1-DCE were not detected at concentrations exceeding the Class GA Standard of 5 µg/L in the Site monitoring wells. It is also notable that downgradient overburden perimeter wells TW-04 and TW-09 and source area bedrock well BR-15 had no COCs detected above the Class GA Standards during the May and October/November sampling events. Additionally, source area bedrock well BR-04 had no COCs detected above the Class GA Standards during the October/November event.

While certain COCs remain above the NYSDEC Class GA Standards, substantial declines of COC concentrations have been observed in most Site monitoring wells. The greatest decrease has been within the two former source areas, where TCE in overburden monitoring wells OB-04 and OB-08 has decreased by more than 99 percent from the historical high for each respective well, as shown in Figure 2 (Appendix A).

As shown in Tables 1 and 2 (Appendix C) in October/November 2012, TCE was detected above the Class GA Standard of 5 µg/L in the groundwater samples collected from three overburden monitoring wells and two bedrock monitoring wells; cis-1,2-DCE was detected above the Class GA Standard of 5 µg/L in the groundwater samples collected from three overburden monitoring wells and three bedrock monitoring wells; trans-1,2-DCE was detected above the Class GA Standard of 5 µg/L in the groundwater samples collected from two overburden monitoring wells and one bedrock monitoring wells; and vinyl chloride was detected above the Class GA Standard of 2 µg/L in the groundwater samples collected from five overburden monitoring wells and one bedrock monitoring well.

After the expanded accelerated bioremediation injection of 3DMe® in the overburden groundwater in 2010, the total COC contaminant mass in overburden monitoring wells increased from 12.3 micromoles per liter (µmole/L) prior to the injection to 18.5 µmole/L in May 2011, six months after the injection. This increase is typical for the initial months following a 3DMe® injection, as the 3DMe® causes contaminants to de-sorb from the soil particles in the saturated zone matrix, thus increasing the available contaminant mass in the groundwater.

However, since May 2011 the total contaminant mass has dropped steadily and in October/November 2012, two years after the injection, contaminant mass is at 6.18 µmole/L. The October/November 2012 total contaminant mass is 67% lower than the May 2011 event and 50% lower than the baseline event. Looking at specific COCs, the TCE contaminant mass in overburden wells has decreased steadily from 8.8 µmole/L prior to injection to 2.63 µmole/L in May 2012 and then 2.59 µmole/L in October/November 2012; cis-1,2-DCE increased from 2.4 µmole/L prior to injection to 7.1 µmole/L in May 2011, but has since decreased steadily to 3.3 µmole/L in May 2012 and 2.56 µmole/L in October/November 2012; and vinyl chloride increased from 0.8 µmole/L prior to injection to 4.8 µmole/L in May 2011, but has since decreased to 1.2 µmole/L and 0.78 µmole/L in May and October/November 2012, respectively. All other COCs are at minimal concentrations or were not detected. The contaminant mass values are depicted on Figure 4 (Appendix A). These decreases in contaminant mass indicated that the 3DMe® has enhanced contaminant biodegradation.

Along with the enhanced contaminant biodegradation in the overburden groundwater, there has also been a corresponding response in bedrock COC contaminant mass with a significant decline from the post injection high in May 2012. The contaminant mass initially increased from 22.4 µmole/L prior to the injection to 64.4 µmole/L in May 2012, 18 months after the injection. However, the total COC contaminant mass in the bedrock wells declined in October/November 2012 to 4.7 µmole/L, which is a 79% decrease from the baseline value and a 93% decrease from the May 2012 event. Looking at specific COCs, the TCE contaminant mass has decreased from 14.2 µmole/L prior to the injection to 0.455 µmole/L in October/November 2012, a 97% decrease, and the cis-1,2-DCE contaminant mass has decreased from 7.46 µmole/L prior to the injection to 4.0 µmole/L in October/November 2012, a 46% decrease. All other COCs have had minimal concentrations or were not detected. The contaminant mass values are depicted in Figure 5 (Appendix A). Although historically bedrock concentrations have varied considerably, these substantial decreases in contaminant mass in October/November 2012 indicate that the bedrock groundwater has now been affected by the enhanced contaminant biodegradation in the overlying overburden groundwater.

2.3 POTENTIOMETRIC SURFACE

Associated with each monitoring event, a potentiometric surface map was generated to depict groundwater elevations for the overburden groundwater. Carlson Civil 2013 and AutoCAD 2011

were used to plot the potentiometric surface maps in Appendix A, Figures 6 and 8. This program mathematically calculates contours based upon groundwater elevation measurements collected in the field.

The May and October/November 2012 overburden potentiometric maps (Figures 6 and 8 in Appendix A) were based upon water level information collected during the course of sampling activities on the subject Site. Overburden potentiometric surface mapping for the water level events is similar to past groundwater mapping.

The bedrock water level data cannot readily be plotted due to the large variation in elevation heads. These variations are due to the fractured bedrock system. The head data appears to be bi-modally distributed possibly reflecting differing elevations of water bearing fractures. The historical absence of contaminants at the southwest corner of the Site and their presence in wells along the north and east site perimeter also support the interpretation that bedrock groundwater flow beneath the two source areas is generally towards the north/northeast. Bedrock water level elevations are presented on Figures 7 and 9 in Appendix A.

3.0 ANALYTICAL PROGRAM

Overall data quality is assessed by grouping particular data evaluation findings and reviewing them in terms of precision, accuracy, representativeness, completeness, and comparability (PARCC) criteria. Data generated during this monitoring period were evaluated for PARCC criteria after receipt of all analytical data.

3.1 PRECISION

Precision is a quantitative evaluation of the repeatability of a measurement. Precision of analytical measurements is determined by calculating the relative percent difference (RPD) between the two numerical values. For precision, the matrix spike (MS) is performed in duplicate, and the values from both analyses are evaluated. Comparison of results from duplicate field samples may also be indicative of overall precision of a data set. However, field duplicates may be influenced by sampling precision and are not as controlled as laboratory duplicates.

For quality control purposes, a MS and matrix spike duplicate (MSD) were taken for each set of 20 samples with a net result of one MS/MSD analyses for the May 2012 sampling event and one MS/MSD analyses for the October/November 2012 event. The evaluation of MS/MSD criteria was used to qualify the data. The evaluations of MS/MSD analyses are presented in the following tables.

BR-04 – May 2012

Analyte	MS Value (µg/L)	Recovery (%)	MSD Value (µg/L)	RPD	Control Limits (%)	RPD Limit
cis-1,2-DCE	125	96	125	0.4	68-138	17
trans-1,2-DCE	48.5	91	49.4	2	66-143	16
1,1-Dichloroethene	45.7	91	45.8	0.1	70-142	17
Trichloroethene	108	105	108	0.9	73-144	17
Tetrachloroethene	51.3	103	52.6	3	72-145	16
Vinyl chloride	61.8	118	61.1	1	56-129	17

BR-04 – October/November 2012

Analyte	MS Value (µg/L)	Recovery (%)	MSD Value (µg/L)	RPD	Control Limits (%)	RPD Limit
cis-1,2-DCE	37.42	65	39.64	6	68-138	17
trans-1,2-DCE	34.13	68	36.45	7	66-143	16
1,1-Dichloroethene	38.50	77	43.81	13	70-142	17
Trichloroethene	45.10	80	47.46	5	73-144	17
Tetrachloroethene	37.98	76	41.34	8	72-145	16
Vinyl chloride	30.71	61	33.99	10	56-129	17

The RPD evaluations demonstrate that MS/MSD analyses are within acceptable limits.

Field duplicate sampling followed the same sampling outline as MS/MSD analysis. One duplicate sample was collected for each set of 20 samples, resulting in one duplicate sample for the May 2012 and one duplicate sample for the October/November 2012 sampling event. Field duplicate precision is presented in the following tables.

W-5 – May 2012

Sample ID	Analyte	Practical Quantitation Limit	Sample Result (µg/L)	Flag	Duplicate Result (µg/L)	Flag	RPD
W-5	cis-1,2-Dichloroethene	1	139		136		2.2
	trans-1,2-Dichloroethene	1	5.37		5.19		3.3
	Trichloroethene	5	230		220		4.4
	Vinyl Chloride	1	39.5		37.2		6.0

W-5 – October/November 2012

Sample ID	Analyte	Practical Quantitation Limit	Sample Result (µg/L)	Flag	Duplicate Result (µg/L)	Flag	RPD
W-5	cis-1,2-Dichloroethene	1	85		83.9		1.3
	trans-1,2-Dichloroethene	1	13.1		12.9		1.5
	Trichloroethene	1	195		191		2.1
	Vinyl Chloride	1	34.8		34.2		1.7

Field duplicate precision was evaluated between the two data sets for detected compounds. The RPDs were below the National Functional Data Validation Guideline of 30 for water samples.

3.2 ACCURACY

Accuracy is a quantitative measurement of agreement between an analytical result and the true value. Accuracy is determined by comparing known amounts of analytes, which are added to the sample prior to analysis, to the field analytical results. Accuracy is expressed as a percentage of recovery of the total amount of spiked analyte. For VOC analyses, each sample was spiked with surrogate compounds prior to analysis (and extraction), and chosen samples were spiked (in duplicate) with additional spikes (MS and MSD). Surrogate and MS/MSD recoveries evaluate accuracy and identify interferences from the sample matrix.

Surrogate recoveries were acceptable for VOC analyses for these sampling events.

3.3 REPRESENTATIVENESS

Representativeness is a qualitative measurement of the degree to which analytical results reflect the true concentrations of analytes that may (or not) be present in a sample. Representativeness of organic analytical results of true Site conditions is evaluated using trip blanks, field blanks, method blanks, and rinsates from decontaminated sampling equipment. Target organic compounds in quality control (QC) samples may represent contamination during sampling or transportation of samples to the laboratory. Compliance with holding time and extraction criteria also assures representativeness of results.

One field blank for the May 2012 event and one field blank for the October/November 2012 event were analyzed to characterize the water source used during these sampling events. Distilled water was used by the field crews for field blanks. No target VOCs were detected above the reporting limit in the field blanks.

No target VOCs were detected above the reporting limit in the method blank in May 2012 or October/November 2012.

One trip blank was analyzed during the May 2012 sampling event and one trip blank was analyzed during the October/November 2012 event as part of the VOC laboratory QC program. No target VOCs were detected above the reporting limit in either of the trip blanks.

Equipment rinse samples were collected for each set of 20 samples, using distilled water to rinse field equipment, and analyzed for all target constituents. One rinsate blank was collected during the May 2012 event and the October/November 2012 event. No target VOCs were detected above the reporting limit in any of the rinsate blanks.

Representativeness is considered complete due to the lack of target VOC detections in QC efforts.

3.4 COMPLETENESS

Completeness is a quantitative measurement of the usability of a data set. Completeness is defined as the percentage of data that satisfy validation criteria. Rejected data are not usable.

Data qualified as estimated, however, is usable. Completeness goals were 100 percent for this report and are considered to be met.

3.5 COMPARABILITY

Comparability is a qualitative assessment of the confidence with which different data sets may be used to characterize a site. Comparability is a necessary criterion because sampling is often performed at different times and precision, accuracy, and representativeness are unique to each sampling event. Comparability between data generated at different times at a single site is evaluated by reviewing sample collection and handling procedures, sample matrix, and analytical methods used. Standardization of sampling protocols and analytical methods assures comparability as long as precision and accuracy criteria are satisfied for each data set. The overall analytical performance for this report was evaluated and is considered comparable to previous and future data sets.

4.0 CONCLUSIONS AND RECOMMENDATIONS

A comparison of analytical data from the 29 sampling events that occurred from 2001-2012 provides an evaluation of the Site remedial progress. The following overall conclusions and recommendations have been reached in this remedial progress evaluation:

- Following shutdown of the remedial treatment system in 2006 and subsequent decommissioning in 2010, an expanded accelerated bioremediation injection using 3DMe® was implemented in 2010 as the final required active Site remediation. By accelerating the biodegradation of COCs in the overburden groundwater, the ongoing overall decreases in COC concentrations in overburden and bedrock groundwater have continued at a more rapid rate.

- While certain COCs remain above the NYSDEC Class GA Standards, substantial declines of COC concentrations have been observed in most Site monitoring wells. The greatest decrease has been within the two former source areas where TCE in overburden monitoring wells OB-04 and OB-08 has decreased by more than 99 percent from the historical high for each respective well.

- It is also notable that downgradient overburden perimeter wells TW-04 and TW-09 and bedrock well BR-15 (located beneath former North TCE Source Area) had no COCs detected above the Class GA Standards during the May and October/November sampling events. Additionally, bedrock well BR-04 (located beneath the former South TCE Source Area) had no COCs detected above the Class GA Standards during the October/November event. Should these concentrations continue to remain below Class GA Standards, these wells may be proposed for removal from the groundwater monitoring program and properly decommissioned according to AMEC's *Revised Operations, Maintenance, and Monitoring Manual* (MACTEC, 2010).

- Since the post-injection high concentrations in May 2011, the total contaminant mass in overburden groundwater has declined steadily. In October/November 2012, two years after the injection, contaminant mass is at 6.18 µmole/L. The October/November 2012 total contaminant mass is 67% lower than the May 2011 event and 50% lower than the baseline event. These decreases in contaminant mass indicate that the 3DMe® has enhanced contaminant biodegradation in the overburden monitoring wells.

- Along with the enhanced contaminant biodegradation in the overburden groundwater, there has been a recent corresponding response in bedrock COC contaminant mass. Following a post-injection high in May 2012, the total COC contaminant mass in the bedrock wells declined in October/November 2012 to 4.7 µmole/L, which is a 79% decrease from the baseline value and a 93% decrease from the May 2012 event. These substantial decreases in contaminant mass in October/November 2012

indicate that the bedrock groundwater has now been affected by the enhanced contaminant biodegradation in the overlying overburden groundwater.

- Groundwater monitoring events will continue to be conducted semi-annually on all 14 remaining monitoring wells as detailed in the *Revised Operations, Maintenance, and Monitoring Manual* (MACTEC, 2010). As noted above, AMEC is evaluating selected monitoring wells for removal from the groundwater monitoring program based on one year of monitoring results that were below the Class GA standards.

- Results for future post-closure monitoring events will be provided to NYSDEC in subsequent annual reports. Unless otherwise agreed to by NYSDEC, contaminant conditions will continue to be monitored until groundwater concentrations of the COCs are at or below the NYSDEC Class GA Standards.

- As requested by NYSDEC (NYSDEC, 2013), the Site Periodic Review Report is provided in Appendix B of this report.

5.0 REFERENCES

Harding Lawson Associates, 2000. *Remedial Work Plan, Former Taylor Instruments Site, 95 Ames Street in Rochester, New York*. Prepared for Combustion Engineering by Harding Lawson Associates (April).

MACTEC, 2010. *Operations, Maintenance, and Monitoring Manual, Rev. 1, Former Taylor Instruments Site, Monroe County, New York*. Prepared for the New York State Department of Environmental Conservation by MACTEC Engineering and Consulting, Inc. (December).

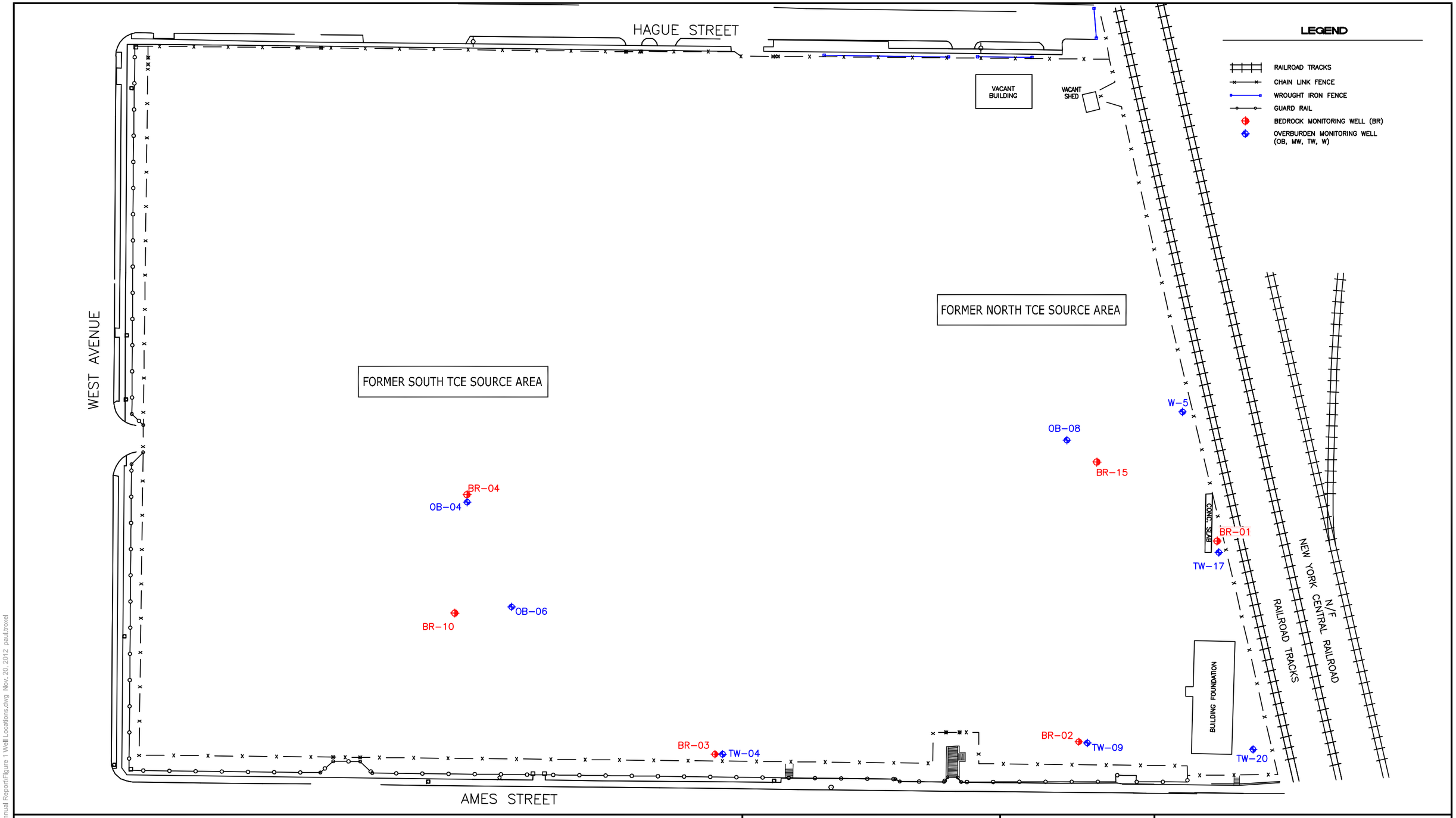
NYSDEC, 1997. Voluntary Cleanup Agreement regarding the Taylor Instruments Site, Number B8-0508-97-02 (November).

NYSDEC, 2005. Letter from Mr. Anthony B. Quartararo with the New York State Department of Environmental Conservation to Ms. Jean H. McCreary with Nixon Peabody LLC (September 2).

NYSDEC, 2013. *Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal Site*. Prepared for the New York State Department of Environmental Conservation for Ms. Melody B. Christopher of ABB, Inc. January 16.

APPENDIX A

FIGURES



NOTES:

AMEC Environment & Infrastructure
9725 Cogdill Road
Knoxville, Tennessee 37932

CLIENT: ABB

TITLE:

WELL LOCATIONS

ANNUAL REPORT 2012

FORMER TAYLOR INSTRUMENTS SITE, ROCHESTER, NEW YORK

DR:	REV:	PROJ. NO.:
APT	JD	3031-05-2006
CHK:	DATE:	DWG NO.
CW	11-20-2012	NA
SCALE: AS SHOWN		FIGURE 1

K:\CADD\Projects\30310052006 ABB\2012 Annual Report\Figure 1 Well Locations.dwg Nov. 20, 2012 paul.trovel

HAGUE STREET

WEST AVENUE

AMES STREET

VACANT BUILDING

VACANT SHED

BUILDING FOUNDATION

CONC. SLAB

N/F NEW YORK CENTRAL RAILROAD TRACKS

LEGEND

- OVERBURDEN MONITORING WELL (OB, MW, TW, W)
- BEDROCK MONITORING WELL (BR)
- DCE DICHLOROETHENE
- PCE TETRACHLOROETHENE (PERCHLOROETHENE)
- TCE TRICHLOROETHENE
- U NON DETECT
- µg/L MICROGRAMS PER LITER
- RESULTS ABOVE NYSDEC CLASS GA STANDARD

	NYSDEC CLASS GA groundwater standard	(units:ug/L)
Site ID: OB-XX		
Analyte		MAY 08
PCE	5	1 U
TCE	5	1 U
cis-1,2-DCE	5	41.4
trans-1,2-DCE	5	8.07
1,1-DCE	5	NS
Vinyl Chloride	2	47.8

SITE ID

DATE SAMPLED

NOT DETECTED AT THE INDICATED QUANTITATION LIMIT

DETECTED

NOT SAMPLED

NOTE: HISTORICAL HIGH OBTAINED FROM DATA FROM THE TIME FRAMES OF ACTIVE REMEDIATION OCT/NOV 2000 TO PRESENT.

BASELINE IS THE MAY 2010 EVENT CONDUCTED PRIOR TO THE EXPANDED ACCELERATED BIOREMEDIATION APPLICATION.

Site ID: OB-04				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	19.9	1 U	1 U	1 U
TCE	71,500	5.76	4.35	3.94
cis-1,2-DCE	56,000	5.69	2.05	2.31
trans-1,2-DCE	170	1.77	1.26	1 U
1,1-DCE	108	1 U	1 U	1 U
Vinyl Chloride	145	9.74	8.69	4.25

Site ID: W-5				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	2.41	1 U	1 U	1 U
TCE	1,435	601	230	195
cis-1,2-DCE	340	164	139	85
trans-1,2-DCE	13.1	2.08	5.37	13.1
1,1-DCE	1 U	1 U	1 U	1 U
Vinyl Chloride	39.5	5.04	39.5	34.8

Site ID: OB-08				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	13.1	1 U	1 U	1 U
TCE	40,000	1 U	1 U	1 U
cis-1,2-DCE	3,750	30.5	3.78	1 U
trans-1,2-DCE	32	3.44	11.1	11.2
1,1-DCE	12.9	1 U	1 U	1 U
Vinyl Chloride	249	36	13.2	3.15

Site ID: OB-06				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	1 U	1 U	1 U	1 U
TCE	5,600	105	25.4	34.3
cis-1,2-DCE	240	10.5	7.56	6.63
trans-1,2-DCE	1.28	1 U	1 U	1 U
1,1-DCE	1 U	1 U	1 U	1 U
Vinyl Chloride	13.8	1 U	2.72	3.86

Site ID: TW-17				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	1 U	1 U	1 U	1 U
TCE	1,000	316	2.16	1 U
cis-1,2-DCE	310	10.6	156	147
trans-1,2-DCE	5.92	1 U	1 U	1 U
1,1-DCE	1 U	1 U	1 U	1 U
Vinyl Chloride	6.28	1 U	6.28	2.66

Site ID: TW-20				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	1 U	1 U	1 U	1 U
TCE	107	65.9	80.8	107
cis-1,2-DCE	8.3	2.34	4.58	4.11
trans-1,2-DCE	1 U	1 U	1 U	1 U
1,1-DCE	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U

Site ID: TW-04				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	1 U	1 U	1 U	1 U
TCE	51.1	5.32	1.66	1 U
cis-1,2-DCE	79	1 U	1.56	2.85
trans-1,2-DCE	1 U	1 U	1 U	1 U
1,1-DCE	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U

Site ID: TW-09				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	1 U	1 U	1 U	1 U
TCE	230	56.7	1.18	1 U
cis-1,2-DCE	36	12.8	1.11	1 U
trans-1,2-DCE	34.6	14.3	2.99	1 U
1,1-DCE	1 U	1 U	1 U	1 U
Vinyl Chloride	6.26	1 U	1.97	1 U

OB-08 BR-15 W-5 BR-04 OB-04 OB-06 BR-10 BR-01 TW-17 BR-03 TW-04 BR-02 TW-09 TW-20

N

0' 40' 80' 120'

1" = 80'

AMEC Environment & Infrastructure, Inc.
9725 Cogdill Road
Knoxville, Tennessee 37932

CLIENT: ABB

TITLE:

VOCs IN OVERBURDEN MONITORING WELLS

ANNUAL REPORT 2012

FORMER TAYLOR INSTRUMENTS SITE, ROCHESTER, NEW YORK

DR:	REV:	PROJ. NO.:
APT	JD	3031-05-2006
CHK:	DATE:	DWG NO.
CW	11-19-2012	NA
SCALE:		FIGURE 2
AS SHOWN		

K:\CADD\Projects\3031052006 ABB\2012 Annual Report\Figure 2 Annual 2012 VOCs OB.dwg Dec. 14, 2012 paul.troxel

HAGUE STREET

WEST AVENUE

AMES STREET

VACANT BUILDING

VACANT SHED

N/F NEW YORK CENTRAL RAILROAD

RAILROAD TRACKS

CONC SLAB

BUILDING FOUNDATION

LEGEND

- OVERBURDEN MONITORING WELL (OB, MW, TW, W)
- BEDROCK MONITORING WELL (BR)
- DCE DICHLOROETHENE
- PCE TETRACHLOROETHENE (PERCHLOROETHENE)
- TCE TRICHLOROETHENE
- U NON DETECT
- µg/L MICROGRAMS PER LITER
- RESULTS ABOVE NYSDEC CLASS GA STANDARD

Site ID: BR-XX	NYSDEC CLASS GA groundwater standard	(units:ug/L) MAY 08
Analyte		
PCE	5	1 U
TCE	5	1 U
cis-1,2-DCE	5	41.4
trans-1,2-DCE	5	8.07
1,1-DCE	5	NS
Vinyl Chloride	2	47.8

SITE ID — DATE SAMPLED — NOT DETECTED AT THE INDICATED QUANTITATION LIMIT — DETECTED — NOT SAMPLED

NOTE: HISTORICAL HIGH OBTAINED FROM DATA FROM THE TIME FRAMES OF ACTIVE REMEDIATION OCT/NOV 2000 TO PRESENT.

BASELINE IS THE MAY 2010 EVENT CONDUCTED PRIOR TO THE EXPANDED ACCELERATED BIOREMEDIATION APPLICATION.

W-5

OB-08

BR-15

Site ID: BR-15				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	1 U	1 U	1 U	1 U
TCE	6,590	167	1 U	1 U
cis-1,2-DCE	1,390	123	1 U	1 U
trans-1,2-DCE	43.8	2.12	1 U	1 U
1,1-DCE	12.8	1 U	1 U	1 U
Vinyl Chloride	199	3.11	1 U	1 U

BR-01

TW-17

Site ID: BR-01				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	1 U	1 U	1 U	1 U
TCE	551	9.23	89.6	1 U
cis-1,2-DCE	550	12.8	34.7	29.6
trans-1,2-DCE	20.6	2.02	1.87	1 U
1,1-DCE	1 U	1 U	1 U	1 U
Vinyl Chloride	7.88	1 U	3.13	7.88

Site ID: BR-04				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	1.8	1 U	1 U	1 U
TCE	10,000	325	55.1	4.9
cis-1,2-DCE	6,410	321	76.6	4.77
trans-1,2-DCE	147	11.7	2.9	1 U
1,1-DCE	21.3	1.37	1 U	1 U
Vinyl Chloride	32.2	1 U	2.72	1 U

BR-04

OB-04

OB-06

BR-10

Site ID: BR-10				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	2.94	1.72	1.28	1 U
TCE	8,700	277	532	7.28
cis-1,2-DCE	1,700	77.3	192	2.21
trans-1,2-DCE	82.8	14	24	1 U
1,1-DCE	4.7	1 U	1 U	1 U
Vinyl Chloride	16.1	1 U	1.13	1 U

Site ID: BR-03				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	1 U	1 U	1 U	1 U
TCE	1,150	270	573	3.06
cis-1,2-DCE	329	3.15	43.4	329
trans-1,2-DCE	6.71	1 U	1.18	6.71
1,1-DCE	3.1	1 U	1.89	1.71
Vinyl Chloride	1 U	1 U	1 U	1 U

BR-03

TW-04

Site ID: BR-02				(units: µg/L)
Analyte	Historical High	Baseline	May-12	Nov-12
PCE	1.32	1 U	1 U	1 U
TCE	7,000	921	5070	44.5
cis-1,2-DCE	19,100	186	1100	23.3
trans-1,2-DCE	154	21.9	49.4	4.69
1,1-DCE	156	1.76	8.67	1 U
Vinyl Chloride	68.1	2.25	22	1 U

BR-02

TW-09

TW-20

N

0' 40' 80' 120'

1" = 80'

AMEC Environment & Infrastructure, Inc.
9725 Cogdill Road
Knoxville, Tennessee 37932

CLIENT: ABB

TITLE:

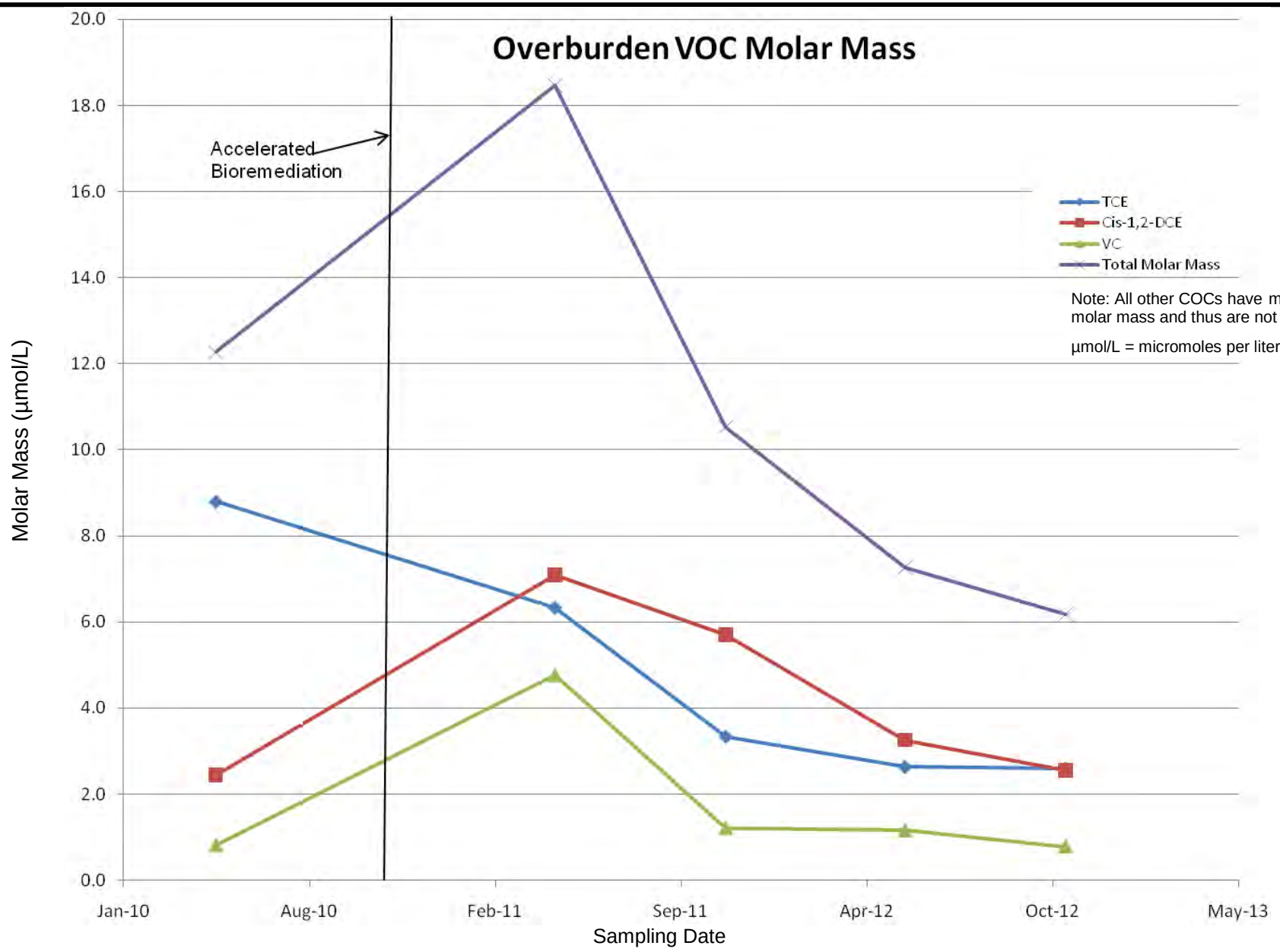
VOCs IN BEDROCK MONITORING WELLS

ANNUAL REPORT 2012

FORMER TAYLOR INSTRUMENTS SITE, ROCHESTER, NEW YORK

DR:	REV:	PROJ. NO.:
APT	JD	3031-05-2006
CHK:	DATE:	DWG NO.
CW	11-19-2012	NA
SCALE: AS SHOWN		FIGURE 3

K:\CADD\Projects\30310520006 ABB\2012 Annual Report\Figure 3 Annual 2012 VOCs BR.dwg Dec. 14, 2012 paul.troxel

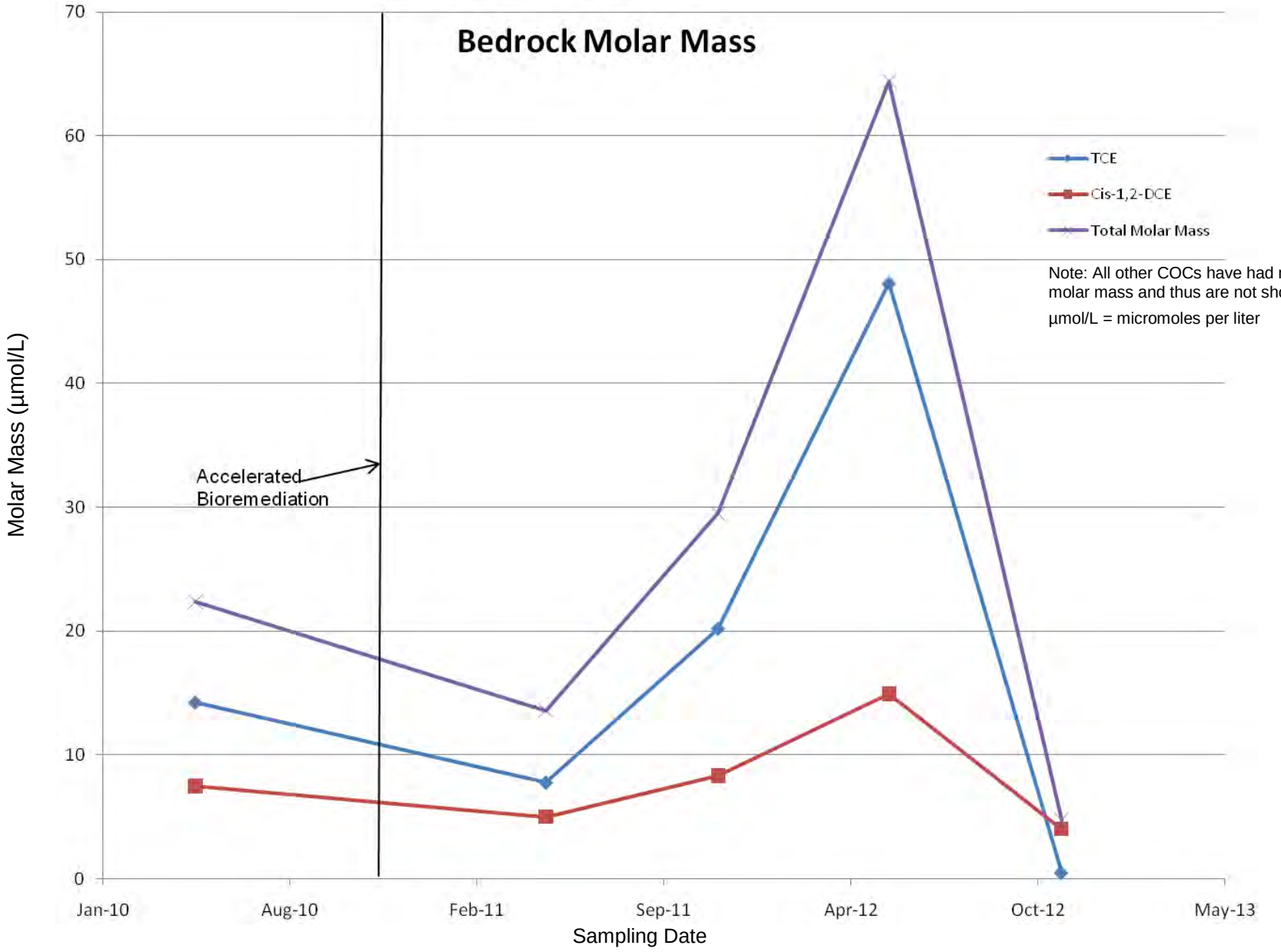


AMEC Environment & Infrastructure, Inc.
9725 Cogdill Road
Knoxville, TN 37932

Prepared by/Date: CRW 11/19/12

Checked by/Date: KJD 11/19/12

FIGURE 4: OVERBURDEN MOLAR MASS GRAPH
FORMER TAYLOR INSTRUMENTS SITE
ROCHESTER, NEW YORK

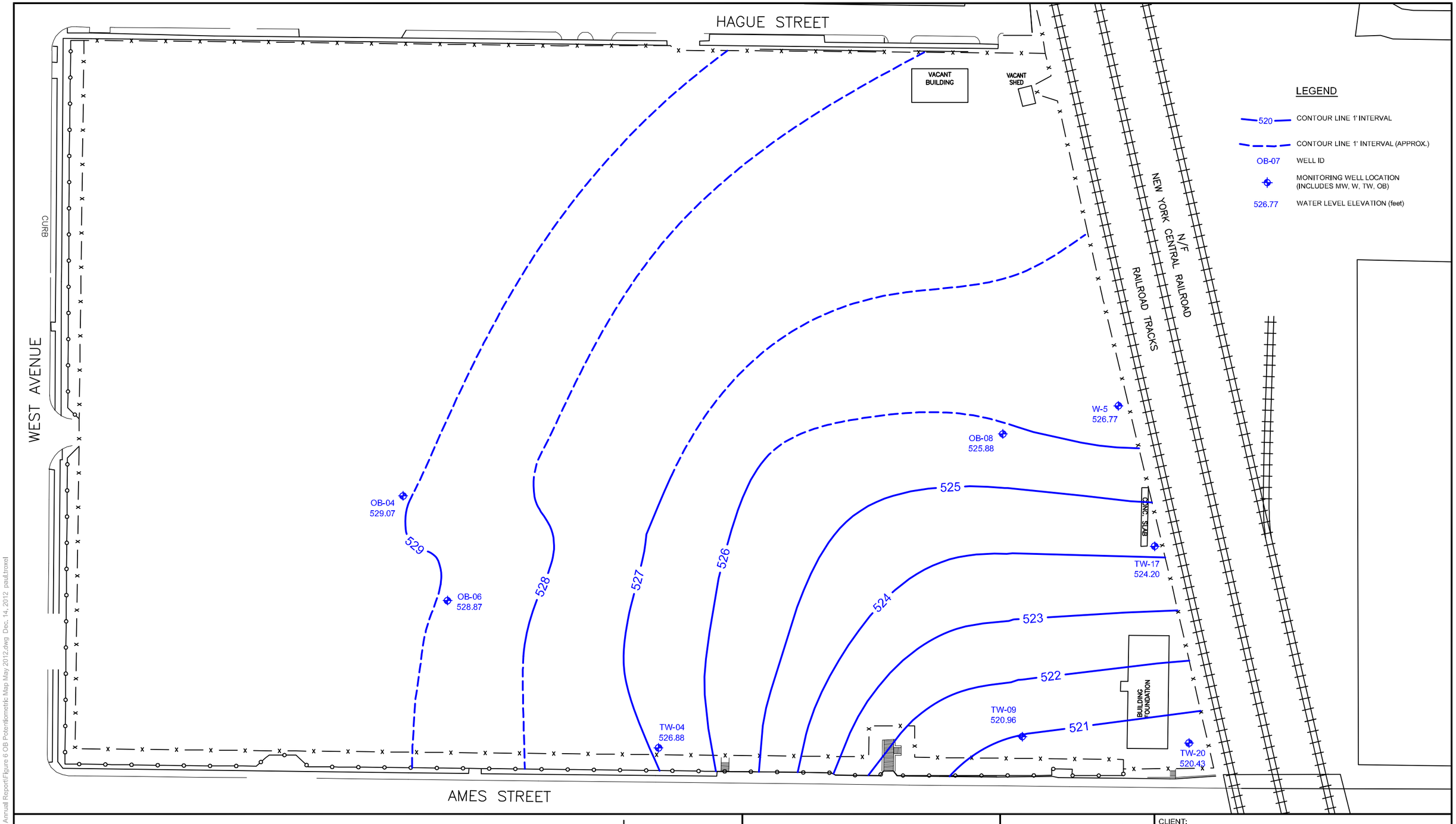


AMEC Environment & Infrastructure, Inc.
9725 Cogdill Road
Knoxville, TN 37932

Prepared by/Date: CRW 11/20/12

Checked by/Date: KJD 11/20/12

FIGURE 5: BEDROCK MOLAR MASS GRAPH
FORMER TAYLOR INSTRUMENTS SITE
ROCHESTER, NEW YORK



NOTES:

N

0' 40' 80' 120'

1" = 80'

AMEC Environment & Infrastructure
9725 Cogdill Road
Knoxville, Tennessee 37932

CLIENT: ABB

TITLE: OVERBURDEN POTENTIOMETRIC SURFACE MAP
MAY 2012 SAMPLING EVENT
ANNUAL REPORT 2012
FORMER TAYLOR INSTRUMENTS SITE, ROCHESTER, NEW YORK

DR:	REV:	PROJ. NO.:
APT	JD	3031-05-2006
CHK:	DATE:	DWG NO.
CW	11-20-2012	NA
SCALE:		FIGURE 6
AS SHOWN		

K:\CAD\Projects\3031052006 ABB\2012 Annual Report\Figure 6 OB Potentiometric Map May 2012.dwg Dec. 14, 2012 paul.troxel

HAGUE STREET

VACANT BUILDING

VACANT SHED

CURB

WEST AVENUE

N/F NEW YORK CENTRAL RAILROAD RAILROAD TRACKS

CONC. SLAB

BUILDING FOUNDATION

BR-15
513.37

BR-04
514.87

BR-01
518.90

BR-10
514.89

BR-03
526.38

BR-02
510.18

AMES STREET

LEGEND

BR-01	WELL ID BEDROCK WELL
	LOCATION WATER LEVEL
519.19	WATER LEVEL ELEVATION (feet)

NOTES:

N

0' 40' 80' 120'

1" = 80'

AMEC Environment & Infrastructure
9725 Cogdill Road
Knoxville, Tennessee 37932

CLIENT: ABB

TITLE: BEDROCK GROUNDWATER ELEVATIONS
MAY 2012 SAMPLING EVENT
ANNUAL REPORT 2012
FORMER TAYLOR INSTRUMENTS SITE, ROCHESTER, NEW YORK

DR:	REV:	PROJ. NO.:
APT	JD	3031-05-2006
CHK:	DATE:	DWG NO.
CW	11-20-2012	NA
SCALE: AS SHOWN		FIGURE 7

K:\CAD\Projects\3031052006 ABB\2012 Annual Report\[Figure 7 BR GW Elevations Map May 2012.dwg Dec. 14, 2012 paul.troxel

HAGUE STREET

WEST AVENUE

CURB

AMES STREET

VACANT BUILDING

VACANT SHED

N/F NEW YORK CENTRAL RAILROAD RAILROAD TRACKS

CONC. SLAB

BUILDING FOUNDATION

531

530

529

528

527

526

525

524

523

522

OB-04
531.14

OB-06
529.95

TW-04
528.10

OB-08
526.84

W-5
527.33

TW-17
526.38

TW-09
523.57

TW-20
521.70

LEGEND

520 — CONTOUR LINE 1' INTERVAL

CONTOUR LINE 1' INTERVAL (APPROX.)

OB-07 WELL ID

MONITORING WELL LOCATION (INCLUDES MW, W, TW, OB)

527.33 WATER LEVEL ELEVATION (feet)

NOTES:

N

0' 40' 80' 120'

1" = 80'

AMEC Environment & Infrastructure
9725 Cogdill Road
Knoxville, Tennessee 37932

CLIENT: ABB

TITLE: OVERBURDEN POTENTIOMETRIC SURFACE MAP
OCTOBER / NOVEMBER 2012 SAMPLING EVENT
ANNUAL REPORT 2012
FORMER TAYLOR INSTRUMENTS SITE, ROCHESTER, NEW YORK

DR:	REV:	PROJ. NO.:
APT	JD	3031-05-2006
CHK:	DATE:	DWG NO.
CW	11-20-2012	NA
SCALE:		
AS SHOWN		FIGURE 8

K:\CADD\Projects\303105\2006 ABB\2012 Annual Report\Figure 8 OB Potentiometric Map Nov 2012 Revised.dwg Dec. 14, 2012 paul.troxel

HAGUE STREET

WEST AVENUE

CURB

AMES STREET

VACANT BUILDING

VACANT SHED

N/F NEW YORK CENTRAL RAILROAD RAILROAD TRACKS

CONC. SLAB

BUILDING FOUNDATION

BR-01
519.45

BR-02
510.44

BR-03
528.85

BR-04
515.03

BR-10
514.99

BR-15
513.64

LEGEND

BR-01 WELL ID BEDROCK WELL

LOCATION WATER LEVEL

519.19 WATER LEVEL ELEVATION (feet)

NOTES:

N

0' 40' 80' 120'

1" = 80'

AMEC Environment & Infrastructure
9725 Cogdill Road
Knoxville, Tennessee 37932

CLIENT: ABB

TITLE:

BEDROCK GROUNDWATER ELEVATIONS

OCTOBER / NOVEMBER 2012 SAMPLING EVENT - ANNUAL REPORT 2012

FORMER TAYLOR INSTRUMENTS SITE, ROCHESTER, NEW YORK

DR:	REV:	PROJ. NO.:
APT	JD	3031-05-2006
CHK:	DATE:	DWG NO.
CW	11-20-2012	NA
SCALE:		FIGURE 9
AS SHOWN		

K:\CAD\Projects\3031052006 ABB\2012 Annual Report\[Figure 9 BR GW Elevations Map Nov 2012.dwg Dec. 14, 2012 paul.troxel

APPENDIX B

PERIODIC REVIEW REPORT

APPENDIX B
PERIODIC REVIEW REPORT

Introduction

This Periodic Review Report (PRR) was prepared to fulfill the requirements of the New York State Department of Environmental Conservation's (NYSDEC) request for a Site Management PRR as requested in a letter dated January 16, 2013 (NYSDEC, 2013).

Executive Summary

The Site was the location of the former Taylor Instruments facility that was operated from 1904 to 1994 under a variety of owners. In 1993 Combustion Engineering (CE) closed the facility. The Site is currently vacant. In 1997 a Voluntary Clean-up Agreement (VCA) was executed between CE and NYSDEC (VCA Index #B8-0508-97-02, NYSDEC, 1997).

Following extensive soil excavation, filling and capping, and other remedial activities, a groundwater remedy for chlorinated volatile organic compounds (VOCs) was implemented from January 2001 to May 2006. This included an on-site remedial treatment system which consisted of a dual-phase vacuum extraction (DPVE) and bedrock groundwater extraction and treatment system (System).

Upon reaching the conclusion that the System had reached asymptotic contaminant removal rates, in July 2006 AMEC Environment & Infrastructure, Inc. (AMEC) (formerly MACTEC Engineering and Consulting, Inc. [MACTEC]) initiated a pilot-scale application of Hydrogen Release Compound (HRC) Advanced® near monitoring wells OB-08 in the North Trichloroethene (TCE) Source Area and OB-04 in the South TCE Source Area of the Site to evaluate the effectiveness of HRC Advanced® in accelerating the biodegradation of the Site contaminants of concern (COCs) in lieu of further operation of the System. The System was shut down prior to the pilot test and remained off thereafter to optimize reducing conditions after implementation of the pilot application. The HRC Advanced® was effective in reducing TCE contamination in the overburden groundwater within the North and South TCE Source Areas.

Following NYSDEC's approval of MACTEC's *Revised Work Plan for Accelerated Bioremediation and Permanent Decommissioning of the Remediation Treatment System* (MACTEC, 2010a) in 2010, the System was decommissioned, an expanded application of 3-D Microemulsion® (3DMe®, formerly HRC Advanced®) was implemented, and post-closure monitoring of natural attenuation was implemented starting in 2011. Unless otherwise agreed to by NYSDEC, contaminant conditions will continue to be monitored until groundwater concentrations of the COCs are at or below NYSDEC Class GA Standards. Decommissioning included removal of all above-ground components of the remedial treatment system, plugging the ends of all underground system piping with silicon seal, and abandonment of all wells (extraction, monitoring, and vent wells) except for the 14 monitoring wells (BR-01, BR-02, BR-03, BR-04, BR-10, BR-15, OB-04, OB-06, OB-08, TW-04, TW-09, TW-17, TW-20, and W-5) that are to be included in the post-closure natural attenuation monitoring. Figure 1 (Attachment A) depicts the former and existing monitoring wells. In October 2010, AMEC completed the expanded accelerated bioremediation application using 3DMe® in the vicinities of the remaining source area overburden monitoring wells and along the eastern portion of the Site.

Also in cooperation with the NYSDEC and the New York State Department of Health in 2010, ABB agreed to investigate sub-slab vapor and indoor air (SSIA) at eight residences near previous soil vapor sample collection points beneath Ames Street (i.e., residences at 64, 70, and 80 Ames Street; 195, 215, and 216 Danforth Street; and 7 and 15 Lynchford Park B). Based on the review of results from the SSIA investigation, ABB installed a sub-slab depressurization (SSD) system to mitigate sub-slab vapor at the 80 Ames/215 Danforth duplex residences.

Complete details of the system decommissioning, 3DMe® injection, and SSD system installation were provided in the *Construction Completion Report* (CCR) (MACTEC, 2010b) which was approved by NYSDEC on February 16, 2011 (NYSDEC, 2011a).

Overburden and bedrock monitoring wells located on the Site have been sampled regularly from 2001 to 2012. Analytical data from the most recent November 2012 groundwater sampling event indicates that while certain COCs remain above the

NYSDEC Class GA drinking water standards, overall substantial declines of COC concentrations have been observed in most Site monitoring wells.

During the past reporting period, no areas of non-compliance were noted. Additionally, no changes to the *Soil Management Plan* (MACTEC, 2005), the revised *Operations, Maintenance, and Monitoring* (OM&M) *Manual* (MACTEC, 2010c) or frequency of PRRs submittals are recommended. The requirements for discontinuing the Site management have not yet been met.

Site Overview

The Site is located at 95 Ames Street in Rochester, New York. The approximately 14-acre Site is vacant, containing a fabricated building that previously housed the System as well as a second small storage shed. The Site is mostly paved and is surrounded by a chain link fence. North of the Site are a railroad line and a commercial/industrial property; to the east across Ames Street are a food processing facility, residences, and a community center; to the south across West Avenue are residences; and to the west across Hague Street is Rochester Gas and Electric. Figure 2 (Attachment A) depicts the current Site layout.

Prior to Site remediation, Site assessments identified the following contaminants:

Site Contamination

- Mercury and TCE were the principal Site contaminants present in Site soils.
- VOCs were being released from the North and South TCE Source Areas to soil and bedrock groundwater at concentrations exceeding groundwater quality standards. TCE was the predominant site-related VOC in overburden and bedrock groundwater samples.
- Soil gas samples collected from downgradient Site perimeter locations contained TCE along with tetrachloroethene and dichloroethene at less frequent detections and lower concentrations.
- TCE and its degradation products were found at several locations in on-site sewers; they were the only VOCs detected. Mercury was detected at low levels in each of the water samples obtained from on-site sewer locations**.**

Complete details on the nature and extent of contamination prior to Site remediation were provided in the *Final Investigative Report* (Harding Lawson Associates, 1999).

Remedial Program

Comprehensive remedial actions implemented at the Site were previously detailed in the *Final Engineering Report, On-Site Storm Sewers* (Harding Lawson Associates, 2000a) [2000 FER], and the *Final Engineering Report* (MACTEC, 2003) [2003 FER]. The FER also contained the *Soil Management Plan* (MACTEC, 2005) which contains details on the Site engineering and institutional controls that have been recorded at the Site. These reports were all approved by NYSDEC.

Subsequent to the 2003 FER, the NYSDEC issued an *Assignable Release and Covenant Not to Sue* (AR-CNTS) (NYSDEC, 2005), subject to implementation of an Operations and Maintenance (O&M) Plan that acknowledged the satisfactory implementation of all Site remedial actions. The AR-CNTS indicated that:

> "*…no further investigation or response will be required at the Site respecting the Existing Contaminations to render the Site safe to be used for the Contemplated Uses." … "The Department, therefore, hereby releases,… Volunteer for the further investigation and remediation of the Site, based on the release of threatened release of any Existing Contamination, provided that … Volunteer pursue to completion the Department-approved O&M Plan…"*

The Site is currently in post-closure groundwater monitoring. Fourteen remaining groundwater monitoring wells are sampled semi-annually for analysis of the six primary contaminants of concern remaining at the Site: tetrachloroethene; TCE; cis-1,2-dichloroethene (cis-1,2-DCE); trans-1,2-dichloroethene (trans-1,2-DCE); 1,1-dichloroethene (1,1-DCE); and vinyl chloride by Environmental Protection Agency (EPA) Method 8260B. Additionally, the groundwater samples will be tested for the full suite of 8260B constituents once every five years and prior to ending monitoring at any specified well. Unless otherwise agreed to by NYSDEC, contaminant conditions will continue to be monitored until groundwater concentrations of the COCs are at or below the NYSDEC Class GA Standards.

Complete details of the remedial program were provided in the April 2000 *Remedial Work Plan* (Harding Lawson Associates, 2000b), the *Final Engineering Report* (MACTEC, 2003), and the CCR (MACTEC, 2010b).

Evaluation of Remedy Performance, Effectiveness, and Protectiveness

The most current assessment of the effectiveness of the final Site remedial action is presented in the *2012 Annual Progress Report and Remedial Progress Evaluation* (AMEC, 2013).

Institutional and Engineering Control (IC/EC) Plan Compliance Report

Specific details on IC/ECs for the Site were provided in the *Remedial Work Plan* (Harding Lawson Associates, 2000b), the *Soil Management Plan* (MACTEC, 2005), and the revised OM&M Manual (MACTEC, 2010c). Certification of the IC/ECs is provided in the NYSDEC-approved certification form (Attachment B).

Monitoring Plan Compliance Report

The scope of the May and November 2012 semi-annual monitoring events, as well as future post-closure monitoring events, is provided in the revised OM&M Manual (MACTEC, 2010c). A summary of recent monitoring, comparisons with remedial objectives, and conclusions and recommendations are provided in the 2012 Annual Progress Report (AMEC, 2013). AMEC has not identified deficiencies with the monitoring plan.

O&M Plan Compliance Report

The original Site O&M Manual (Harding ESE, 2001) governed all sampling events prior to the May 2011 monitoring event. The components of the plan included details of the DPVE System, including System maintenance; Site health and safety; Site environmental sampling; and reporting and notification requirements. The revised OM&M Manual (MACTEC, 2010c), which governs OM&M activities beginning in 2011, was approved by NYSDEC on March 3, 2011 (NYSDEC, 2011b). The components of the revised OM&M

Manual include Site groundwater monitoring, SSD system O&M, IC/ECs, and reporting and certification requirements.

O&M activities completed during the 2012 reporting period included two site-wide groundwater sampling events; yearly inspection of a SSD system at an off-site residential duplex; and the submittal of the 2012 Annual Progress Report (AMEC, 2013) to NYSDEC. The yearly inspection of the SSD system at the off-site residential duplex located at 80 Ames Street/215 Danforth Street was conducted on October 29, 2012 by the installation contractor, Mitigation Tech (National Environmental Health Association National Radon Proficiency Program ID certification #100722). Mitigation Tech certified that the SSD system is effectively maintaining sub-slab depressurization. The inspection report is included as Attachment C. AMEC has not identified deficiencies with the revised OM&M Manual (MACTEC, 2010c).

Overall PRR Conclusions and Recommendations

Compliance with the revised Site O&M Manual (MACTEC, 2010c) including performance and effectiveness of the Site remedy is detailed in the 2012 Annual Progress Report (AMEC, 2013). As indicated in that report, a comparison of analytical data from the 29 sampling events that occurred in 2001-2012 provides an evaluation of the Site remedial progress. The following overall conclusions and recommendations have been reached in this remedial progress evaluation:

- Following shutdown of the remedial treatment system in 2006 and subsequent decommissioning in 2010, an expanded accelerated bioremediation injection using 3DMe® was implemented in 2010 as the final required active Site remediation. By accelerating the biodegradation of COCs in the overburden groundwater, the ongoing overall decreases in COC concentrations in overburden and bedrock groundwater have continued at a more rapid rate.

- While certain COCs remain above the NYSDEC Class GA Standards, substantial declines of COC concentrations have been observed in most Site monitoring wells. The greatest decrease has been within the two former source areas where TCE in overburden monitoring wells OB-04 and OB-08 has decreased by more than 99 percent from the historical high for each respective well.

- It is also notable that downgradient overburden perimeter wells TW-04 and TW-09 and bedrock well BR-15 (located beneath former North TCE

Source Area) had no COCs detected above the Class GA Standards during the May and October/November sampling events. Additionally, bedrock well BR-04 (located beneath the former South TCE Source Area) had no COCs detected above the Class GA Standards during the October/November event. Should these concentrations continue to remain below Class GA Standards, these wells may be proposed for removal from the groundwater monitoring program and properly decommissioned according to AMEC's *Revised Operations, Maintenance, and Monitoring Manual* (MACTEC, 2010).

- Since the post-injection high concentrations in May 2011, the total contaminant mass in overburden groundwater has declined steadily. In October/November 2012, two years after the injection, contaminant mass is at 6.18 µmole/L. The October/November 2012 total contaminant mass is 67% lower than the May 2011 event and 50% lower than the baseline event. These decreases in contaminant mass indicate that the 3DMe® has enhanced contaminant biodegradation in the overburden monitoring wells.

- Along with the enhanced contaminant biodegradation in the overburden groundwater, there has been a recent corresponding response in bedrock COC contaminant mass. Following a post-injection high in May 2012, the total COC contaminant mass in the bedrock wells declined in October/November 2012 to 4.7 µmole/L, which is a 79% decrease from the baseline value and a 93% decrease from the May 2012 event. These substantial decreases in contaminant mass in October/November 2012 indicate that the bedrock groundwater has now been affected by the enhanced contaminant biodegradation in the overlying overburden groundwater.

- Groundwater monitoring events will continue to be conducted semi-annually on all 14 remaining monitoring wells as detailed in the *Revised Operations, Maintenance, and Monitoring Manual* (MACTEC, 2010). As noted above, AMEC is evaluating selected monitoring wells for removal from the groundwater monitoring program based on one year of monitoring results that were below the Class GA standards.

- In September 2010, ABB installed an SSD system to mitigate vapors beneath the basement at the 80 Ames Street/215 Danforth Street duplex as a precautionary measure. The yearly SSD system inspection and maintenance was performed by the installation contractor Mitigation Tech on October 29, 2012 and Mitigation Tech certified that the SSD System is effectively maintaining sub-slab depressurization. Inspections will continue to be performed by Mitigation Tech annually.

References

AMEC, 2013. *2012 Annual Progress Report and Remedial Progress Evaluation*, *Former Taylor Instruments Site, Rochester, New York*. Prepared for ABB, Inc., by AMEC Environment and Infrastructure, Inc. (February).

Harding ESE, 2001. *Dual-Phase Vacuum Extraction Remediation System Operation and Maintenance Manual (OM&M)*, prepared for the former Taylor Instruments Site, 95 Ames Street in Rochester, New York by Harding ESE (March).

Harding Lawson Associates, 1999. *Final Investigative Report, Taylor Instruments Site, Rochester, New York.* Prepared for the New York State Department of Environmental Conservation by Harding Lawson Associates (March).

Harding Lawson Associates, 2000a. *Final Engineering Report, On-Site Storm Sewers, Former Taylor Instruments Site, Rochester, New York.* Prepared for Combustion Engineering by Harding Lawson Associates (January).

Harding Lawson Associates, 2000b. *Remedial Work Plan, Taylor Instruments Site, 95 Ames Street, Rochester, New York.* Prepared for Combustion Engineering by Harding Lawson Associates (April).

MACTEC, 2003. *Final Engineering Report, Former Taylor Instruments Site, Rochester, New York.* Prepared for Combustion Engineering by MACTEC Engineering and Consulting, Inc. (September).

MACTEC, 2005. *Soil Management Plan, Former Taylor Instruments Facility, 95 Ames Street, Rochester, New York 14611.* Prepared for Combustion Engineering by MACTEC Engineering and Consulting, Inc. (April).

MACTEC, 2010a. *Revised Work Plan for Accelerated Bioremediation and Permanent Decommissioning of the Remedial Treatment System, Former Taylor Instruments Site, 95 Ames Street in Rochester, New York.* Prepared for the New York State Department of Environmental Conservation by MACTEC Engineering and Consulting, Inc. (June 11).

MACTEC, 2010b. *Construction Completion Report, Former Taylor Instruments Site, Monroe County, New York*. Prepared for the New York State Department of Environmental Conservation by MACTEC Engineering and Consulting, Inc. (December).

MACTEC, 2010c. *Operations, Maintenance, and Monitoring Manual, Rev. 1, Former Taylor Instruments Site, Monroe County, New York*. Prepared for the New York State Department of Environmental Conservation by MACTEC Engineering and Consulting, Inc. (December)

NYSDEC, 1997. Voluntary Cleanup Agreement, Taylor Instruments Site, Number B8-0508-97-02 (November).

NYSDEC, 2005. Letter from Mr. Anthony B. Quartararo with the New York State Department of Environmental Conservation to Ms. Jean H. McCreary with Nixon Peabody LLC (September 2).

NYSDEC, 2010. Email from Mr. Frank Sowers with the New York State Department of Environmental Conservation to Mr. Ricky A. Ryan with MACTEC Engineering and Consulting, Inc. (October 27).

NYSDEC, 2011a. Letter from Mr. Frank Sowers with the New York State Department of Environmental Conservation to Ricky Ryan of AMEC Environment and Infrastructure, Inc., approving the CCR (February 16).

NYSDEC, 2011b. Letter from Mr. Frank Sowers with the New York State Department of Environmental Conservation to Ricky Ryan of AMEC Environment and Infrastructure, inc., approving the *Operations, Maintenance, and Monitoring Manual, Rev. 1, Former Taylor Instruments Site, Monroe County, New York.* (March 3).

NYSDEC, 2013. *Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal Site*. Prepared for the New York State Department of Environmental Conservation for Ms. Melody B. Christopher of ABB, Inc. (January 16).

Acronym List

2000 FER	*Final Engineering Report, On-Site Storm Sewers* (Harding Lawson Associates, 2000a)
2003 FER	*Final Engineering Report* (MACTEC, 2003)
3DMe®	3D Microemulsion®
µmole/L	micromole per liter
AMEC	AMEC Environment & Infrastructure, Inc.
AR-CNTS	Assignable Release and Covenant Not to Sue
CCR	*Construction Completion Report* (MACTEC, 2010b)
CE	Combustion Engineering
COC	contaminant of concern
1,1-DCE	1,1-dichloroethene
cis-1,2-DCE	cis-1,2-dichloroethene
trans-1,2-DCE	trans-1,2-dichloroethene
DPVE	dual-phase vacuum extraction
EPA	Environmental Protection Agency
HRC	Hydrogen Release Compound
IC/EC	institutional and engineering control
MACTEC	MACTEC Engineering and Consulting, Inc.
NYSDEC	New York State Department of Environmental Conservation
O&M	operation and maintenance
OM&M	operations, maintenance, and monitoring
PRR	Periodic Review Report
Site	location of the former Taylor Instruments facility
SSD	sub-slab depressurization
SSIA	sub-slab vapor and indoor air
System	DPVE and bedrock groundwater extraction and treatment system
TCE	trichloroethene
VCA	Voluntary Clean-up Agreement
VOC	volatile organic compound

Attachment A

Figures

HAGUE STREET

WEST AVENUE

AMES STREET

FORMER SOUTH TCE SOURCE AREA

FORMER NORTH TCE SOURCE AREA

VACANT BUILDING

VACANT SHED

BUILDING FOUNDATION

CONC. SLAB

N/F NEW YORK CENTRAL RAILROAD RAILROAD TRACKS

LEGEND

- RAILROAD TRACKS
- CHAIN LINK FENCE
- WROUGHT IRON FENCE
- GUARD RAIL
- BEDROCK MONITORING WELL (BR)
- OVERBURDEN MONITORING WELL (OB, MW, TW, W)
- FORMER BEDROCK EXTRACTION WELL (BREW)
- FORMER DUAL-PHASE VACUUM EXTRACTION WELL (DPVE)
- FORMER VENT WELL
- FORMER BEDROCK MONITORING WELL (BR)
- FORMER OVERBURDEN MONITORING WELL (OB, MW, TW, W)

N

0' 40' 80' 120'

1" = 80'

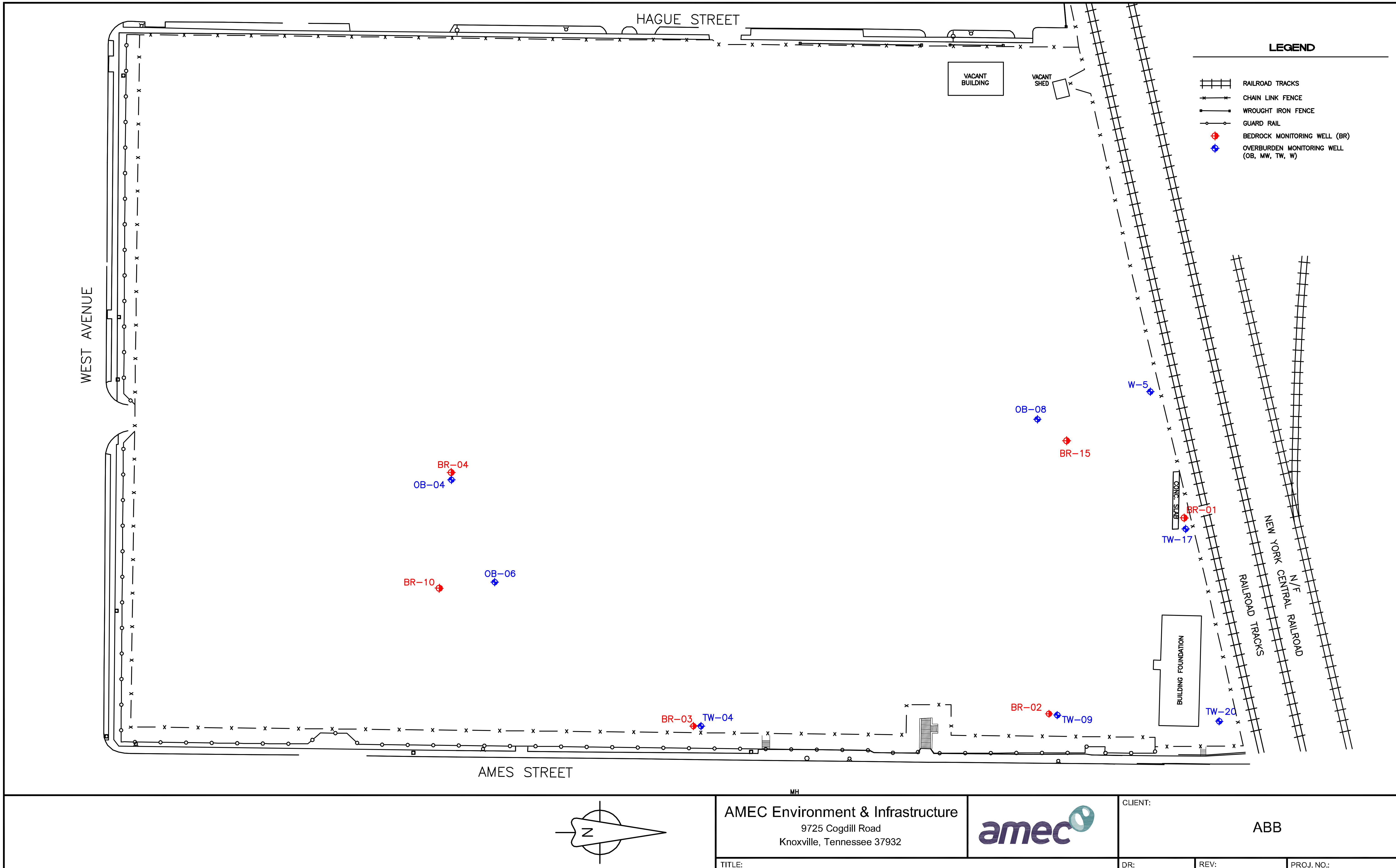
AMEC Environment & Infrastructure
9725 Cogdill Road
Knoxville, Tennessee 37932

CLIENT: ABB

TITLE:
FORMER AND EXISTING WELL LOCATIONS
2012 PERIODIC REVIEW REPORT
FORMER TAYLOR INSTRUMENTS SITE, ROCHESTER, NEW YORK

DR:	REV:	PROJ. NO.:
APT	JD	3031-05-2006
CHK:	DATE:	DWG NO.
CW	11-20-2012	NA
SCALE:		
AS SHOWN		FIGURE 1

K:\CADD\Projects\3031052006 ABB\2012 Periodic Review\Figure 1 2012 Periodic Review .dwg Nov 20, 2012 paul.trovel



AMEC Environment & Infrastructure
9725 Cogdill Road
Knoxville, Tennessee 37932

CLIENT: ABB

TITLE:
MONITORING WELLS FOR POST CLOSURE MONITORING
2012 PERIODIC REVIEW REPORT
FORMER TAYLOR INSTRUMENTS SITE, ROCHESTER, NEW YORK

DR: APT	REV: JD	PROJ. NO.: 3031-05-2006
CHK: CW	DATE: 11-20-2012	DWG NO. NA
SCALE: AS SHOWN		FIGURE. NO.: FIGURE 2

K:\CADD\Projects\3031052006 ABB\2012 Periodic Review\Figure 2 2012 Periodic Review.dwg Nov. 20, 2012 paul.troxel

Attachment B

NYSDEC-Approved Certification Form

80 Ames Street/215 Danforth Street Certification

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. V00144

Site Name Former Taylor Instruments Facility

Site Address: 95 AMES STREET Zip Code: 14611
City/Town: Rochester
County: Monroe
Site Acreage: ~~17.0~~ 14.5

Reporting Period: February 14, 2012 to February 14, 2013

	YES	NO
1. Is the information above correct?	☐	☒
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

SITE NO. V00144 Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
~~120.410-1-2~~	~~ABB, Inc. (Attn: John Conant)~~	~~Ground Water Use Restriction~~ ~~Landuse Restriction~~ ~~Soil Management Plan~~
120.42-1.4	Kevin Carter	Site Management Plan

Box 4

Description of Engineering Controls

Parcel	Engineering Control
~~120.410-1-2~~	~~Cover System~~ ~~Vapor Mitigation~~
120.42-1.4	Vapor Mitigation

Engineering Control Details for Site No. V00144

~~Parcel: 120.410-1-2~~
~~Ground Water Use Restriction~~
~~Landuse Restriction~~
~~Soil Management Plan~~
~~Cover System~~
~~Vapor Mitigation (future buildings)~~
~~Annual certification~~

Parcel: 120.42-1.4
Sub-slab depressurization system
Annual Certification

Parcel 120.42-1.4 is located at 80 Ames Street / 215 Danforth Street
Rochester, NY 14611

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) If a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☒	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. V00144

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Melody B. Christopher (print name) at 5 Waterside Crossing, Windsor CT 06095 (print business address)

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Melody B. Christopher, ABB Inc. — Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

2/26/2013 — Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Ricky Ryan (print name) at 9725 Cogdill Road, Knoxville, TN 37932 (print business address)

am certifying as a Professional Engineer for the ABB Inc., Remedial Party (Owner or Remedial Party)

STATE OF NEW YORK
RICKY A. RYAN
LICENSED PROFESSIONAL ENGINEER
068227

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

9/13/13
Date

(Required for PE)

It is a violation of the New York State Education Code for any person, unless he is acting under the direction of a licensed professional engineer to alter this certification in any way.

95 Ames Street Certification

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. V00144

Site Name Former Taylor Instruments Facility

Site Address: 95 AMES STREET Zip Code: 14611
City/Town: Rochester
County: Monroe
Site Acreage: ~~17.0~~ 14.5

Reporting Period: February 14, 2012 to February 14, 2013

	YES	NO
1. Is the information above correct?	☐	☒
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

SITE NO. V00144 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
120.410-1-2	ABB, Inc. (Attn: ~~John Genant~~ Melody Christopher)	Ground Water Use Restriction Landuse Restriction Soil Management Plan
~~120.42-1-4~~	~~Kevin Carter~~	~~Site Management Plan~~

Box 4

Description of Engineering Controls

Parcel	Engineering Control
120.410-1-2	Cover System Vapor Mitigation (future buildings)
~~120.42-1-4~~	~~Vapor Mitigation~~

Engineering Control Details for Site No. V00144

Parcel: 120.410-1-2
- Ground Water Use Restriction
- Landuse Restriction
- Soil Management Plan
- Cover System
- Vapor Mitigation (future buildings)
- Annual certification

~~Parcel: 120.42-1-4~~
~~Sub-slab depressurization system~~
~~Annual Certification~~

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) If a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☒	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. V00144

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Melody B. Christopher (print name) at 5 Waterside Crossing, Windsor CT 06095 (print business address)

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Melody B. Christopher, ABB Inc
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

2/20/2013
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Ricky Ryan (print name) at 9725 Cogdill Road, Knoxville, TN 37932 (print business address)

am certifying as a Professional Engineer for the ABB Inc., Remedial Party (Owner or Remedial Party)

3/13/13

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

Date

It is a violation of the New York State Education Code for any person, unless he is acting under the direction of a licensed professional engineer to alter this certification in any way.

Attachment C

Mitigation Tech Inspection Report for Sub-Slab Depressurization System
80 Ames Street and 215 Danforth Street

mitigation tech *vapor intrusion specialists*

INSPECTION REPORT

October 30, 2012

Mr. Joe Deatherage, P.E.
Senior Engineer
AMEC E&I, Inc.
9725 Cogdill Rd.
Knoxville, TN 37932
Via email: joe.deatherage@amec.com

Re: ABB Rochester - Former Taylor Instruments
Project No. 3031052007-21 //// WO No. & PO No.: C012600068
Work site: 80 Ames St./215 Danforth St., Rochester, NY
Inspection Report for Sub-slab Depressurization System

For work completed October 29, 2012 per WO C012600068, February 8, 2012

1. Conducted a visual inspection of the complete System (e.g., vent fan, piping, warning device, labeling on systems, etc.): **SATISFACTORY**
2. Conducted an inspection of all surfaces to which vacuum is applied: **SATISFACTORY**
3. Inspected all components for condition and proper operation: **SATISFACTORY**
4. Identify and repair any leaks in accordance with Section 4.3.1(a) of the NYS DOH Guidance, with smoke tubes: **NO LEAKS OBSERVED**
5. Inspect the exhaust or discharge point to verify that no air intakes have been located nearby: **NO AIR INTAKES WITHIN TEN FEET**
6. Conduct an airstream velocity measurement: **SATISFACTORY**
7. Conduct pressure field extension testing (to ensure that the system is maintaining a vacuum beneath the entire slab): **SATISFACTORY**
8. Interview an appropriate occupant or owner seeking comments and observations regarding the operation of the System: **SATISFACTORY**
9. Observe VOC readings from sample port: **NON-DETECT AT 100 PPB SCALE**

I certify that this system is effectively maintaining sub-slab depressurization.

Thank you.

Nicholas E. Mouganis

55 SHUMWAY ROAD, BROCKPORT, NEW YORK, 14420 * OFFICE/FAX 585-637-7430

APPENDIX C

TABLES

Table 1
Overburden Monitoring Wells with COCs Exceeding Class GA Standards
October/November 2012

2012 Annual Progress Report
and Remedial Progress Evaluation
Former Taylor Instruments Site
Rochester, New York

COC	Class GA Standard	Monitoring Well					
		OB-04	OB-06	OB-08	TW-17	TW-20	W-5
PCE	5	1 U	1 U	1 U	1 U	1 U	1 U
TCE	5	3.94	**34.3**	1 U	1 U	**107**	**195**
cis-1,2-DCE	5	2.31	**6.63**	1 U	**147**	4.11	**85**
trans-1,2-DCE	5	1 U	1 U	**11.2**	1 U	1 U	**13.1**
1,1-DCE	5	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	**4.25**	**3.86**	**3.15**	**2.66**	1 U	**34.8**

All concentrations are in micrograms per liter.
TW-04 and TW-09 had no detections exceeding the Class GA Standards.

Created by: CRW on 11/16/12
Checked by: KJD on 11/20/12

Notes: **Bold and shaded** values indicate detection exceeding Class GA Standards.
COC = contaminants of concern
DCE = dichloroethene
PCE = tetrachloroethene
TCE = trichloroethene
U = not detected at practical quantitation limit

Table 2
Bedrock Monitoring Wells with COCs Exceeding Class GA Standards
October/November 2012

2012 Annual Progress Report
and Remedial Progress Evaluation
Former Taylor Instruments Site
Rochester, New York

COC	Class GA Standard	Monitoring Well			
		BR-01	BR-02	BR-03	BR-10
PCE	5	1 U	1 U	1 U	1 U
TCE	5	1 U	**44.5**	3.06	**7.28**
cis-1,2-DCE	5	**29.6**	**23.3**	**329**	2.21
trans-1,2-DCE	5	1 U	4.69	**6.71**	1 U
1,1-DCE	5	1 U	1 U	1.71	1 U
Vinyl Chloride	2	**7.88**	1 U	1 U	1 U

All concentrations are in micrograms per liter.
BR-04 and BR-15 had no detections exceeding the Class GA Standards.

Created by: CRW on 11/16/12
Checked by: KJD on 11/21/12

Notes: **Bold and shaded** values indicate detection exceeding Class GA Standards.

COC = contaminants of concern
DCE = dichloroethene
PCE = tetrachloroethene
TCE = trichloroethene
U = not detected at practical quantitation limit

Table 3
Summary of VOC Results for Existing Overburden Wells for the 2000-2012 Sampling Events

2012 Annual Progress Report
and Remedial Progress Evaluation
Former Taylor Instruments Site
Rochester, New York

Sample ID	Date Sampled	TCE (μg/L)	cis-1,2-DCE (μg/L)	trans-1,2-DCE (μg/L)	1,1-DCE (μg/L)	Vinyl Chloride (μg/L)
OB-04	11/19/00	70,000	2,900	--	--	--
OB-04	03/24/01	150	3.2 J	--	--	--
OB-04	06/18/01	39,000	21,000	--	--	--
OB-04	09/01	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)
OB-04	12/17/01	71,500	56,000	170	108	10.2
OB-04	03/12/02	65,600	1,640	16.6	3.8	--
OB-04	06/09/02	3,650	554	--	--	--
OB-04	09/23/02	3,760	1,950	7.5	4.9	2
OB-04	12/09/02	46.3	5.5	--	--	--
OB-04	03/22/03	11.3	1.3	--	--	--
OB-04	06/13/03	41.5	6.7	--	--	--
OB-04	09/21/03	2,780	125	1.9	--	--
OB-04	12/14/03	23.3	3	--	--	--
OB-04	06/19/04	394	87.2	1.3	--	--
OB-04	12/05/04	626	124	1.6	--	--
OB-04	06/26/05	367	141	2.4	--	--
OB-04	12/03/05	385	139	1.14	--	--
OB-04	07/20/06	252	153	1.56	--	--
OB-04	12/06/06	1,920	892	--	--	1.19
OB-04	05/03/07	618	399	3.19	--	--
OB-04	12/13/07	109	1,350	5.43	2.19	95.1
OB-04	05/05/08	125	875	5.72	1.60	145
OB-04	11/06/08	44.9	258	2.80	--	114
OB-04	05/06/09	28.9	102	2.27	--	21.7
OB-04	10/21/09	32.8	59.6	--	--	49.8
OB-04	05/12/10	5.76	5.69	1.77	--	9.74
OB-04	05/03/11	47.1	304	1.79	--	43.3
OB-04	11/01/11	5.68	51.1	2.51	--	33.2
OB-04	05/15/12	4.35	2.05	1.26	--	8.69
OB-04	10/30/12	3.94	2.31	--	--	4.25
OB-06	11/17/00	2,600	60	--	--	--
OB-06 (DUP)	11/17/00	3,300	80 J	--	--	--
OB-06	03/21/01	540	--	--	--	--
OB-06	06/15/01	720	12 J	--	--	--
OB-06	09/13/01	5,600	240	9.0 J	--	--
OB-06	12/13/01	637	13.7	--	--	--
OB-06	03/08/02	526	7.8	--	--	--
OB-06	06/07/02	184	2.8	--	--	--
OB-06	09/20/02	386	10.1	--	--	--
OB-06	12/06/02	100	1.5	--	--	--
OB-06	03/20/03	84.9	1.5	--	--	--

See notes at end of table.

Table 3 (Continued)
Summary of VOC Results for Existing Overburden Wells for the 2000-2012 Sampling Events

2012 Annual Progress Report
and Remedial Progress Evaluation
Former Taylor Instruments Site
Rochester, New York

Sample ID	Date Sampled	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	Vinyl Chloride (µg/L)
OB-06	06/11/03	52.7	1.1	--	--	--
OB-06	09/18/03	242	2.6	--	--	--
OB-06	12/11/03	60	1	--	--	--
OB-06	06/17/04	38.6	--	--	--	--
OB-06	12/02/04	31.9	1.4	--	--	--
OB-06	06/26/05	37.1	1.8	--	--	--
OB-06	12/02/05	117	4.71	--	--	--
OB-06	07/21/06	60.5	2.59	--	--	--
OB-06	12/10/06	87.8	2.69	--	--	--
OB-06	05/03/07	66.3	4.85	--	--	--
OB-06	12/12/07	82.9	3.31	--	--	--
OB-06	05/03/08	72.6	3.90	--	--	--
OB-06	11/05/08	89.8	4.82	--	--	--
OB-06	05/05/09	78.3	6.03	--	--	--
OB-06	10/20/09	121	12.6	--	--	--
OB-06	05/11/10	105	10.5	--	--	--
OB-06	05/03/11	60	77.4	--	--	--
OB-06	11/01/11	18.9	46.5	1.28	--	13.8
OB-06	05/15/12	25.4	7.56	--	--	2.72
OB-06	10/30/12	34.3	6.63	--	--	3.86
OB-08	11/16/00	40,000	390 J	--	--	--
OB-08	03/20/01	29,000	390 J	--	--	--
OB-08	06/19/01	15,000	240 J	--	--	--
OB-08	03/12/02	15,750	208	8.6	2.7	--
OB-08	06/10/02	5,370	--	--	--	--
OB-08	09/24/02	5,440	110	3.6	--	--
OB-08	12/09/02	8,050	94.2	5	1.3	--
OB-08	03/24/03	3,480	37.3	2.2	--	--
OB-08	06/13/03	2,250	15.3	1.2	--	--
OB-08	09/22/03	2,780	32.1	3.1	--	--
OB-08	12/15/03	1,360	10.8	1.5	--	--
OB-08	06/20/04	725	13.1	2.5	--	--
OB-08	12/06/04	429	5.80	--	--	--
OB-08	06/29/05	570	3.3	--	--	--
OB-08	12/06/05	797	6.25	2.17	--	--
OB-08	07/21/06	890	7.85	3.91	--	--
OB-08	12/06/06	73.7	1,550	10.7	--	--
OB-08	05/03/07	2.48	3,750	29.6	12.7	3.08
OB-08	12/13/07	--	1,150	32.0	4.24	1.54
OB-08	05/05/08	--	41.4	8.07	--	47.8
OB-08	11/06/08	--	53.9	14.8	--	68.9
OB-08	05/06/09	--	42.5	10.2	--	83.8
OB-08	10/21/09	--	35.2	12.4	--	111
OB-08	05/12/10	--	30.5	3.44	--	36.0

See notes at end of table.

Table 3 (Continued)
Summary of VOC Results for Existing Overburden Wells for the 2000-2012 Sampling Events

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Sample ID	Date Sampled	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	Vinyl Chloride (µg/L)
OB-08	05/04/11	--	67.9	22.7	--	249
OB-08	11/02/11	--	--	15.5	--	4.73
OB-08	05/17/12	--	3.78	11.1	--	13.2
OB-08	10/31/12	--	--	11.2	--	3.15
TW-04	10/24/00	42	79	--	--	--
TW-04	03/22/01	14	16	--	--	--
TW-04	06/15/01	--	--	--	--	--
TW-04	09/14/01	27	38	--	--	--
TW-04	12/13/01	51.1	19.4	--	--	--
TW-04	03/05/02	51	3.7	--	--	--
TW-04	06/04/02	20.7	--	--	--	--
TW-04	09/17/02	21.2	7.1	--	--	--
TW-04	12/04/02	42.5	5.5	--	--	--
TW-04	03/18/03	--	--	--	--	--
TW-04	06/10/03	19.3	--	--	--	--
TW-04	09/16/03	29.2	3.1	--	--	--
TW-04	12/09/03	49.8	1.1	--	--	--
TW-04	06/15/04	12.7	--	--	--	--
TW-04	11/30/04	40.0	--	--	--	--
TW-04	06/24/05	9.20	1.7	--	--	--
TW-04	12/01/05	31.4	--	--	--	--
TW-04	07/18/06	27.9	--	--	--	--
TW-04	12/11/06	8.99	--	--	--	--
TW-04	05/03/07	4.66	--	--	--	--
TW-04	12/11/07	15.2	--	--	--	--
TW-04	05/03/08	4.40	--	--	--	--
TW-04	11/04/08	21.3	--	--	--	--
TW-04	05/04/09	4.78	--	--	--	--
TW-04	10/19/09	--	--	--	--	--
TW-04	05/11/10	5.32	--	--	--	--
TW-04	05/03/11	6.17	--	--	--	--
TW-04	11/01/11	8.9	2.44	--	--	--
TW-04	05/16/12	1.66	1.56	--	--	--
TW-04	10/31/12	--	2.85	--	--	--
TW-09	10/24/00	230	36	--	--	--
TW-09	03/27/01	120	1.9 J	--	--	--
TW-09	06/16/01	200	7.4	--	--	--
TW-09	09/16/01	150	9.6	--	--	--
TW-09	12/15/01	110	4	--	--	--
TW-09	03/06/02	55.4	2	--	--	--
TW-09	06/05/02	36.5	--	--	--	--
TW-09	09/19/02	91.5	4	--	--	--
TW-09	12/05/02	38	--	--	--	--

See notes at end of table.

Table 3 (Continued)
Summary of VOC Results for Existing Overburden Wells for the 2000-2012 Sampling Events

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Sample ID	Date Sampled	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	Vinyl Chloride (µg/L)
TW-09	03/19/03	--	--	--	--	--
TW-09	06/11/03	29.4	--	--	--	--
TW-09	09/17/03	77	6.4	--	--	--
TW-09	12/10/03	36.8	1.2	--	--	--
TW-09	06/16/04	43.1	1.0	--	--	--
TW-09	12/02/04	46.2	2.4	--	--	--
TW-09	06/24/05	48.2	1.7	--	--	--
TW-09	12/05/05	45.0	1.48	--	--	--
TW-09	07/18/06	56.7	1.35	--	--	--
TW-09	12/06/06	34.3	2.60	--	--	--
TW-09	05/03/07	31.2	3.01	1.46	--	--
TW-09	12/13/07	29.8	1.28	--	--	--
TW-09	05/05/08	50.5	4.70	4.87	--	--
TW-09	11/06/08	71.2	12.6	12.0	--	--
TW-09	05/06/09	72.1	32.6	32.0	--	5.83
TW-09	10/21/09	82.9	34.4	34.6	--	--
TW-09	05/12/10	56.7	12.8	14.3	--	--
TW-09	05/03/11	4.13	2.28	--	--	4.17
TW-09	11/02/11	1.24	4.23	7.07	--	6.26
TW-09	05/16/12	1.18	1.11	2.99	--	1.97
TW-09	11/01/12	--	--	--	--	--
TW-17	11/17/00	1,000	7.9 J	--	--	--
TW-17	03/23/01	530	--	--	--	--
TW-17	06/16/01	490	--	--	--	--
TW-17	09/14/01	740	--	--	--	--
TW-17	12/14/01	515	--	--	--	--
TW-17	03/05/02	339	--	--	--	--
TW-17	06/04/02	393	--	--	--	--
TW-17	09/18/02	666	--	--	--	--
TW-17	12/04/02	390	--	--	--	--
TW-17	03/18/03	379	--	--	--	--
TW-17	06/10/03	282	--	--	--	--
TW-17	09/16/03	435	--	--	--	--
TW-17	12/09/03	441	--	--	--	--
TW-17	06/15/04	280	--	--	--	--
TW-17	11/30/04	407	6.9	--	--	--
TW-17	06/24/05	340	1.0	--	--	--
TW-17	12/01/05	397	1.35	--	--	--
TW-17	07/18/06	410	2.04	--	--	--
TW-17	12/06/06	246	7.47	--	--	--
TW-17	05/02/07	253	5.87	--	--	--
TW-17	12/12/07	296	3.98	--	--	--
TW-17	05/04/08	477	4.19	--	--	--
TW-17	11/05/08	270	110	--	--	--
TW-17	05/05/09	332	6.46	--	--	--

See notes at end of table.

Table 3 (Continued)
Summary of VOC Results for Existing Overburden Wells for the 2000-2012 Sampling Events

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Sample ID	Date Sampled	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	Vinyl Chloride (µg/L)
TW-17	10/20/09	94	199	5.92	--	--
TW-17	05/11/10	316	10.6	--	--	--
TW-17	05/05/11	205	115	--	--	--
TW-17	11/03/11	21.6	310	--	--	4.92
TW-17	05/16/12	2.16	156	--	--	6.28
TW-17	10/31/12	--	147	--	--	2.66
TW-20	10/25/00	5.2	--	--	--	--
TW-20	03/27/01	12	--	--	--	--
TW-20	06/16/01	2.9 J	--	--	--	--
TW-20	09/14/01	--	--	--	--	--
TW-20	12/14/01	3.1	--	--	--	--
TW-20	03/06/02	2.4	--	--	--	--
TW-20	09/18/02	--	--	--	--	--
TW-20	12/04/02	11.6	--	--	--	--
TW-20	03/19/03	2.4	--	--	--	--
TW-20	06/10/03	--	--	--	--	--
TW-20	09/17/03	5.0	--	--	--	--
TW-20	12/10/03	14.8	--	--	--	--
TW-20	06/15/04	--	--	--	--	--
TW-20	12/01/04	--	--	--	--	--
TW-20	06/24/05	1.5	--	--	--	--
TW-20	12/01/05	6.32	--	--	--	--
TW-20	07/18/06	12.0	--	--	--	--
TW-20	12/06/06	13.2	--	--	--	--
TW-20	05/02/07	8.28	--	--	--	--
TW-20	12/11/07	4.58	--	--	--	--
TW-20	05/02/08	4.50	--	--	--	--
TW-20	11/04/08	23.0	3.47	--	--	--
TW-20	05/04/09	25.2	1.55	--	--	--
TW-20	10/19/09	78.8	5.50	--	--	--
TW-20	05/11/10	65.9	2.34	--	--	--
TW-20	05/04/11	65	2.86	--	--	--
TW-20	11/02/11	88.8	8.3	--	--	--
TW-20	05/17/12	80.8	4.58	--	--	--
TW-20	11/01/12	107	4.11	--	--	--
W-5	11/16/00	--	27	11	--	--
W-5	03/23/01	120	25	8.1	--	--
W-5	06/18/01	62	23	9.6	--	--
W-5	09/17/01	64	9.1	6.5	--	--
W-5 (DUP)	09/17/01	62	11	7.3	--	--
W-5	12/17/01	1,435	39.5	9	--	--
W-5 (DUP)	12/17/01	1,780	36.2	8.5	--	--
W-5	03/07/02	737	21.6	3.5	--	--
W-5 (DUP)	03/07/02	607	23.2	3.9	--	--

See notes at end of table.

Table 3 (Continued)
Summary of VOC Results for Existing Overburden Wells for the 2000-2012 Sampling Events

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Sample ID	Date Sampled	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	Vinyl Chloride (µg/L)
W-5	06/06/02	155	15.7	--	--	--
W-5 (DUP)	06/06/02	150	13.8	--	--	--
W-5	09/19/02	960	49.6	--	--	--
W-5 (DUP)	09/19/02	676	48.5	4.7	--	--
W-5	12/05/02	777	52	3.6	--	--
W-5 (DUP)	12/05/02	843	51.7	4	--	--
W-5	03/20/03	262	132	3.4	--	--
W-5 (DUP)	03/20/03	232	119	3.3	--	--
W-5	06/11/03	234	128	5	--	--
W-5 (DUP)	06/11/03	234	152	5.1	--	--
W-5	09/18/03	510	129	4	--	--
W-5 (DUP)	09/18/03	444	112	3.9	--	--
W-5	12/11/03	550	127	3.5	--	--
W-5 (DUP)	12/11/03	520	118	3.4	--	--
W-5	06/16/04	348	98.9	5.4	--	--
W-5 (DUP)	06/16/04	360	71.6	4.6	--	--
W-5	12/02/04	569	125	4.7	--	--
W-5 (DUP)	12/02/04	725	89.4	4.4	--	--
W-5	06/25/05	381	98.2	3.7	--	--
W-5 (DUP)	06/25/05	380	93.2	3.5	--	--
W-5	12/05/05	1,100	76.9	2.13	--	--
W-5 (DUP)	12/05/05	916	69.5	--	--	--
W-5	07/19/06	212	104	2.34	--	3.63
W-5 (DUP)	07/19/06	219	99.0	2.30	--	3.81
W-5	12/05/06	263	122	2.89	--	7.14
W-5	05/03/07	1,140	340	4.61	--	4.43
W-5 (DUP)	05/03/07	1,070	336	4.60	--	4.00
W-5	12/13/07	835	158	3.83	--	22.1
W-5 (DUP)	12/13/07	850	124	3.36	--	16.1
W-5	05/05/08	1,180	314	4.41	--	6.77 J
W-5 (DUP)	05/05/08	1,110	342	4.33	--	13.6 J
W-5	11/06/08	687	143	3.28	--	8.86
W-5 (DUP)	11/06/08	703	126	2.88	--	8.85
W-5	05/06/09	961	124	2.61	--	1.33
W-5 (DUP)	05/06/09	961	123	2.69	--	--
W-5	10/21/09	664	59.9	1.55	--	5.39 J
W-5 (DUP)	10/21/09	642	68.2	1.61	--	7.42
W-5	05/12/10	601	164	2.08	--	5.04
W-5 (DUP)	05/12/10	591	159	2.08	--	5.27
W-5	05/04/11	445	117	1.39	--	1.51
W-5 (DUP)	05/04/11	432	141	1.62	--	1.53
W-5	11/03/11	293	130	1.41	--	12.5
W-5 (DUP)	11/03/11	325	153	1.74	--	17.0

See notes at end of table.

Table 3 (Continued)
Summary of VOC Results for Existing Overburden Wells for the 2000-2012 Sampling Events

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Sample ID	Date Sampled	TCE (μg/L)	cis-1,2-DCE (μg/L)	trans-1,2-DCE (μg/L)	1,1-DCE (μg/L)	Vinyl Chloride (μg/L)
W-5	05/17/12	230	139	5.37	--	39.5
W-5 (DUP)	05/17/12	220	136	5.19	--	37.2
W-5	11/01/12	195	85	13.1	--	34.8
W-5 (DUP)	11/01/12	191	83.9	12.9	--	34.2

Notes: -- = no detections
μg/L = micrograms per liter
1,1-DCE = 1,1-dichloroethene
cis-1,2-DCE = cis-1,2-dichloroethene
trans-1,2-DCE = trans-1,2-dichloroethene
DUP = duplicate
ID = identification
J = estimated value
NS = not sampled
TCE = trichloroethene
VOC = volatile organic compound

Prepared by C. Wolf on 11/16/12
Checked by J. Deatherage on 11/20/12

Table 4
Summary of VOC Results for the Existing Bedrock Wells for the 2000-2012 Sampling Events

2012 Annual Progress Report
and Remedial Progress Evaluation
Former Taylor Instruments Site
Rochester, New York

Sample ID	Date Sampled	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	Vinyl Chloride (µg/L)
BR-01	11/17/00	180	550	4.3 J	--	3.5 J
BR-01	03/21/01	320	34	2.2 J	--	--
BR-01 (DUP)	03/21/01	320	35	2.4 J	--	--
BR-01	06/16/01	270	59	4.4 J	--	--
BR-01	09/14/01	31	170	16	--	--
BR-01	12/14/01	63.8	77.5	2	--	--
BR-01	03/09/02	47.3	5.5	1.6	--	--
BR-01	06/08/02	85.7	10.1	3.2	--	--
BR-01	09/20/02	107	16	4	--	--
BR-01	12/07/02	14.3	83	3.8	--	--
BR-01	03/21/03	25.8	2.1	1	--	--
BR-01	06/12/03	60.9	4.6	2.8	--	--
BR-01	09/19/03	102	11.4	1.7	--	--
BR-01	12/12/03	127	61.7	20.6	--	--
BR-01	06/18/04	551	42	6.1	--	--
BR-01	12/03/04	65	4.3	1.4	--	--
BR-01	06/26/05	199	6.5	1.0	--	--
BR-01	12/02/05	1.12	36.2	1.10	--	--
BR-01	07/19/06	--	3.09	--	--	--
BR-01	12/08/06	--	3.73	--	--	--
BR-01	05/02/07	67.5	10.6	--	--	--
BR-01	12/10/07	--	70.6	4.33	--	--
BR-01	05/02/08	4.19	10.7	1.63	--	--
BR-01	11/04/08	--	98.7	2.23	--	--
BR-01	05/04/09	3.26	11.3	1.95	--	--
BR-01	10/19/09	--	6.92	--	--	--
BR-01	05/11/10	9.23	12.8	2.02	--	--
BR-01	05/04/11	2.05	14.6	1.03	--	--
BR-01	11/03/11	--	41.6	--	--	3.61
BR-01	05/17/12	89.6	34.7	1.87	--	3.13
BR-01	10/31/12	--	29.6	--	--	7.88
BR-02	11/18/00	1,800	540	31 J	--	--
BR-02	03/21/01	1,200	95	--	--	--
BR-02	06/17/01	1,000	94	27 J	--	--
BR-02	09/15/01	7,000	1,500	63	31 J	--
BR-02	12/15/01	6,500	1,830	59.8	30.3	19.6
BR-02	03/09/02	588	79.6	20.8	1.2	--
BR-02	06/08/02	568	122	2.2	--	--
BR-02	09/21/02	768	518	24.4	4.6	18.7
BR-02	12/07/02	694	172	29.8	--	5.6
BR-02	03/21/03	4,000	19,100	154	156	64.9
BR-02	06/13/03	710	17,900	120	122	68.1

See notes at end of table.

Table 4 (Continued)
Summary of VOC Results for the Existing Bedrock Wells for the 2000-2012 Sampling Events

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Sample ID	Date Sampled	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	Vinyl Chloride (µg/L)
BR-02	09/18/03	372	245	23.3	--	--
BR-02	12/12/03	324	58.2	18.2	--	--
BR-02	06/18/04	450	257	33.8	2.8	2.3
BR-02	12/03/04	647	242	23.4	1.4	1.4
BR-02	06/27/05	163	29	9.1	--	--
BR-02	12/03/05	114	23.1	9.08	--	--
BR-02	07/19/06	120	16.9	8.29	--	--
BR-02	12/08/06	113	31.1	11.3	--	--
BR-02	05/02/07	409	118	15.2	1.26	--
BR-02	12/10/07	134	38.6	14.1	--	--
BR-02	05/02/08	153	74.2	14.0	--	--
BR-02	11/04/08	90.9	48.1	11.4	--	1.54
BR-02	05/04/09	88.1	142	20.5	1.00	1.19
BR-02	10/19/09	254	100	13.4	1.03	1.22
BR-02	05/11/10	821	186	21.9	1.76	2.25
BR-02	05/04/11	237	56.2	8.89	--	--
BR-02	11/02/11	2,230	483	24.6	4.35	8.25
BR-02	05/16/12	5,070	1,100	49.4	8.67	22
BR-02	11/01/12	44.5	23.3	4.69	--	--
BR-03	11/18/00	440	99	1.2 J	2.2 J	--
BR-03	03/22/01	810	12 J	--	3.2 J	--
BR-03	06/15/01	500	20 J	--	--	--
BR-03	09/14/01	330	7.8 J	--	--	--
BR-03	12/13/01	780	7.6	--	2.2	--
BR-03	03/08/02	599	9.8	--	2.1	--
BR-03	06/07/02	854	19.7	--	2.8	--
BR-03	09/20/02	370	6.5	--	--	--
BR-03	12/07/02	821	13.5	--	--	--
BR-03	03/21/03	590	7.7	--	2	--
BR-03	06/12/03	632	25.3	1.9	3	--
BR-03	09/18/03	1,150	10.4	1.5	3.1	--
BR-03	12/12/03	--	--	--	--	--
BR-03	06/17/04	446	17.0	1.1	1.5	--
BR-03	12/03/04	60.6	27.0	--	1.0	--
BR-03	06/26/05	73.4	5.6	--	--	--
BR-03	12/02/05	5.57	21.0	--	--	--
BR-03	07/19/06	248	6.97	--	--	--
BR-03	12/08/06	29.7	27.3	--	--	--
BR-03	05/01/07	701	7.32	--	1.89	--
BR-03	12/11/07	35.4	21.8	--	--	--
BR-03	05/03/08	588	5.20	--	1.81	--
BR-03	11/04/08	61.8	4.61	--	--	--
BR-03	05/04/09	202	3.10	--	--	--

See notes at end of table.

Table 4 (Continued)
Summary of VOC Results for the Existing Bedrock Wells for the 2000-2012 Sampling Events

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Sample ID	Date Sampled	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	Vinyl Chloride (µg/L)
BR-03	10/19/09	365	29.3	1.02	2.05	--
BR-03	05/11/10	270	3.15	--	--	--
BR-03	05/03/11	52.5	75	--	--	--
BR-03	11/02/11	--	37.1	--	--	--
BR-03	05/16/12	573	43.4	1.18	1.89	--
BR-03	10/31/12	3.06	329	6.71	1.71	--
BR-04	11/19/00	10,000	600	140	17 J	25 J
BR-04	03/24/01	9,000	400	95 J	--	--
BR-04	06/19/01	4,300	320	61 J	--	--
BR-04	09/17/01	5,000	420	100 J	--	--
BR-04	12/17/01	5,700	430	79.9	9	27.4
BR-04	03/12/02	5,750	384	77	8.1	23.4
BR-04	06/10/02	4,570	338	49	--	--
BR-04	09/23/02	3,310	551	63.1	8.3	32.2
BR-04	12/09/02	5,300	535	77.6	8.3	27.1
BR-04	03/23/03	4,630	473	52	6.8	14.8
BR-04	06/13/03	302	1,280	19.5	3.6	1.2
BR-04	09/21/03	2,540	560	61	5.4	32.2
BR-04	12/14/03	3,650	507	51.9	6.2	14.3
BR-04	06/19/04	102	1,420	45.8	6.4	3.0
BR-04	12/05/04	4,090	2,810	90.0	15.3	8.3
BR-04	06/28/05	6.6	937	22.5	1.6	1.2
BR-04	12/03/05	16.4	127	2.21	--	--
BR-04	07/20/06	3,940	6,410	147	21.3	12.9
BR-04	12/09/06	5.32	2,030	24.1	3.17	5.21
BR-04	05/01/07	56.9	446	12.7	1.09	--
BR-04	12/12/07	8.64	240	4.36	--	3.07
BR-04	05/04/08	332	647	17.7	2.83	1.37
BR-04	11/06/08	7.04	490	8.51	--	3.28
BR-04	05/06/09	498	163	10.9	1.59	--
BR-04	10/21/09	25.1	167	5.24	--	1.72
BR-04	05/12/10	325	321	11.7	1.37	--
BR-04	05/03/11	--	--	--	--	--
BR-04	11/01/11	4.29	5.02	--	--	--
BR-04	05/15/12	55.1	76.6	2.9	--	2.72
BR-04	10/31/12	4.9	4.77	--	--	--
BR-10	11/18/00	4,000	450	27 J	--	--
BR-10	03/28/01	4,700	980	110 J	--	--
BR-10	06/18/01	8,500	1,000	--	--	--
BR-10	09/17/01	8,700	1,700	160 J	--	--
BR-10	12/16/01	5,350	1,200	82.8	3.4	5.6
BR-10	03/11/02	3,745	1,090	78.2	3.9	5.5
BR-10	06/09/02	5,100	1,290	64.6	4.7	5.3

See notes at end of table.

Table 4 (Continued)
Summary of VOC Results for the Existing Bedrock Wells for the 2000-2012 Sampling Events

2012 Annual Progress Report
and Remedial Progress Evaluation
Former Taylor Instruments Site
Rochester, New York

Sample ID	Date Sampled	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	Vinyl Chloride (µg/L)
BR-10	09/22/02	--	120	9.8	--	--
BR-10	12/09/02	3,060	750	60.1	2.3	--
BR-10	03/22/03	2,580	886	42.2	2.5	3.1
BR-10	06/13/03	2,950	1,080	61.7	3.2	5.1
BR-10	09/21/03	2,250	400	49.4	2	16.1
BR-10	12/13/03	1,420	442	36.4	1.4	8.8
BR-10	06/19/04	1,520	507	62.9	2.9	6.8
BR-10	12/04/04	1,270	436	41.2	1.8	5.0
BR-10	06/27/05	558	166	17.3	--	1.3
BR-10	12/03/05	474	122	11.1	--	--
BR-10	07/20/06	52.3	12.2	1.53	--	--
BR-10	12/08/06	28.2	15.0	1.26	--	--
BR-10	05/02/07	226	57.8	5.87	--	--
BR-10	12/12/07	17.8	3.83	--	--	--
BR-10	05/04/08	357	94.6	10.7	--	1.40
BR-10	11/05/08	8.44	3.02	--	--	--
BR-10	05/05/09	235	66.1	10.3	--	1.07
BR-10	10/20/09	48	22	2.79	--	--
BR-10	05/11/10	277	77.3	14.0	--	--
BR-10	05/03/11	725	312	26.3	--	2.79
BR-10	11/01/11	417	231	25.3	--	2.87
BR-10	05/15/12	532	192	24	--	1.13
BR-10	10/31/12	7.28	2.21	--	--	--
BR-15	11/19/00	2,700	54 J	--	--	--
BR-15 (DUP)	11/19/00	2,700	49 J	--	--	--
BR-15	03/26/01	2,500	33 J	--	--	--
BR-15	06/18/01	2,300	49 J	--	--	--
BR-15	09/16/01	4,800	110 J	--	--	--
BR-15	12/16/01	6,590	189	28.2	2	1.1
BR-15	03/11/02	5,500	172	36.6	2.2	--
BR-15	06/09/02	5,800	373	36.9	4.6	3.8
BR-15	09/22/02	4,390	555	40.3	7.5	5.4
BR-15	12/08/02	4,740	177	43.6	2.8	--
BR-15	03/22/03	2,500	404	21.9	4.3	1.2
BR-15	06/13/03	1,180	1,390	24.8	8.4	3.9
BR-15	09/21/03	1,230	580	35.3	6.9	8.3
BR-15	12/13/03	2,000	194	24.9	2.8	--
BR-15	12/12/07	212	380	2.81	1.48	15.7
BR-15	05/04/08	43.4	449	2.94	1.38	28.2
BR-15	11/06/08	4.08	4.04	--	--	--
BR-15	05/06/09	261	105	1.33	--	6.40
BR-15	10/20/09	38.0	19.3	--	--	--
BR-15	05/12/10	167	123	2.12	--	3.11
BR-15	05/04/11	1.74	27.2	--	--	25.9

See notes at end of table.

Table 4 (Continued)
Summary of VOC Results for the Existing Bedrock Wells for the 2000-2012 Sampling Events

2012 Annual Progress Report
and Remedial Progress Evaluation
Former Taylor Instruments Site
Rochester, New York

Sample ID	Date Sampled	TCE (μg/L)	cis-1,2-DCE (μg/L)	trans-1,2-DCE (μg/L)	1,1-DCE (μg/L)	Vinyl Chloride (μg/L)
BR-15	11/02/11	1.01	8.81	--	--	10.8
BR-15	05/16/12	--	--	--	--	--
BR-15	11/01/12	--	--	--	--	--

Notes: -- = no detections
μg/L = micrograms per liter
1,1-DCE = 1,1-dichloroethene
cis-1,2-DCE = cis-1,2-dichloroethene
trans-1,2-DCE = trans-1,2-dichloroethene
DUP = duplicate
ID = identification
J = estimated value
TCE = trichloroethene
VOC = volatile organic compound

Prepared by C. Wolf on 11/16/12
Checked by J. Deatherage on 11/20/12

APPENDIX D

LABORATORY REPORTS

MAY 2012 DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Road
Nashville, TN 37204
Tel: 800-765-0980

TestAmerica Job ID: NWE2216
Client Project/Site: 3031052006-16
Client Project Description: Former Taylor Instruments

For:
AMEC Environment & Infrastructure Inc. (4997)
9725 Cogdill Rd.
Knoxville, TN 37932

Attn: Joe Deatherage

Authorized for release by:
5/31/2012 6:06:31 PM

Shali Brown
Project Manager
shali.brown@testamericainc.com

LINKS

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Have a Question? Ask The Expert

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

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

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

Table of Contents

Sample Summary

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NWE2216-01	BR-01	Water	05/17/12 12:24	05/18/12 08:30
NWE2216-02	BR-02	Water	05/16/12 15:04	05/18/12 08:30
NWE2216-03	BR-03	Water	05/16/12 12:05	05/18/12 08:30
NWE2216-04	BR-04	Water	05/15/12 16:07	05/18/12 08:30
NWE2216-05	BR-10	Water	05/15/12 18:32	05/18/12 08:30
NWE2216-06	BR-15	Water	05/16/12 18:21	05/18/12 08:30
NWE2216-07	OB-04	Water	05/15/12 13:30	05/18/12 08:30
NWE2216-08	OB-06	Water	05/15/12 14:44	05/18/12 08:30
NWE2216-09	OB-08	Water	05/17/12 09:18	05/18/12 08:30
NWE2216-10	TW-04	Water	05/16/12 10:39	05/18/12 08:30
NWE2216-11	TW-09	Water	05/16/12 13:15	05/18/12 08:30
NWE2216-12	TW-17	Water	05/16/12 18:55	05/18/12 08:30
NWE2216-13	TW-20	Water	05/17/12 10:42	05/18/12 08:30
NWE2216-14	W-5	Water	05/17/12 13:59	05/18/12 08:30
NWE2216-15	QAFB01	Water	05/16/12 10:55	05/18/12 08:30
NWE2216-16	W-5 (DUP)	Water	05/17/12 13:59	05/18/12 08:30
NWE2216-17	QARB01	Water	05/16/12 19:03	05/18/12 08:30
NWE2216-18	QATB01	Water	05/16/12 00:01	05/18/12 08:30

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

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
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
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
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: BR-01
Date Collected: 05/17/12 12:24
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-01
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 17:34	1.00
trans-1,2-Dichloroethene	**1.87**		1.00		ug/L		05/24/12 11:50	05/24/12 17:34	1.00
cis-1,2-Dichloroethene	**34.7**		1.00		ug/L		05/24/12 11:50	05/24/12 17:34	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 17:34	1.00
Trichloroethene	**89.6**		1.00		ug/L		05/24/12 11:50	05/24/12 17:34	1.00
Vinyl chloride	**3.13**		1.00		ug/L		05/24/12 11:50	05/24/12 17:34	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*103*		*70 - 130*	*05/24/12 11:50*	*05/24/12 17:34*	*1.00*
Dibromofluoromethane	*99*		*70 - 130*	*05/24/12 11:50*	*05/24/12 17:34*	*1.00*
Toluene-d8	*103*		*70 - 130*	*05/24/12 11:50*	*05/24/12 17:34*	*1.00*
4-Bromofluorobenzene	*108*		*70 - 130*	*05/24/12 11:50*	*05/24/12 17:34*	*1.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: BR-02
Date Collected: 05/16/12 15:04
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-02
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	8.67		1.00		ug/L		05/25/12 08:07	05/25/12 19:06	1.00
trans-1,2-Dichloroethene	49.4		1.00		ug/L		05/25/12 08:07	05/25/12 19:06	1.00
Tetrachloroethene	ND		1.00		ug/L		05/25/12 08:07	05/25/12 19:06	1.00
Vinyl chloride	22.0		1.00		ug/L		05/25/12 08:07	05/25/12 19:06	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*117*		*70 - 130*	*05/25/12 08:07*	*05/25/12 19:06*	*1.00*
Dibromofluoromethane	*107*		*70 - 130*	*05/25/12 08:07*	*05/25/12 19:06*	*1.00*
Toluene-d8	*97*		*70 - 130*	*05/25/12 08:07*	*05/25/12 19:06*	*1.00*
4-Bromofluorobenzene	*105*		*70 - 130*	*05/25/12 08:07*	*05/25/12 19:06*	*1.00*

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	1100		20.0		ug/L		05/25/12 08:07	05/25/12 18:38	20.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*117*		*70 - 130*	*05/25/12 08:07*	*05/25/12 18:38*	*20.0*
Dibromofluoromethane	*108*		*70 - 130*	*05/25/12 08:07*	*05/25/12 18:38*	*20.0*
Toluene-d8	*97*		*70 - 130*	*05/25/12 08:07*	*05/25/12 18:38*	*20.0*
4-Bromofluorobenzene	*98*		*70 - 130*	*05/25/12 08:07*	*05/25/12 18:38*	*20.0*

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	5070		50.0		ug/L		05/29/12 09:07	05/29/12 19:28	50.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*99*		*70 - 130*	*05/29/12 09:07*	*05/29/12 19:28*	*50.0*
Dibromofluoromethane	*100*		*70 - 130*	*05/29/12 09:07*	*05/29/12 19:28*	*50.0*
Toluene-d8	*99*		*70 - 130*	*05/29/12 09:07*	*05/29/12 19:28*	*50.0*
4-Bromofluorobenzene	*96*		*70 - 130*	*05/29/12 09:07*	*05/29/12 19:28*	*50.0*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: BR-03
Date Collected: 05/16/12 12:05
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-03
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.89		1.00		ug/L		05/25/12 08:07	05/25/12 16:47	1.00
trans-1,2-Dichloroethene	1.18		1.00		ug/L		05/25/12 08:07	05/25/12 16:47	1.00
cis-1,2-Dichloroethene	43.4		1.00		ug/L		05/25/12 08:07	05/25/12 16:47	1.00
Tetrachloroethene	ND		1.00		ug/L		05/25/12 08:07	05/25/12 16:47	1.00
Vinyl chloride	ND		1.00		ug/L		05/25/12 08:07	05/25/12 16:47	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*113*		*70 - 130*	*05/25/12 08:07*	*05/25/12 16:47*	*1.00*
Dibromofluoromethane	*108*		*70 - 130*	*05/25/12 08:07*	*05/25/12 16:47*	*1.00*
Toluene-d8	*100*		*70 - 130*	*05/25/12 08:07*	*05/25/12 16:47*	*1.00*
4-Bromofluorobenzene	*104*		*70 - 130*	*05/25/12 08:07*	*05/25/12 16:47*	*1.00*

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	573		5.00		ug/L		05/25/12 08:07	05/25/12 17:14	5.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*112*		*70 - 130*	*05/25/12 08:07*	*05/25/12 17:14*	*5.00*
Dibromofluoromethane	*106*		*70 - 130*	*05/25/12 08:07*	*05/25/12 17:14*	*5.00*
Toluene-d8	*96*		*70 - 130*	*05/25/12 08:07*	*05/25/12 17:14*	*5.00*
4-Bromofluorobenzene	*108*		*70 - 130*	*05/25/12 08:07*	*05/25/12 17:14*	*5.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: BR-04
Date Collected: 05/15/12 16:07
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-04
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 17:05	1.00
trans-1,2-Dichloroethene	**2.90**		1.00		ug/L		05/24/12 11:50	05/24/12 17:05	1.00
cis-1,2-Dichloroethene	**76.6**		1.00		ug/L		05/24/12 11:50	05/24/12 17:05	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 17:05	1.00
Trichloroethene	**55.1**		1.00		ug/L		05/24/12 11:50	05/24/12 17:05	1.00
Vinyl chloride	**2.72**		1.00		ug/L		05/24/12 11:50	05/24/12 17:05	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*103*		*70 - 130*	*05/24/12 11:50*	*05/24/12 17:05*	*1.00*
Dibromofluoromethane	*101*		*70 - 130*	*05/24/12 11:50*	*05/24/12 17:05*	*1.00*
Toluene-d8	*103*		*70 - 130*	*05/24/12 11:50*	*05/24/12 17:05*	*1.00*
4-Bromofluorobenzene	*109*		*70 - 130*	*05/24/12 11:50*	*05/24/12 17:05*	*1.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: BR-10
Date Collected: 05/15/12 18:32
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-05
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/25/12 08:07	05/25/12 17:42	1.00
trans-1,2-Dichloroethene	**24.0**		1.00		ug/L		05/25/12 08:07	05/25/12 17:42	1.00
cis-1,2-Dichloroethene	**192**		1.00		ug/L		05/25/12 08:07	05/25/12 17:42	1.00
Tetrachloroethene	**1.28**		1.00		ug/L		05/25/12 08:07	05/25/12 17:42	1.00
Vinyl chloride	**1.13**		1.00		ug/L		05/25/12 08:07	05/25/12 17:42	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*115*		*70 - 130*	*05/25/12 08:07*	*05/25/12 17:42*	*1.00*
Dibromofluoromethane	*109*		*70 - 130*	*05/25/12 08:07*	*05/25/12 17:42*	*1.00*
Toluene-d8	*98*		*70 - 130*	*05/25/12 08:07*	*05/25/12 17:42*	*1.00*
4-Bromofluorobenzene	*102*		*70 - 130*	*05/25/12 08:07*	*05/25/12 17:42*	*1.00*

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**532**		5.00		ug/L		05/25/12 08:07	05/25/12 18:10	5.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*112*		*70 - 130*	*05/25/12 08:07*	*05/25/12 18:10*	*5.00*
Dibromofluoromethane	*105*		*70 - 130*	*05/25/12 08:07*	*05/25/12 18:10*	*5.00*
Toluene-d8	*100*		*70 - 130*	*05/25/12 08:07*	*05/25/12 18:10*	*5.00*
4-Bromofluorobenzene	*102*		*70 - 130*	*05/25/12 08:07*	*05/25/12 18:10*	*5.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: BR-15
Date Collected: 05/16/12 18:21
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-06
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 18:02	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 18:02	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 18:02	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 18:02	1.00
Trichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 18:02	1.00
Vinyl chloride	ND		1.00		ug/L		05/24/12 11:50	05/24/12 18:02	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*105*		*70 - 130*	*05/24/12 11:50*	*05/24/12 18:02*	*1.00*
Dibromofluoromethane	*99*		*70 - 130*	*05/24/12 11:50*	*05/24/12 18:02*	*1.00*
Toluene-d8	*103*		*70 - 130*	*05/24/12 11:50*	*05/24/12 18:02*	*1.00*
4-Bromofluorobenzene	*109*		*70 - 130*	*05/24/12 11:50*	*05/24/12 18:02*	*1.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: OB-04
Date Collected: 05/15/12 13:30
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-07
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 18:31	1.00
trans-1,2-Dichloroethene	**1.26**		1.00		ug/L		05/24/12 11:50	05/24/12 18:31	1.00
cis-1,2-Dichloroethene	**2.05**		1.00		ug/L		05/24/12 11:50	05/24/12 18:31	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 18:31	1.00
Trichloroethene	**4.35**		1.00		ug/L		05/24/12 11:50	05/24/12 18:31	1.00
Vinyl chloride	**8.69**		1.00		ug/L		05/24/12 11:50	05/24/12 18:31	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*104*		*70 - 130*	*05/24/12 11:50*	*05/24/12 18:31*	*1.00*
Dibromofluoromethane	*101*		*70 - 130*	*05/24/12 11:50*	*05/24/12 18:31*	*1.00*
Toluene-d8	*104*		*70 - 130*	*05/24/12 11:50*	*05/24/12 18:31*	*1.00*
4-Bromofluorobenzene	*109*		*70 - 130*	*05/24/12 11:50*	*05/24/12 18:31*	*1.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: OB-06
Date Collected: 05/15/12 14:44
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-08
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 18:59	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 18:59	1.00
cis-1,2-Dichloroethene	**7.56**		1.00		ug/L		05/24/12 11:50	05/24/12 18:59	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 18:59	1.00
Trichloroethene	**25.4**		1.00		ug/L		05/24/12 11:50	05/24/12 18:59	1.00
Vinyl chloride	**2.72**		1.00		ug/L		05/24/12 11:50	05/24/12 18:59	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*105*		*70 - 130*	*05/24/12 11:50*	*05/24/12 18:59*	*1.00*
Dibromofluoromethane	*100*		*70 - 130*	*05/24/12 11:50*	*05/24/12 18:59*	*1.00*
Toluene-d8	*104*		*70 - 130*	*05/24/12 11:50*	*05/24/12 18:59*	*1.00*
4-Bromofluorobenzene	*109*		*70 - 130*	*05/24/12 11:50*	*05/24/12 18:59*	*1.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: OB-08
Date Collected: 05/17/12 09:18
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-09
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 19:27	1.00
trans-1,2-Dichloroethene	**11.1**		1.00		ug/L		05/24/12 11:50	05/24/12 19:27	1.00
cis-1,2-Dichloroethene	**3.78**		1.00		ug/L		05/24/12 11:50	05/24/12 19:27	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 19:27	1.00
Trichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 19:27	1.00
Vinyl chloride	**13.2**		1.00		ug/L		05/24/12 11:50	05/24/12 19:27	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*103*		*70 - 130*	*05/24/12 11:50*	*05/24/12 19:27*	*1.00*
Dibromofluoromethane	*101*		*70 - 130*	*05/24/12 11:50*	*05/24/12 19:27*	*1.00*
Toluene-d8	*102*		*70 - 130*	*05/24/12 11:50*	*05/24/12 19:27*	*1.00*
4-Bromofluorobenzene	*110*		*70 - 130*	*05/24/12 11:50*	*05/24/12 19:27*	*1.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: TW-04
Date Collected: 05/16/12 10:39
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-10
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 19:56	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 19:56	1.00
cis-1,2-Dichloroethene	**1.56**		1.00		ug/L		05/24/12 11:50	05/24/12 19:56	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 19:56	1.00
Trichloroethene	**1.66**		1.00		ug/L		05/24/12 11:50	05/24/12 19:56	1.00
Vinyl chloride	ND		1.00		ug/L		05/24/12 11:50	05/24/12 19:56	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*103*		*70 - 130*	*05/24/12 11:50*	*05/24/12 19:56*	*1.00*
Dibromofluoromethane	*100*		*70 - 130*	*05/24/12 11:50*	*05/24/12 19:56*	*1.00*
Toluene-d8	*104*		*70 - 130*	*05/24/12 11:50*	*05/24/12 19:56*	*1.00*
4-Bromofluorobenzene	*110*		*70 - 130*	*05/24/12 11:50*	*05/24/12 19:56*	*1.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: TW-09
Date Collected: 05/16/12 13:15
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-11
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 20:24	1.00
trans-1,2-Dichloroethene	**2.99**		1.00		ug/L		05/24/12 11:50	05/24/12 20:24	1.00
cis-1,2-Dichloroethene	**1.11**		1.00		ug/L		05/24/12 11:50	05/24/12 20:24	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 20:24	1.00
Trichloroethene	**1.18**		1.00		ug/L		05/24/12 11:50	05/24/12 20:24	1.00
Vinyl chloride	**1.97**		1.00		ug/L		05/24/12 11:50	05/24/12 20:24	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*103*		*70 - 130*	*05/24/12 11:50*	*05/24/12 20:24*	*1.00*
Dibromofluoromethane	*100*		*70 - 130*	*05/24/12 11:50*	*05/24/12 20:24*	*1.00*
Toluene-d8	*104*		*70 - 130*	*05/24/12 11:50*	*05/24/12 20:24*	*1.00*
4-Bromofluorobenzene	*109*		*70 - 130*	*05/24/12 11:50*	*05/24/12 20:24*	*1.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: TW-17
Date Collected: 05/16/12 18:55
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-12
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 20:52	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 20:52	1.00
cis-1,2-Dichloroethene	**156**		1.00		ug/L		05/24/12 11:50	05/24/12 20:52	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 20:52	1.00
Trichloroethene	**2.16**		1.00		ug/L		05/24/12 11:50	05/24/12 20:52	1.00
Vinyl chloride	**6.28**		1.00		ug/L		05/24/12 11:50	05/24/12 20:52	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*105*		*70 - 130*	*05/24/12 11:50*	*05/24/12 20:52*	*1.00*
Dibromofluoromethane	*101*		*70 - 130*	*05/24/12 11:50*	*05/24/12 20:52*	*1.00*
Toluene-d8	*103*		*70 - 130*	*05/24/12 11:50*	*05/24/12 20:52*	*1.00*
4-Bromofluorobenzene	*109*		*70 - 130*	*05/24/12 11:50*	*05/24/12 20:52*	*1.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: TW-20
Date Collected: 05/17/12 10:42
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-13
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 21:20	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 21:20	1.00
cis-1,2-Dichloroethene	**4.58**		1.00		ug/L		05/24/12 11:50	05/24/12 21:20	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 21:20	1.00
Trichloroethene	**80.8**		1.00		ug/L		05/24/12 11:50	05/24/12 21:20	1.00
Vinyl chloride	ND		1.00		ug/L		05/24/12 11:50	05/24/12 21:20	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*102*		*70 - 130*	*05/24/12 11:50*	*05/24/12 21:20*	*1.00*
Dibromofluoromethane	*98*		*70 - 130*	*05/24/12 11:50*	*05/24/12 21:20*	*1.00*
Toluene-d8	*105*		*70 - 130*	*05/24/12 11:50*	*05/24/12 21:20*	*1.00*
4-Bromofluorobenzene	*108*		*70 - 130*	*05/24/12 11:50*	*05/24/12 21:20*	*1.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: W-5
Date Collected: 05/17/12 13:59
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-14
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 21:48	1.00
trans-1,2-Dichloroethene	**5.37**		1.00		ug/L		05/24/12 11:50	05/24/12 21:48	1.00
cis-1,2-Dichloroethene	**139**		1.00		ug/L		05/24/12 11:50	05/24/12 21:48	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 21:48	1.00
Vinyl chloride	**39.5**		1.00		ug/L		05/24/12 11:50	05/24/12 21:48	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*101*		*70 - 130*	*05/24/12 11:50*	*05/24/12 21:48*	*1.00*
Dibromofluoromethane	*100*		*70 - 130*	*05/24/12 11:50*	*05/24/12 21:48*	*1.00*
Toluene-d8	*103*		*70 - 130*	*05/24/12 11:50*	*05/24/12 21:48*	*1.00*
4-Bromofluorobenzene	*108*		*70 - 130*	*05/24/12 11:50*	*05/24/12 21:48*	*1.00*

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**230**		5.00		ug/L		05/29/12 09:07	05/29/12 19:55	5.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*98*		*70 - 130*	*05/29/12 09:07*	*05/29/12 19:55*	*5.00*
Dibromofluoromethane	*100*		*70 - 130*	*05/29/12 09:07*	*05/29/12 19:55*	*5.00*
Toluene-d8	*98*		*70 - 130*	*05/29/12 09:07*	*05/29/12 19:55*	*5.00*
4-Bromofluorobenzene	*97*		*70 - 130*	*05/29/12 09:07*	*05/29/12 19:55*	*5.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: QAFB01
Date Collected: 05/16/12 10:55
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-15
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 16:09	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 16:09	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 16:09	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 16:09	1.00
Trichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 16:09	1.00
Vinyl chloride	ND		1.00		ug/L		05/24/12 11:50	05/24/12 16:09	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*101*		*70 - 130*	*05/24/12 11:50*	*05/24/12 16:09*	*1.00*
Dibromofluoromethane	*99*		*70 - 130*	*05/24/12 11:50*	*05/24/12 16:09*	*1.00*
Toluene-d8	*103*		*70 - 130*	*05/24/12 11:50*	*05/24/12 16:09*	*1.00*
4-Bromofluorobenzene	*108*		*70 - 130*	*05/24/12 11:50*	*05/24/12 16:09*	*1.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: W-5 (DUP)

Date Collected: 05/17/12 13:59
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-16

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 22:15	1.00
trans-1,2-Dichloroethene	**5.19**		1.00		ug/L		05/24/12 11:50	05/24/12 22:15	1.00
cis-1,2-Dichloroethene	**136**		1.00		ug/L		05/24/12 11:50	05/24/12 22:15	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 22:15	1.00
Vinyl chloride	**37.2**		1.00		ug/L		05/24/12 11:50	05/24/12 22:15	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*102*		*70 - 130*	*05/24/12 11:50*	*05/24/12 22:15*	*1.00*
Dibromofluoromethane	*100*		*70 - 130*	*05/24/12 11:50*	*05/24/12 22:15*	*1.00*
Toluene-d8	*104*		*70 - 130*	*05/24/12 11:50*	*05/24/12 22:15*	*1.00*
4-Bromofluorobenzene	*109*		*70 - 130*	*05/24/12 11:50*	*05/24/12 22:15*	*1.00*

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**220**		5.00		ug/L		05/29/12 09:07	05/29/12 20:23	5.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*99*		*70 - 130*	*05/29/12 09:07*	*05/29/12 20:23*	*5.00*
Dibromofluoromethane	*100*		*70 - 130*	*05/29/12 09:07*	*05/29/12 20:23*	*5.00*
Toluene-d8	*98*		*70 - 130*	*05/29/12 09:07*	*05/29/12 20:23*	*5.00*
4-Bromofluorobenzene	*96*		*70 - 130*	*05/29/12 09:07*	*05/29/12 20:23*	*5.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: QARB01
Date Collected: 05/16/12 19:03
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-17
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 16:37	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 16:37	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 16:37	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 16:37	1.00
Trichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 16:37	1.00
Vinyl chloride	ND		1.00		ug/L		05/24/12 11:50	05/24/12 16:37	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*104*		*70 - 130*	*05/24/12 11:50*	*05/24/12 16:37*	*1.00*
Dibromofluoromethane	*100*		*70 - 130*	*05/24/12 11:50*	*05/24/12 16:37*	*1.00*
Toluene-d8	*104*		*70 - 130*	*05/24/12 11:50*	*05/24/12 16:37*	*1.00*
4-Bromofluorobenzene	*107*		*70 - 130*	*05/24/12 11:50*	*05/24/12 16:37*	*1.00*

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: QATB01
Date Collected: 05/16/12 00:01
Date Received: 05/18/12 08:30

Lab Sample ID: NWE2216-18
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 15:40	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 15:40	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 15:40	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 15:40	1.00
Trichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 15:40	1.00
Vinyl chloride	ND		1.00		ug/L		05/24/12 11:50	05/24/12 15:40	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*102*		*70 - 130*	*05/24/12 11:50*	*05/24/12 15:40*	*1.00*
Dibromofluoromethane	*98*		*70 - 130*	*05/24/12 11:50*	*05/24/12 15:40*	*1.00*
Toluene-d8	*104*		*70 - 130*	*05/24/12 11:50*	*05/24/12 15:40*	*1.00*
4-Bromofluorobenzene	*109*		*70 - 130*	*05/24/12 11:50*	*05/24/12 15:40*	*1.00*

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Lab Sample ID: 12E6063-BLK1
Matrix: Water
Analysis Batch: V008844

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 12E6063_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/25/12 08:07	05/25/12 12:27	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		05/25/12 08:07	05/25/12 12:27	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		05/25/12 08:07	05/25/12 12:27	1.00
Tetrachloroethene	ND		1.00		ug/L		05/25/12 08:07	05/25/12 12:27	1.00
Trichloroethene	ND		1.00		ug/L		05/25/12 08:07	05/25/12 12:27	1.00
Vinyl chloride	ND		1.00		ug/L		05/25/12 08:07	05/25/12 12:27	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*113*		*70 - 130*	*05/25/12 08:07*	*05/25/12 12:27*	*1.00*
Dibromofluoromethane	*107*		*70 - 130*	*05/25/12 08:07*	*05/25/12 12:27*	*1.00*
Toluene-d8	*96*		*70 - 130*	*05/25/12 08:07*	*05/25/12 12:27*	*1.00*
4-Bromofluorobenzene	*100*		*70 - 130*	*05/25/12 08:07*	*05/25/12 12:27*	*1.00*

Lab Sample ID: 12E6063-BS1
Matrix: Water
Analysis Batch: V008844

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 12E6063_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			50.0	54.4		ug/L		109	79 - 124		
trans-1,2-Dichloroethene			50.0	56.8		ug/L		114	79 - 126		
cis-1,2-Dichloroethene			50.0	57.0		ug/L		114	76 - 125		
Tetrachloroethene			50.0	53.2		ug/L		106	80 - 126		
Trichloroethene			50.0	56.2		ug/L		112	80 - 123		
Vinyl chloride			50.0	52.2		ug/L		104	68 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4	*106*		*70 - 130*
Dibromofluoromethane	*108*		*70 - 130*
Toluene-d8	*101*		*70 - 130*
4-Bromofluorobenzene	*102*		*70 - 130*

Lab Sample ID: 12E6063-MS1
Matrix: Water
Analysis Batch: V008844

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 12E6063_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene	ND		10000	11700		ug/L		117	70 - 142		
trans-1,2-Dichloroethene	ND		10000	12100		ug/L		121	66 - 143		
cis-1,2-Dichloroethene	ND		10000	12400		ug/L		124	68 - 138		
Tetrachloroethene	ND		10000	11300		ug/L		113	72 - 145		
Trichloroethene	ND		10000	13300		ug/L		133	73 - 144		
Vinyl chloride	ND		10000	11900		ug/L		119	56 - 129		

Surrogate	*Matrix Spike %Recovery*	*Matrix Spike Qualifier*	*Limits*
1,2-Dichloroethane-d4	*111*		*70 - 130*
Dibromofluoromethane	*112*		*70 - 130*
Toluene-d8	*97*		*70 - 130*
4-Bromofluorobenzene	*96*		*70 - 130*

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Lab Sample ID: 12E6063-MSD1
Matrix: Water
Analysis Batch: V008844

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total
Prep Batch: 12E6063_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		10000	11600		ug/L		116	70 - 142	0.8	17
trans-1,2-Dichloroethene	ND		10000	12200		ug/L		122	66 - 143	0.9	16
cis-1,2-Dichloroethene	ND		10000	12200		ug/L		122	68 - 138	1	17
Tetrachloroethene	ND		10000	11200		ug/L		112	72 - 145	0.9	16
Trichloroethene	ND		10000	12200		ug/L		122	73 - 144	8	17
Vinyl chloride	ND		10000	12100		ug/L		121	56 - 129	2	17

Surrogate	*Matrix Spike Dup %Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
1,2-Dichloroethane-d4	*113*		*70 - 130*
Dibromofluoromethane	*110*		*70 - 130*
Toluene-d8	*94*		*70 - 130*
4-Bromofluorobenzene	*99*		*70 - 130*

Lab Sample ID: 12E6105-BLK1
Matrix: Water
Analysis Batch: V008860

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 12E6105_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/29/12 09:07	05/29/12 11:27	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		05/29/12 09:07	05/29/12 11:27	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		05/29/12 09:07	05/29/12 11:27	1.00
Tetrachloroethene	ND		1.00		ug/L		05/29/12 09:07	05/29/12 11:27	1.00
Trichloroethene	ND		1.00		ug/L		05/29/12 09:07	05/29/12 11:27	1.00
Vinyl chloride	ND		1.00		ug/L		05/29/12 09:07	05/29/12 11:27	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*99*		*70 - 130*	*05/29/12 09:07*	*05/29/12 11:27*	*1.00*
Dibromofluoromethane	*101*		*70 - 130*	*05/29/12 09:07*	*05/29/12 11:27*	*1.00*
Toluene-d8	*98*		*70 - 130*	*05/29/12 09:07*	*05/29/12 11:27*	*1.00*
4-Bromofluorobenzene	*98*		*70 - 130*	*05/29/12 09:07*	*05/29/12 11:27*	*1.00*

Lab Sample ID: 12E6105-BS1
Matrix: Water
Analysis Batch: V008860

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 12E6105_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	50.0	53.1		ug/L		106	79 - 124
trans-1,2-Dichloroethene	50.0	51.9		ug/L		104	79 - 126
cis-1,2-Dichloroethene	50.0	51.8		ug/L		104	76 - 125
Tetrachloroethene	50.0	53.9		ug/L		108	80 - 126
Trichloroethene	50.0	53.3		ug/L		107	80 - 123
Vinyl chloride	50.0	47.8		ug/L		96	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4	*99*		*70 - 130*
Dibromofluoromethane	*101*		*70 - 130*
Toluene-d8	*99*		*70 - 130*
4-Bromofluorobenzene	*99*		*70 - 130*

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Lab Sample ID: 12E6105-MS1
Matrix: Water
Analysis Batch: V008860

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 12E6105_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	ND		5000	5280		ug/L		106	70 - 142
trans-1,2-Dichloroethene	ND		5000	5090		ug/L		102	66 - 143
cis-1,2-Dichloroethene	ND		5000	4920		ug/L		98	68 - 138
Tetrachloroethene	ND		5000	5160		ug/L		103	72 - 145
Trichloroethene	ND		5000	5250		ug/L		105	73 - 144
Vinyl chloride	ND		5000	4740		ug/L		95	56 - 129

Surrogate	*Matrix Spike %Recovery*	*Matrix Spike Qualifier*	*Limits*
1,2-Dichloroethane-d4	*96*		*70 - 130*
Dibromofluoromethane	*99*		*70 - 130*
Toluene-d8	*98*		*70 - 130*
4-Bromofluorobenzene	*98*		*70 - 130*

Lab Sample ID: 12E6105-MSD1
Matrix: Water
Analysis Batch: V008860

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total
Prep Batch: 12E6105_P

Analyte	Sample Result	Sample Qualifier	Spike Added	ıtrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		5000	5320		ug/L		106	70 - 142	0.7	17
trans-1,2-Dichloroethene	ND		5000	5080		ug/L		102	66 - 143	0.3	16
cis-1,2-Dichloroethene	ND		5000	4900		ug/L		98	68 - 138	0.4	17
Tetrachloroethene	ND		5000	5260		ug/L		105	72 - 145	2	16
Trichloroethene	ND		5000	5280		ug/L		106	73 - 144	0.5	17
Vinyl chloride	ND		5000	4700		ug/L		94	56 - 129	0.7	17

Surrogate	*Matrix Spike Dup %Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
1,2-Dichloroethane-d4	*97*		*70 - 130*
Dibromofluoromethane	*100*		*70 - 130*
Toluene-d8	*99*		*70 - 130*
4-Bromofluorobenzene	*99*		*70 - 130*

Lab Sample ID: 12E6141-BLK1
Matrix: Water
Analysis Batch: V008886

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 12E6141_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 14:38	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 14:38	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 14:38	1.00
Tetrachloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 14:38	1.00
Trichloroethene	ND		1.00		ug/L		05/24/12 11:50	05/24/12 14:38	1.00
Vinyl chloride	ND		1.00		ug/L		05/24/12 11:50	05/24/12 14:38	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*103*		*70 - 130*	*05/24/12 11:50*	*05/24/12 14:38*	*1.00*
Dibromofluoromethane	*99*		*70 - 130*	*05/24/12 11:50*	*05/24/12 14:38*	*1.00*
Toluene-d8	*103*		*70 - 130*	*05/24/12 11:50*	*05/24/12 14:38*	*1.00*
4-Bromofluorobenzene	*108*		*70 - 130*	*05/24/12 11:50*	*05/24/12 14:38*	*1.00*

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Lab Sample ID: 12E6141-BS1
Matrix: Water
Analysis Batch: V008886

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 12E6141_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			50.0	41.8		ug/L		84	79 - 124		
trans-1,2-Dichloroethene			50.0	43.0		ug/L		86	79 - 126		
cis-1,2-Dichloroethene			50.0	49.0		ug/L		98	76 - 125		
Tetrachloroethene			50.0	47.8		ug/L		96	80 - 126		
Trichloroethene			50.0	49.3		ug/L		99	80 - 123		
Vinyl chloride			50.0	50.7		ug/L		101	68 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4	*101*		*70 - 130*
Dibromofluoromethane	*100*		*70 - 130*
Toluene-d8	*103*		*70 - 130*
4-Bromofluorobenzene	*110*		*70 - 130*

Lab Sample ID: 12E6141-BSD1
Matrix: Water
Analysis Batch: V008886

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 12E6141_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			50.0	41.6		ug/L		83	79 - 124	0.4	17
trans-1,2-Dichloroethene			50.0	42.9		ug/L		86	79 - 126	0.3	16
cis-1,2-Dichloroethene			50.0	49.5		ug/L		99	76 - 125	1	17
Tetrachloroethene			50.0	48.4		ug/L		97	80 - 126	1	16
Trichloroethene			50.0	49.8		ug/L		100	80 - 123	1	17
Vinyl chloride			50.0	50.5		ug/L		101	68 - 120	0.4	17

Surrogate	*LCS Dup %Recovery*	*LCS Dup Qualifier*	*Limits*
1,2-Dichloroethane-d4	*101*		*70 - 130*
Dibromofluoromethane	*98*		*70 - 130*
Toluene-d8	*103*		*70 - 130*
4-Bromofluorobenzene	*111*		*70 - 130*

Lab Sample ID: 12E6141-MS1
Matrix: Water
Analysis Batch: V008886

Client Sample ID: BR-04
Prep Type: Total
Prep Batch: 12E6141_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene	ND		50.0	45.7		ug/L		91	70 - 142		
trans-1,2-Dichloroethene	2.90		50.0	48.5		ug/L		91	66 - 143		
cis-1,2-Dichloroethene	76.6		50.0	125		ug/L		96	68 - 138		
Tetrachloroethene	ND		50.0	51.3		ug/L		103	72 - 145		
Trichloroethene	55.1		50.0	108		ug/L		105	73 - 144		
Vinyl chloride	2.72		50.0	61.8		ug/L		118	56 - 129		

Surrogate	*Matrix Spike %Recovery*	*Matrix Spike Qualifier*	*Limits*
1,2-Dichloroethane-d4	*102*		*70 - 130*
Dibromofluoromethane	*102*		*70 - 130*
Toluene-d8	*104*		*70 - 130*
4-Bromofluorobenzene	*113*		*70 - 130*

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Lab Sample ID: 12E6141-MSD1
Matrix: Water
Analysis Batch: V008886

Client Sample ID: BR-04
Prep Type: Total
Prep Batch: 12E6141_P

Analyte	Sample Result	Sample Qualifier	Spike Added	ıtrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		50.0	45.8		ug/L		92	70 - 142	0.1	17
trans-1,2-Dichloroethene	2.90		50.0	49.4		ug/L		93	66 - 143	2	16
cis-1,2-Dichloroethene	76.6		50.0	125		ug/L		97	68 - 138	0.4	17
Tetrachloroethene	ND		50.0	52.6		ug/L		105	72 - 145	3	16
Trichloroethene	55.1		50.0	108		ug/L		107	73 - 144	0.9	17
Vinyl chloride	2.72		50.0	61.1		ug/L		117	56 - 129	1	17

Surrogate	*Matrix Spike Dup %Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
1,2-Dichloroethane-d4	*100*		*70 - 130*
Dibromofluoromethane	*101*		*70 - 130*
Toluene-d8	*104*		*70 - 130*
4-Bromofluorobenzene	*111*		*70 - 130*

Client: AMEC Environment & Infrastructure Inc. (4997) TestAmerica Job ID: NWE2216
Project/Site: 3031052006-16

GCMS Volatiles

Analysis Batch: V008844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12E6063-BLK1	Method Blank	Total	Water	SW846 8260B	12E6063_P
12E6063-BS1	Lab Control Sample	Total	Water	SW846 8260B	12E6063_P
12E6063-MS1	Matrix Spike	Total	Water	SW846 8260B	12E6063_P
12E6063-MSD1	Matrix Spike Duplicate	Total	Water	SW846 8260B	12E6063_P
NWE2216-02	BR-02	Total	Water	SW846 8260B	12E6063_P
NWE2216-02 - RE1	BR-02	Total	Water	SW846 8260B	12E6063_P
NWE2216-03	BR-03	Total	Water	SW846 8260B	12E6063_P
NWE2216-03 - RE1	BR-03	Total	Water	SW846 8260B	12E6063_P
NWE2216-05	BR-10	Total	Water	SW846 8260B	12E6063_P
NWE2216-05 - RE1	BR-10	Total	Water	SW846 8260B	12E6063_P

Analysis Batch: V008860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12E6105-BLK1	Method Blank	Total	Water	SW846 8260B	12E6105_P
12E6105-BS1	Lab Control Sample	Total	Water	SW846 8260B	12E6105_P
12E6105-MS1	Matrix Spike	Total	Water	SW846 8260B	12E6105_P
12E6105-MSD1	Matrix Spike Duplicate	Total	Water	SW846 8260B	12E6105_P
NWE2216-02 - RE2	BR-02	Total	Water	SW846 8260B	12E6105_P
NWE2216-14 - RE1	W-5	Total	Water	SW846 8260B	12E6105_P
NWE2216-16 - RE1	W-5 (DUP)	Total	Water	SW846 8260B	12E6105_P

Analysis Batch: V008886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12E6141-BLK1	Method Blank	Total	Water	SW846 8260B	12E6141_P
12E6141-BS1	Lab Control Sample	Total	Water	SW846 8260B	12E6141_P
12E6141-BSD1	Lab Control Sample Dup	Total	Water	SW846 8260B	12E6141_P
12E6141-MS1	BR-04	Total	Water	SW846 8260B	12E6141_P
12E6141-MSD1	BR-04	Total	Water	SW846 8260B	12E6141_P
NWE2216-01	BR-01	Total	Water	SW846 8260B	12E6141_P
NWE2216-04	BR-04	Total	Water	SW846 8260B	12E6141_P
NWE2216-06	BR-15	Total	Water	SW846 8260B	12E6141_P
NWE2216-07	OB-04	Total	Water	SW846 8260B	12E6141_P
NWE2216-08	OB-06	Total	Water	SW846 8260B	12E6141_P
NWE2216-09	OB-08	Total	Water	SW846 8260B	12E6141_P
NWE2216-10	TW-04	Total	Water	SW846 8260B	12E6141_P
NWE2216-11	TW-09	Total	Water	SW846 8260B	12E6141_P
NWE2216-12	TW-17	Total	Water	SW846 8260B	12E6141_P
NWE2216-13	TW-20	Total	Water	SW846 8260B	12E6141_P
NWE2216-14	W-5	Total	Water	SW846 8260B	12E6141_P
NWE2216-15	QAFB01	Total	Water	SW846 8260B	12E6141_P
NWE2216-16	W-5 (DUP)	Total	Water	SW846 8260B	12E6141_P
NWE2216-17	QARB01	Total	Water	SW846 8260B	12E6141_P
NWE2216-18	QATB01	Total	Water	SW846 8260B	12E6141_P

Prep Batch: 12E6063_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12E6063-BLK1	Method Blank	Total	Water	EPA 5030B	
12E6063-BS1	Lab Control Sample	Total	Water	EPA 5030B	
12E6063-MS1	Matrix Spike	Total	Water	EPA 5030B	
12E6063-MSD1	Matrix Spike Duplicate	Total	Water	EPA 5030B	
NWE2216-02	BR-02	Total	Water	EPA 5030B	
NWE2216-02 - RE1	BR-02	Total	Water	EPA 5030B	

GCMS Volatiles (Continued)

Prep Batch: 12E6063_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NWE2216-03	BR-03	Total	Water	EPA 5030B	
NWE2216-03 - RE1	BR-03	Total	Water	EPA 5030B	
NWE2216-05	BR-10	Total	Water	EPA 5030B	
NWE2216-05 - RE1	BR-10	Total	Water	EPA 5030B	

Prep Batch: 12E6105_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12E6105-BLK1	Method Blank	Total	Water	EPA 5030B	
12E6105-BS1	Lab Control Sample	Total	Water	EPA 5030B	
12E6105-MS1	Matrix Spike	Total	Water	EPA 5030B	
12E6105-MSD1	Matrix Spike Duplicate	Total	Water	EPA 5030B	
NWE2216-02 - RE2	BR-02	Total	Water	EPA 5030B	
NWE2216-14 - RE1	W-5	Total	Water	EPA 5030B	
NWE2216-16 - RE1	W-5 (DUP)	Total	Water	EPA 5030B	

Prep Batch: 12E6141_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12E6141-BLK1	Method Blank	Total	Water	EPA 5030B	
12E6141-BS1	Lab Control Sample	Total	Water	EPA 5030B	
12E6141-BSD1	Lab Control Sample Dup	Total	Water	EPA 5030B	
12E6141-MS1	BR-04	Total	Water	EPA 5030B	
12E6141-MSD1	BR-04	Total	Water	EPA 5030B	
NWE2216-01	BR-01	Total	Water	EPA 5030B	
NWE2216-04	BR-04	Total	Water	EPA 5030B	
NWE2216-06	BR-15	Total	Water	EPA 5030B	
NWE2216-07	OB-04	Total	Water	EPA 5030B	
NWE2216-08	OB-06	Total	Water	EPA 5030B	
NWE2216-09	OB-08	Total	Water	EPA 5030B	
NWE2216-10	TW-04	Total	Water	EPA 5030B	
NWE2216-11	TW-09	Total	Water	EPA 5030B	
NWE2216-12	TW-17	Total	Water	EPA 5030B	
NWE2216-13	TW-20	Total	Water	EPA 5030B	
NWE2216-14	W-5	Total	Water	EPA 5030B	
NWE2216-15	QAFB01	Total	Water	EPA 5030B	
NWE2216-16	W-5 (DUP)	Total	Water	EPA 5030B	
NWE2216-17	QARB01	Total	Water	EPA 5030B	
NWE2216-18	QATB01	Total	Water	EPA 5030B	

Client Sample ID: BR-01

Lab Sample ID: NWE2216-01

Date Collected: 05/17/12 12:24

Matrix: Water

Date Received: 05/18/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 17:34	EML	TAL NSH

Client Sample ID: BR-02

Lab Sample ID: NWE2216-02

Date Collected: 05/16/12 15:04

Matrix: Water

Date Received: 05/18/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6063_P	05/25/12 08:07	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008844	05/25/12 19:06	EML	TAL NSH
Total	Prep	EPA 5030B	RE1	1.00	12E6063_P	05/25/12 08:07	EML	TAL NSH
Total	Analysis	SW846 8260B	RE1	20.0	V008844	05/25/12 18:38	EML	TAL NSH
Total	Prep	EPA 5030B	RE2	1.00	12E6105_P	05/29/12 09:07	EML	TAL NSH
Total	Analysis	SW846 8260B	RE2	50.0	V008860	05/29/12 19:28	EML	TAL NSH

Client Sample ID: BR-03

Lab Sample ID: NWE2216-03

Date Collected: 05/16/12 12:05

Matrix: Water

Date Received: 05/18/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6063_P	05/25/12 08:07	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008844	05/25/12 16:47	EML	TAL NSH
Total	Prep	EPA 5030B	RE1	1.00	12E6063_P	05/25/12 08:07	EML	TAL NSH
Total	Analysis	SW846 8260B	RE1	5.00	V008844	05/25/12 17:14	EML	TAL NSH

Client Sample ID: BR-04

Lab Sample ID: NWE2216-04

Date Collected: 05/15/12 16:07

Matrix: Water

Date Received: 05/18/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 17:05	EML	TAL NSH

Client Sample ID: BR-10

Lab Sample ID: NWE2216-05

Date Collected: 05/15/12 18:32

Matrix: Water

Date Received: 05/18/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6063_P	05/25/12 08:07	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008844	05/25/12 17:42	EML	TAL NSH
Total	Prep	EPA 5030B	RE1	1.00	12E6063_P	05/25/12 08:07	EML	TAL NSH
Total	Analysis	SW846 8260B	RE1	5.00	V008844	05/25/12 18:10	EML	TAL NSH

Client Sample ID: BR-15

Lab Sample ID: NWE2216-06

Date Collected: 05/16/12 18:21

Matrix: Water

Date Received: 05/18/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 18:02	EML	TAL NSH

Client Sample ID: OB-04

Lab Sample ID: NWE2216-07

Date Collected: 05/15/12 13:30

Matrix: Water

Date Received: 05/18/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 18:31	EML	TAL NSH

Client Sample ID: OB-06

Lab Sample ID: NWE2216-08

Date Collected: 05/15/12 14:44

Matrix: Water

Date Received: 05/18/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 18:59	EML	TAL NSH

Client Sample ID: OB-08

Lab Sample ID: NWE2216-09

Date Collected: 05/17/12 09:18

Matrix: Water

Date Received: 05/18/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 19:27	EML	TAL NSH

Client Sample ID: TW-04

Lab Sample ID: NWE2216-10

Date Collected: 05/16/12 10:39

Matrix: Water

Date Received: 05/18/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 19:56	EML	TAL NSH

Client Sample ID: TW-09

Lab Sample ID: NWE2216-11

Date Collected: 05/16/12 13:15

Matrix: Water

Date Received: 05/18/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 20:24	EML	TAL NSH

Lab Chronicle

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: TW-17

Lab Sample ID: NWE2216-12

Date Collected: 05/16/12 18:55
Date Received: 05/18/12 08:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 20:52	EML	TAL NSH

Client Sample ID: TW-20

Lab Sample ID: NWE2216-13

Date Collected: 05/17/12 10:42
Date Received: 05/18/12 08:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 21:20	EML	TAL NSH

Client Sample ID: W-5

Lab Sample ID: NWE2216-14

Date Collected: 05/17/12 13:59
Date Received: 05/18/12 08:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 21:48	EML	TAL NSH
Total	Prep	EPA 5030B	RE1	1.00	12E6105_P	05/29/12 09:07	EML	TAL NSH
Total	Analysis	SW846 8260B	RE1	5.00	V008860	05/29/12 19:55	EML	TAL NSH

Client Sample ID: QAFB01

Lab Sample ID: NWE2216-15

Date Collected: 05/16/12 10:55
Date Received: 05/18/12 08:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 16:09	EML	TAL NSH

Client Sample ID: W-5 (DUP)

Lab Sample ID: NWE2216-16

Date Collected: 05/17/12 13:59
Date Received: 05/18/12 08:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 22:15	EML	TAL NSH
Total	Prep	EPA 5030B	RE1	1.00	12E6105_P	05/29/12 09:07	EML	TAL NSH
Total	Analysis	SW846 8260B	RE1	5.00	V008860	05/29/12 20:23	EML	TAL NSH

Lab Chronicle

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Client Sample ID: QARB01

Lab Sample ID: NWE2216-17

Date Collected: 05/16/12 19:03
Date Received: 05/18/12 08:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 16:37	EML	TAL NSH

Client Sample ID: QATB01

Lab Sample ID: NWE2216-18

Date Collected: 05/16/12 00:01
Date Received: 05/18/12 08:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B		1.00	12E6141_P	05/24/12 11:50	EML	TAL NSH
Total	Analysis	SW846 8260B		1.00	V008886	05/24/12 15:40	EML	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

Method Summary

Client: AMEC Environment & Infrastructure Inc. (4997)
Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

Method	Method Description	Protocol	Laboratory
SW846 8260B	Volatile Organic Compounds by EPA Method 8260B		TAL NSH

Protocol References:

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

Certification Summary

Client: AMEC Environment & Infrastructure Inc. (4997) TestAmerica Job ID: NWE2216
Project/Site: 3031052006-16

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville		ACIL		393
TestAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
TestAmerica Nashville	Alabama	State Program	4	41150
TestAmerica Nashville	Alaska (UST)	State Program	10	UST-087
TestAmerica Nashville	Arizona	State Program	9	AZ0473
TestAmerica Nashville	Arkansas DEQ	State Program	6	88-0737
TestAmerica Nashville	California	NELAC	9	1168CA
TestAmerica Nashville	Canadian Assoc Lab Accred (CALA)	Canada		3744
TestAmerica Nashville	Colorado	State Program	8	N/A
TestAmerica Nashville	Connecticut	State Program	1	PH-0220
TestAmerica Nashville	Florida	NELAC	4	E87358
TestAmerica Nashville	Illinois	NELAC	5	200010
TestAmerica Nashville	Iowa	State Program	7	131
TestAmerica Nashville	Kansas	NELAC	7	E-10229
TestAmerica Nashville	Kentucky	State Program	4	90038
TestAmerica Nashville	Kentucky (UST)	State Program	4	19
TestAmerica Nashville	Louisiana	NELAC	6	30613
TestAmerica Nashville	Louisiana	NELAC	6	LA110014
TestAmerica Nashville	Maryland	State Program	3	316
TestAmerica Nashville	Massachusetts	State Program	1	M-TN032
TestAmerica Nashville	Minnesota	NELAC	5	047-999-345
TestAmerica Nashville	Mississippi	State Program	4	N/A
TestAmerica Nashville	Montana (UST)	State Program	8	NA
TestAmerica Nashville	New Hampshire	NELAC	1	2963
TestAmerica Nashville	New Jersey	NELAC	2	TN965
TestAmerica Nashville	New York	NELAC	2	11342
TestAmerica Nashville	North Carolina DENR	State Program	4	387
TestAmerica Nashville	North Dakota	State Program	8	R-146
TestAmerica Nashville	Ohio VAP	State Program	5	CL0033
TestAmerica Nashville	Oklahoma	State Program	6	9412
TestAmerica Nashville	Oregon	NELAC	10	TN200001
TestAmerica Nashville	Pennsylvania	NELAC	3	68-00585
TestAmerica Nashville	Rhode Island	State Program	1	LAO00268
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	Tennessee	State Program	4	2008
TestAmerica Nashville	Texas	NELAC	6	T104704077-09-TX
TestAmerica Nashville	USDA	Federal		S-48469
TestAmerica Nashville	Utah	NELAC	8	TAN
TestAmerica Nashville	Virginia	NELAC	3	460152
TestAmerica Nashville	Virginia	State Program	3	00323
TestAmerica Nashville	Washington	State Program	10	C789
TestAmerica Nashville	West Virginia DEP	State Program	3	219
TestAmerica Nashville	Wisconsin	State Program	5	998020430
TestAmerica Nashville	Wyoming (UST)	A2LA	8	453.07

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RI

NWE2216

Cooler Received/Opened On 5/18/2012 @ 0830

1. Tracking # 2856 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 14740456

2. Temperature of rep. sample or temp blank when opened: 0.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES (NO) NA

4. Were custody seals on outside of cooler? (YES)...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? (YES)...NO...NA

6. Were custody papers inside cooler? (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...(NO)...NA

14. Was there a Trip Blank in this cooler? (YES)...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) VG.

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) VG.

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) VG.

I certify that I attached a label with the unique LIMS number to each container (intial) VG.

21. Were there Non-Conformance issues at login? YES..(NO) Was a PIPE generated? YES..(NO)..#_____

BIS = Broken in shipment

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

5/31/2012

Client Information	Sampler: Courtney Wolf	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-513-112.1
Client Contact: Mr. Joe Deatherage	Phone: 865 207-4625	E-Mail: shali.brown@testamericainc.com		Page: Page 1 of 82
Company: AMEC Environment & Infrastructure, Inc.		Analysis Requested		Job #:
Address: 9725 Cogdill Road	Due Date Requested:			Preservation Codes:
City: Knoxville	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TN, 37932				
Phone: 865-218-1049(Tel)	PO #: Purchase Order Requested			Other:
Email: joe.deatherage@amec.com	WO #:			NWE2216 06/04/12 23:59
Project Name: Former Taylor Instruments	Project #: 49001213			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - 8260Custom TCE PCE 1,1-DCE cis/trans 1,2	624_6ml - 624 Volatiles	Total containers	Special Instructions/Note:
			Preservation Code:				A	A		
1 BR-01	5/17/12	1224	G	Water	N		X			
2 BR-02	5/16/12	1504	G	Water	N		X			
3 BR-03	5/16/12	1205	G	Water	N		X			
4 BR-04	5/15/12	1607	G	Water	N		X			
5 BR-10	5/15/12	1832	G	Water	N		X			
6 BR-15	5/16/12	1821	G	Water	N		X			
7 OB-04	5/15/12	1330	G	Water	N		X			
8 OB-06	5/15/12	1444	G	Water	N		X			
9 OB-08	5/17/12	0918	G	Water	N		X			
10 TW-04	5/16/12	1039	G	Water	N		X			
11 TW-09	5/16/12	1315	G	Water	N		X			

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Courtney Wolf	5/17/12 1500	AMEC	TAW	5/18/12 0830	
2						
3						

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

5/31/2012

Client Information	Sampler: Courtney Wolf	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-513-112.2
Client Contact: Mr. Joe Deatherage	Phone:	E-Mail: shali.brown@testamericainc.com		Page: Page 2 of 2
Company: AMEC Environment & Infrastructure, Inc.		Analysis Requested		Job #:
Address: 9725 Cogdill Road	Due Date Requested:			Preservation Codes:
City: Knoxville	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TN, 37932				
Phone: 865-218-1049(Tel)	PO #: Purchase Order Requested			Other:
Email: joe.deatherage@amec.com	WO #:			
Project Name: Former Taylor Instruments	Project #: 49001213			NWE2216 06/04/12 23:59
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - 8260Custom TCE PCE 1,1-DCE cis/trans 1,2	624_6ml - 624 Volatiles	Total # of containers	Special Instructions/Note:
			Preservation Code:				A	A		
12 TW-17	5/16/12	1855	G	Water	N		X			
13 TW-20	5/17/12	1042	G	Water	N		X			
14 W-5	5/17/12	1359	G	Water	N		X			
15 QAFB01	5/16/12	1055	G	Water	N		X			
16 W-5 (DUP)	5/17/12	1359	G	Water	N		X			
17 BR-04 (MS)	5/15/12	1607	G	Water	N		X			
BR-04 (MSD)	5/15/12	1607	G	Water	N		X			
18 QARB01	5/16/12	1903	G	Water	N		X			
~~Extra Set~~ QATB-01	—	—	—	Water	N		X			
~~IDW-1~~				~~Water~~						
~~IDW-2~~				~~Water~~						

Page 38 of 38

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Courtney Wolf	5/17/12 1500	AMEC	TAN	5/18/12 0830	-0.1
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

OCTOBER/NOVEMBER 2012 DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-10489-1
Client Project/Site: Former Taylor Instruments

For:
AMEC Environment & Infrastructure, Inc.
9725 Cogdill Road
Knoxville, Tennessee 37932

Attn: Mr. Joe Deatherage

Pamela A. Langford

Authorized for release by:
11/14/2012 3:51:13 PM
Pam Langford
Senior Project Manager
pam.langford@testamericainc.com

Designee for

Shali Brown
Project Manager I
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Table of Contents

Sample Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-10489-1	QATB01	Water	10/30/12 00:01	11/02/12 08:00
490-10489-2	OB-06	Water	10/30/12 16:22	11/02/12 08:00
490-10489-3	OB-04	Water	10/30/12 17:45	11/02/12 08:00
490-10489-4	BR-04	Water	10/31/12 09:55	11/02/12 08:00
490-10489-5	BR-10	Water	10/31/12 10:48	11/02/12 08:00
490-10489-6	TW-04	Water	10/31/12 12:15	11/02/12 08:00
490-10489-7	BR-03	Water	10/31/12 13:30	11/02/12 08:00
490-10489-8	QAFB01	Water	10/31/12 13:52	11/02/12 08:00
490-10489-9	BR-01	Water	10/31/12 16:21	11/02/12 08:00
490-10489-10	OB-08	Water	10/31/12 17:30	11/02/12 08:00
490-10489-11	QARB01	Water	10/31/12 17:43	11/02/12 08:00
490-10489-12	W-5	Water	11/01/12 09:24	11/02/12 08:00
490-10489-13	W-5 Dup	Water	11/01/12 09:24	11/02/12 08:00
490-10489-14	TW-09	Water	11/01/12 10:12	11/02/12 08:00
490-10489-15	BR-02	Water	11/01/12 11:38	11/02/12 08:00
490-10489-16	TW-20	Water	11/01/12 13:05	11/02/12 08:00
490-10489-17	TW-17	Water	11/01/12 13:55	11/02/12 08:00
490-10489-18	BR-15	Water	11/01/12 17:06	11/02/12 08:00

Job ID: 490-10489-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: AMEC Environment & Infrastructure, Inc.

Project: Former Taylor Instruments

Report Number: 490-10489-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 11/02/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.5 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples QATB01 (490-10489-1), OB-06 (490-10489-2), OB-04 (490-10489-3), BR-04 (490-10489-4), BR-10 (490-10489-5), TW-04 (490-10489-6), BR-03 (490-10489-7), QAFB01 (490-10489-8), BR-01 (490-10489-9), OB-08 (490-10489-10), QARB01 (490-10489-11), W-5 (490-10489-12), W-5 Dup (490-10489-13), TW-09 (490-10489-14), BR-02 (490-10489-15), TW-20 (490-10489-16), TW-17 (490-10489-17) and BR-15 (490-10489-18) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/02/2012 and 11/05/2012.

cis-1,2-Dichloroethene failed the recovery criteria low for the MS of sample BR-15MS (490-10489-18) in batches 490-33568 and 33042..

Several analytes exceeded the rpd limit for the MSD of sample BR-15MSD (490-10489-18) in batch 490-33568.

Refer to the QC report for details.

Sample BR-03 (490-10489-7)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the VOCs analyses.

Job ID: 490-10489-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

All other quality control parameters were within the acceptance limits.

No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

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
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
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
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
RER	Relative error ratio
DER	Duplicate error ratio (normalized absolute difference)
DLC	Decision level concentration
RL	Reporting Limit or Requested Limit (Radiochemistry only)

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: QATB01
Date Collected: 10/30/12 00:01
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 17:21	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 17:21	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 17:21	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 17:21	1
Trichloroethene	ND		1.00		ug/L			11/02/12 17:21	1
Vinyl chloride	ND		1.00		ug/L			11/02/12 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*11/02/12 17:21*	*1*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/02/12 17:21*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*11/02/12 17:21*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/02/12 17:21*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: OB-06
Date Collected: 10/30/12 16:22
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 17:48	1
cis-1,2-Dichloroethene	**6.63**		1.00		ug/L			11/02/12 17:48	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 17:48	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 17:48	1
Trichloroethene	**34.3**		1.00		ug/L			11/02/12 17:48	1
Vinyl chloride	**3.86**		1.00		ug/L			11/02/12 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*11/02/12 17:48*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/02/12 17:48*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*11/02/12 17:48*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*11/02/12 17:48*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: OB-04
Date Collected: 10/30/12 17:45
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 18:16	1
cis-1,2-Dichloroethene	**2.31**		1.00		ug/L			11/02/12 18:16	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 18:16	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 18:16	1
Trichloroethene	**3.94**		1.00		ug/L			11/02/12 18:16	1
Vinyl chloride	**4.25**		1.00		ug/L			11/02/12 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*11/02/12 18:16*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/02/12 18:16*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*11/02/12 18:16*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/02/12 18:16*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: BR-04
Date Collected: 10/31/12 09:55
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 18:43	1
cis-1,2-Dichloroethene	**4.77**		1.00		ug/L			11/02/12 18:43	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 18:43	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 18:43	1
Trichloroethene	**4.90**		1.00		ug/L			11/02/12 18:43	1
Vinyl chloride	ND		1.00		ug/L			11/02/12 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*11/02/12 18:43*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/02/12 18:43*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*11/02/12 18:43*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/02/12 18:43*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: BR-10
Date Collected: 10/31/12 10:48
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 19:10	1
cis-1,2-Dichloroethene	**2.21**		1.00		ug/L			11/02/12 19:10	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 19:10	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 19:10	1
Trichloroethene	**7.28**		1.00		ug/L			11/02/12 19:10	1
Vinyl chloride	ND		1.00		ug/L			11/02/12 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*11/02/12 19:10*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/02/12 19:10*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*11/02/12 19:10*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*11/02/12 19:10*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: TW-04
Date Collected: 10/31/12 12:15
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 19:37	1
cis-1,2-Dichloroethene	**2.85**		1.00		ug/L			11/02/12 19:37	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 19:37	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 19:37	1
Trichloroethene	ND		1.00		ug/L			11/02/12 19:37	1
Vinyl chloride	ND		1.00		ug/L			11/02/12 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*11/02/12 19:37*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/02/12 19:37*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*11/02/12 19:37*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*11/02/12 19:37*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: BR-03
Date Collected: 10/31/12 13:30
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**1.71**		1.00		ug/L			11/02/12 20:04	1
cis-1,2-Dichloroethene	**329**		5.00		ug/L			11/05/12 17:30	5
Tetrachloroethene	ND		1.00		ug/L			11/02/12 20:04	1
trans-1,2-Dichloroethene	**6.71**		1.00		ug/L			11/02/12 20:04	1
Trichloroethene	**3.06**		1.00		ug/L			11/02/12 20:04	1
Vinyl chloride	ND		1.00		ug/L			11/02/12 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*11/02/12 20:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*11/05/12 17:30*	*5*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*11/02/12 20:04*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/05/12 17:30*	*5*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*11/02/12 20:04*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*11/05/12 17:30*	*5*
Toluene-d8 (Surr)	*94*		*70 - 130*		*11/02/12 20:04*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*11/05/12 17:30*	*5*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: QAFB01
Date Collected: 10/31/12 13:52
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 20:31	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 20:31	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 20:31	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 20:31	1
Trichloroethene	ND		1.00		ug/L			11/02/12 20:31	1
Vinyl chloride	ND		1.00		ug/L			11/02/12 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*11/02/12 20:31*	*1*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*11/02/12 20:31*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*11/02/12 20:31*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/02/12 20:31*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: BR-01
Date Collected: 10/31/12 16:21
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 20:58	1
cis-1,2-Dichloroethene	**29.6**		1.00		ug/L			11/02/12 20:58	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 20:58	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 20:58	1
Trichloroethene	ND		1.00		ug/L			11/02/12 20:58	1
Vinyl chloride	**7.88**		1.00		ug/L			11/02/12 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*11/02/12 20:58*	*1*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*		*11/02/12 20:58*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*11/02/12 20:58*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/02/12 20:58*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: OB-08
Date Collected: 10/31/12 17:30
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 21:25	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 21:25	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 21:25	1
trans-1,2-Dichloroethene	**11.2**		1.00		ug/L			11/02/12 21:25	1
Trichloroethene	ND		1.00		ug/L			11/02/12 21:25	1
Vinyl chloride	**3.15**		1.00		ug/L			11/02/12 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*11/02/12 21:25*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*11/02/12 21:25*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*11/02/12 21:25*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/02/12 21:25*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: QARB01
Date Collected: 10/31/12 17:43
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 21:52	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 21:52	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 21:52	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 21:52	1
Trichloroethene	ND		1.00		ug/L			11/02/12 21:52	1
Vinyl chloride	ND		1.00		ug/L			11/02/12 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*11/02/12 21:52*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/02/12 21:52*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*11/02/12 21:52*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*11/02/12 21:52*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: W-5
Date Collected: 11/01/12 09:24
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 22:20	1
cis-1,2-Dichloroethene	**85.0**		1.00		ug/L			11/02/12 22:20	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 22:20	1
trans-1,2-Dichloroethene	**13.1**		1.00		ug/L			11/02/12 22:20	1
Trichloroethene	**195**		1.00		ug/L			11/02/12 22:20	1
Vinyl chloride	**34.8**		1.00		ug/L			11/02/12 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*11/02/12 22:20*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/02/12 22:20*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*11/02/12 22:20*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/02/12 22:20*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: W-5 Dup
Date Collected: 11/01/12 09:24
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 22:47	1
cis-1,2-Dichloroethene	**83.9**		1.00		ug/L			11/02/12 22:47	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 22:47	1
trans-1,2-Dichloroethene	**12.9**		1.00		ug/L			11/02/12 22:47	1
Trichloroethene	**191**		1.00		ug/L			11/02/12 22:47	1
Vinyl chloride	**34.2**		1.00		ug/L			11/02/12 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*11/02/12 22:47*	*1*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*11/02/12 22:47*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*11/02/12 22:47*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/02/12 22:47*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: TW-09
Date Collected: 11/01/12 10:12
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 23:14	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 23:14	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 23:14	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 23:14	1
Trichloroethene	ND		1.00		ug/L			11/05/12 17:03	1
Vinyl chloride	ND		1.00		ug/L			11/02/12 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*11/02/12 23:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*11/05/12 17:03*	*1*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*		*11/02/12 23:14*	*1*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/05/12 17:03*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*11/02/12 23:14*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*11/05/12 17:03*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*11/02/12 23:14*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*11/05/12 17:03*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: BR-02
Date Collected: 11/01/12 11:38
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 23:41	1
cis-1,2-Dichloroethene	**23.3**		1.00		ug/L			11/02/12 23:41	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 23:41	1
trans-1,2-Dichloroethene	**4.69**		1.00		ug/L			11/02/12 23:41	1
Trichloroethene	**44.5**		1.00		ug/L			11/02/12 23:41	1
Vinyl chloride	ND		1.00		ug/L			11/02/12 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*11/02/12 23:41*	*1*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*11/02/12 23:41*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*11/02/12 23:41*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/02/12 23:41*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: TW-20
Date Collected: 11/01/12 13:05
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/05/12 15:15	1
cis-1,2-Dichloroethene	**4.11**		1.00		ug/L			11/05/12 15:15	1
Tetrachloroethene	ND		1.00		ug/L			11/05/12 15:15	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/05/12 15:15	1
Trichloroethene	**107**		1.00		ug/L			11/05/12 15:15	1
Vinyl chloride	ND		1.00		ug/L			11/05/12 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*11/05/12 15:15*	*1*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/05/12 15:15*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*11/05/12 15:15*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/05/12 15:15*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: TW-17
Date Collected: 11/01/12 13:55
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/05/12 15:42	1
cis-1,2-Dichloroethene	**147**		1.00		ug/L			11/05/12 15:42	1
Tetrachloroethene	ND		1.00		ug/L			11/05/12 15:42	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/05/12 15:42	1
Trichloroethene	ND		1.00		ug/L			11/05/12 15:42	1
Vinyl chloride	**2.66**		1.00		ug/L			11/05/12 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*11/05/12 15:42*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/05/12 15:42*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*11/05/12 15:42*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/05/12 15:42*	*1*

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: BR-15
Date Collected: 11/01/12 17:06
Date Received: 11/02/12 08:00

Lab Sample ID: 490-10489-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/05/12 16:09	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			11/05/12 16:09	1
Tetrachloroethene	ND		1.00		ug/L			11/05/12 16:09	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/05/12 16:09	1
Trichloroethene	ND		1.00		ug/L			11/05/12 16:09	1
Vinyl chloride	ND		1.00		ug/L			11/05/12 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*11/05/12 16:09*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*11/05/12 16:09*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*11/05/12 16:09*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/05/12 16:09*	*1*

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

Lab Sample ID: MB 490-33042/7
Matrix: Water
Analysis Batch: 33042

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/02/12 16:19	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 16:19	1
Tetrachloroethene	ND		1.00		ug/L			11/02/12 16:19	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/02/12 16:19	1
Trichloroethene	ND		1.00		ug/L			11/02/12 16:19	1
Vinyl chloride	ND		1.00		ug/L			11/02/12 16:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*11/02/12 16:19*	*1*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*11/02/12 16:19*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*11/02/12 16:19*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*11/02/12 16:19*	*1*

Lab Sample ID: LCS 490-33042/3
Matrix: Water
Analysis Batch: 33042

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			50.0	52.26		ug/L		105	79 - 124		
cis-1,2-Dichloroethene			50.0	43.76		ug/L		88	76 - 125		
Tetrachloroethene			50.0	50.28		ug/L		101	80 - 126		
trans-1,2-Dichloroethene			50.0	45.23		ug/L		90	79 - 126		
Trichloroethene			50.0	53.47		ug/L		107	80 - 123		
Vinyl chloride			50.0	41.77		ug/L		84	68 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 490-33042/4
Matrix: Water
Analysis Batch: 33042

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			50.0	50.43		ug/L		101	79 - 124	4	17
cis-1,2-Dichloroethene			50.0	42.86		ug/L		86	76 - 125	2	17
Tetrachloroethene			50.0	49.64		ug/L		99	80 - 126	1	16
trans-1,2-Dichloroethene			50.0	44.66		ug/L		89	79 - 126	1	16
Trichloroethene			50.0	52.77		ug/L		106	80 - 123	1	17
Vinyl chloride			50.0	40.56		ug/L		81	68 - 120	3	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

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

Lab Sample ID: 490-10489-4 MS
Matrix: Water
Analysis Batch: 33042

Client Sample ID: BR-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	ND		50.0	38.50		ug/L		77	70 - 142
cis-1,2-Dichloroethene	4.77		50.0	37.42	F	ug/L		65	68 - 138
Tetrachloroethene	ND		50.0	37.98		ug/L		76	72 - 145
trans-1,2-Dichloroethene	ND		50.0	34.13		ug/L		68	66 - 143
Trichloroethene	4.90		50.0	45.10		ug/L		80	73 - 144
Vinyl chloride	ND		50.0	30.71		ug/L		61	56 - 129

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: 490-10489-4 MSD
Matrix: Water
Analysis Batch: 33042

Client Sample ID: BR-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		50.0	43.81		ug/L		88	70 - 142	13	17
cis-1,2-Dichloroethene	4.77		50.0	39.64		ug/L		70	68 - 138	6	17
Tetrachloroethene	ND		50.0	41.34		ug/L		83	72 - 145	8	16
trans-1,2-Dichloroethene	ND		50.0	36.45		ug/L		73	66 - 143	7	16
Trichloroethene	4.90		50.0	47.46		ug/L		85	73 - 144	5	17
Vinyl chloride	ND		50.0	33.99		ug/L		68	56 - 129	10	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
Dibromofluoromethane (Surr)	*107*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: MB 490-33568/7
Matrix: Water
Analysis Batch: 33568

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00		ug/L			11/05/12 14:33	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			11/05/12 14:33	1
Tetrachloroethene	ND		1.00		ug/L			11/05/12 14:33	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			11/05/12 14:33	1
Trichloroethene	ND		1.00		ug/L			11/05/12 14:33	1
Vinyl chloride	ND		1.00		ug/L			11/05/12 14:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*11/05/12 14:33*	*1*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/05/12 14:33*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*11/05/12 14:33*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/05/12 14:33*	*1*

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

Lab Sample ID: LCS 490-33568/3
Matrix: Water
Analysis Batch: 33568

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			50.0	49.07		ug/L		98	79 - 124		
cis-1,2-Dichloroethene			50.0	42.06		ug/L		84	76 - 125		
Tetrachloroethene			50.0	48.46		ug/L		97	80 - 126		
trans-1,2-Dichloroethene			50.0	43.36		ug/L		87	79 - 126		
Trichloroethene			50.0	50.12		ug/L		100	80 - 123		
Vinyl chloride			50.0	40.05		ug/L		80	68 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 490-33568/4
Matrix: Water
Analysis Batch: 33568

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			50.0	49.07		ug/L		98	79 - 124	0	17
cis-1,2-Dichloroethene			50.0	41.29		ug/L		83	76 - 125	2	17
Tetrachloroethene			50.0	47.25		ug/L		95	80 - 126	3	16
trans-1,2-Dichloroethene			50.0	42.15		ug/L		84	79 - 126	3	16
Trichloroethene			50.0	48.19		ug/L		96	80 - 123	4	17
Vinyl chloride			50.0	39.06		ug/L		78	68 - 120	2	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: 490-10489-18 MS
Matrix: Water
Analysis Batch: 33568

Client Sample ID: BR-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene	ND		50.0	39.14		ug/L		78	70 - 142		
cis-1,2-Dichloroethene	ND		50.0	32.67	F	ug/L		65	68 - 138		
Tetrachloroethene	ND		50.0	37.55		ug/L		75	72 - 145		
trans-1,2-Dichloroethene	ND		50.0	34.34		ug/L		69	66 - 143		
Trichloroethene	ND		50.0	38.84		ug/L		78	73 - 144		
Vinyl chloride	ND		50.0	30.75		ug/L		62	56 - 129		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*107*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

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

Lab Sample ID: 490-10489-18 MSD
Matrix: Water
Analysis Batch: 33568

Client Sample ID: BR-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		50.0	47.59	F	ug/L		95	70 - 142	19	17
cis-1,2-Dichloroethene	ND		50.0	40.27	F	ug/L		81	68 - 138	21	17
Tetrachloroethene	ND		50.0	46.94	F	ug/L		94	72 - 145	22	16
trans-1,2-Dichloroethene	ND		50.0	41.97	F	ug/L		84	66 - 143	20	16
Trichloroethene	ND		50.0	49.07	F	ug/L		98	73 - 144	23	17
Vinyl chloride	ND		50.0	38.54	F	ug/L		77	56 - 129	22	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

GC/MS VOA

Analysis Batch: 33042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-10489-1	QATB01	Total/NA	Water	8260B	
490-10489-2	OB-06	Total/NA	Water	8260B	
490-10489-3	OB-04	Total/NA	Water	8260B	
490-10489-4	BR-04	Total/NA	Water	8260B	
490-10489-4 MS	BR-04	Total/NA	Water	8260B	
490-10489-4 MSD	BR-04	Total/NA	Water	8260B	
490-10489-5	BR-10	Total/NA	Water	8260B	
490-10489-6	TW-04	Total/NA	Water	8260B	
490-10489-7	BR-03	Total/NA	Water	8260B	
490-10489-8	QAFB01	Total/NA	Water	8260B	
490-10489-9	BR-01	Total/NA	Water	8260B	
490-10489-10	OB-08	Total/NA	Water	8260B	
490-10489-11	QARB01	Total/NA	Water	8260B	
490-10489-12	W-5	Total/NA	Water	8260B	
490-10489-13	W-5 Dup	Total/NA	Water	8260B	
490-10489-14	TW-09	Total/NA	Water	8260B	
490-10489-15	BR-02	Total/NA	Water	8260B	
LCS 490-33042/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-33042/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-33042/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 33568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-10489-7	BR-03	Total/NA	Water	8260B	
490-10489-14	TW-09	Total/NA	Water	8260B	
490-10489-16	TW-20	Total/NA	Water	8260B	
490-10489-17	TW-17	Total/NA	Water	8260B	
490-10489-18	BR-15	Total/NA	Water	8260B	
490-10489-18 MS	BR-15	Total/NA	Water	8260B	
490-10489-18 MSD	BR-15	Total/NA	Water	8260B	
LCS 490-33568/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-33568/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-33568/7	Method Blank	Total/NA	Water	8260B	

Client Sample ID: QATB01 — **Lab Sample ID: 490-10489-1**
Date Collected: 10/30/12 00:01 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 17:21	BM	TAL NSH

Client Sample ID: OB-06 — **Lab Sample ID: 490-10489-2**
Date Collected: 10/30/12 16:22 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 17:48	BM	TAL NSH

Client Sample ID: OB-04 — **Lab Sample ID: 490-10489-3**
Date Collected: 10/30/12 17:45 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 18:16	BM	TAL NSH

Client Sample ID: BR-04 — **Lab Sample ID: 490-10489-4**
Date Collected: 10/31/12 09:55 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 18:43	BM	TAL NSH

Client Sample ID: BR-10 — **Lab Sample ID: 490-10489-5**
Date Collected: 10/31/12 10:48 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 19:10	BM	TAL NSH

Client Sample ID: TW-04 — **Lab Sample ID: 490-10489-6**
Date Collected: 10/31/12 12:15 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 19:37	BM	TAL NSH

Client Sample ID: BR-03 — **Lab Sample ID: 490-10489-7**
Date Collected: 10/31/12 13:30 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 20:04	BM	TAL NSH

Client Sample ID: BR-03 — **Lab Sample ID: 490-10489-7**
Date Collected: 10/31/12 13:30 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	33568	11/05/12 17:30	JM	TAL NSH

Client Sample ID: QAFB01 — **Lab Sample ID: 490-10489-8**
Date Collected: 10/31/12 13:52 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 20:31	BM	TAL NSH

Client Sample ID: BR-01 — **Lab Sample ID: 490-10489-9**
Date Collected: 10/31/12 16:21 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 20:58	BM	TAL NSH

Client Sample ID: OB-08 — **Lab Sample ID: 490-10489-10**
Date Collected: 10/31/12 17:30 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 21:25	BM	TAL NSH

Client Sample ID: QARB01 — **Lab Sample ID: 490-10489-11**
Date Collected: 10/31/12 17:43 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 21:52	BM	TAL NSH

Client Sample ID: W-5 — **Lab Sample ID: 490-10489-12**
Date Collected: 11/01/12 09:24 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 22:20	BM	TAL NSH

Client Sample ID: W-5 Dup — **Lab Sample ID: 490-10489-13**
Date Collected: 11/01/12 09:24 — **Matrix: Water**
Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 22:47	BM	TAL NSH

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Client Sample ID: TW-09

Lab Sample ID: 490-10489-14

Date Collected: 11/01/12 10:12

Matrix: Water

Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 23:14	BM	TAL NSH
Total/NA	Analysis	8260B		1	33568	11/05/12 17:03	JM	TAL NSH

Client Sample ID: BR-02

Lab Sample ID: 490-10489-15

Date Collected: 11/01/12 11:38

Matrix: Water

Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33042	11/02/12 23:41	BM	TAL NSH

Client Sample ID: TW-20

Lab Sample ID: 490-10489-16

Date Collected: 11/01/12 13:05

Matrix: Water

Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33568	11/05/12 15:15	JM	TAL NSH

Client Sample ID: TW-17

Lab Sample ID: 490-10489-17

Date Collected: 11/01/12 13:55

Matrix: Water

Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33568	11/05/12 15:42	JM	TAL NSH

Client Sample ID: BR-15

Lab Sample ID: 490-10489-18

Date Collected: 11/01/12 17:06

Matrix: Water

Date Received: 11/02/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33568	11/05/12 16:09	JM	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

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

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-13
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alabama	State Program	4	41150	05-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13
Arizona	State Program	9	AZ0473	05-05-13
Arkansas DEQ	State Program	6	88-0737	04-25-13
California	NELAC	9	1168CA	10-31-13
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Colorado	State Program	8	N/A	02-28-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAC	4	E87358	06-30-13
Illinois	NELAC	5	200010	12-09-12
Iowa	State Program	7	131	05-01-14
Kansas	NELAC	7	E-10229	10-31-13
Kentucky	State Program	4	90038	12-31-12
Kentucky (UST)	State Program	4	19	09-15-13
Louisiana	NELAC	6	LA120025	12-31-12
Louisiana	NELAC	6	30613	06-30-13
Maryland	State Program	3	316	03-31-13
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAC	5	047-999-345	12-31-12
Mississippi	State Program	4	N/A	06-30-13
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-13
New Hampshire	NELAC	1	2963	10-09-13
New Jersey	NELAC	2	TN965	06-30-13
New York	NELAC	2	11342	04-01-13
North Carolina DENR	State Program	4	387	12-31-12
North Dakota	State Program	8	R-146	06-30-13
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-13
Oregon	NELAC	10	TN200001	04-30-13
Pennsylvania	NELAC	3	68-00585	06-30-13
Rhode Island	State Program	1	LAO00268	12-30-12
South Carolina	State Program	4	84009 (001)	02-28-13
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAC	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Utah	NELAC	8	TAN	06-30-13
Virginia	NELAC	3	460152	06-14-13
Washington	State Program	10	C789	07-19-13
West Virginia DEP	State Program	3	219	02-28-13
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-10489 Chain of Custody

Cooler Received/Opened On 11/2/2012 @ 0800

1. Tracking # 3206 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 1.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...(NA)

4. Were custody seals on outside of cooler? (YES)..NO...NA

If yes, how many and where: (2) Front/Back

5. Were the seals intact, signed, and dated correctly? (YES)..NO...NA

6. Were custody papers inside cooler? (YES)..NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) (MW)

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? (YES)..NO...NA

b. Was there any observable headspace present in any VOA vial? YES...(NO)...NA

14. Was there a Trip Blank in this cooler? (YES)...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) ✓

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) ✓

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) ✓

I certify that I attached a label with the unique LIMS number to each container (intial) ✓

21. Were there Non-Conformance issues at login? YES...(NO) Was a PIPE generated? YES...(NO)...#_____

Sample date & time from container BR-15
11/01/12
0
1706

BIS = Broken in shipment

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

11/14/2012

Client Information	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Mr. Joe Deatherage	Phone:	E-Mail: shali.brown@testamericainc.com		Page: 1 of 2
Company: AMEC Environment & Infrastructure, Inc.				Job #:
Address: 9725 Cogdill Road	Due Date Requested:			
City: Knoxville	TAT Requested (days):			
State, Zip: TN, 37932				
Phone: 865-218-1049(Tel)	PO #: C012600052			
Email: joe.deatherage@amec.com	WO #:			
Project Name: Former Taylor Instruments	Project #: 49001213			
Site: Rochester, NY	SSOW#:			

Analysis Requested

Loc: 490
10489

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B TCE PCE 1,1-DCE cis/trans 1,2 DCE vinyl chloride	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
QATB01	—	—	—	Water	N		X		01
OB-06	10/30/12	1622	G	Water	N		X		2
OB-04	10/30/12	1745	G	Water	N		X		3
BR-04	10/31/12	0955	G	Water	N		X		4
BR-04 MS	10/31/12	0955	G	Water	N		X		1
BR-04 MSD	10/31/12	0955	G	Water	N		X		1
BR-10	10/31/12	1048	G	Water	N		X		5
TW-04	10/31/12	1215	G	Water	N		X		6
BR-03	10/31/12	1330	G	Water	N		X		7
QAFB01	10/31/12	1352	G	Water	N		X		8
BR-01	10/31/12	1621	G	Water	N		X		9

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

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

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

Special Instructions/QC Requirements:

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:	
Relinquished by:	Date/Time: 10/1/12 1800	Company AMEC	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11/01/12 0810	Company TA Nashville
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

11/14/2012

Client Information	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Mr. Joe Deatherage	Phone:	E-Mail: shali.brown@testamericainc.com		Page: 2 of 2
Company: AMEC Environment & Infrastructure, Inc.				Job #:

Address: 9725 Cogdill Road	Due Date Requested:	
City: Knoxville	TAT Requested (days):	
State, Zip: TN, 37932		
Phone: 865-218-1049(Tel)	PO #: C012600052	
Email: joe.deatherage@amec.com	WO #:	
Project Name: Former Taylor Instruments	Project #: 49001213	
Site: Rochester, NY	SSOW#:	

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B TCE PCE 1,1-DCE cis/trans 1,2 DCE vinyl chloride	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
~~dup~~ OB-05	10/31/12	1730	G	Water	N		X		10
QARB01	10/31/12	1743	G	Water	N		X		11
W-5	11/1/12	0924	G	Water	N		X		12
W-5 DUP	11/1/12	0924	G	Water	N		X		13
TW-09	11/1/12	1012	G	Water	N		X		14
BR-02	11/1/12	1138	G	Water	N		X		15
TW-20	11/1/12	1305	G	Water	N		X		16
TW-17	11/1/12	1355	G	Water	N		X		17
BR-15				Water					18
~~EB~~				Water					
				Water					

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	11/1/12 1800	AMEC	FTAN 1.5	11/02/12 0800	TA Nashville
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Login Sample Receipt Checklist

Client: AMEC Environment & Infrastructure, Inc.

Job Number: 490-10489-1
SDG Number:

Login Number: 10489
List Number: 1
Creator: Gambill, Shane

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5
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?	False	
There are no discrepancies between the containers received 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX E

CHAIN-OF-CUSTODY FORMS

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

5/31/2012

Client Information	Sampler: Courtney Wolf	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-513-112.1
Client Contact: Mr. Joe Deatherage	Phone: 865 207-4625	E-Mail: shali.brown@testamericainc.com		Page: Page 1 of 2
Company: AMEC Environment & Infrastructure, Inc.		Analysis Requested		Job #:
Address: 9725 Cogdill Road	Due Date Requested:			Preservation Codes:
City: Knoxville	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TN, 37932				
Phone: 865-218-1049(Tel)	PO #: Purchase Order Requested			
Email: joe.deatherage@amec.com	WO #:			Other:
Project Name: Former Taylor Instruments	Project #: 49001213			
Site:	SSOW#:			

NWE2216
06/04/12 23:59

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - 8260Custom TOG PCE 1,1-DCE cis/trans 1,2	624_8ml - 624 Volatiles	Total containers	Special Instructions/Note:
			Preservation Code:				A	A		
1 BR-01	5/17/12	1224	G	Water	N		X			
2 BR-02	5/16/12	1504	G	Water	N		X			
3 BR-03	5/16/12	1205	G	Water	N		X			
4 BR-04	5/15/12	1607	G	Water	N		X			
5 BR-10	5/15/12	1832	G	Water	N		X			
6 BR-15	5/16/12	1821	G	Water	N		X			
7 OB-04	5/15/12	1330	G	Water	N		X			
8 OB-06	5/15/12	1444	G	Water	N		X			
9 OB-08	5/17/12	0918	G	Water	N		X			
10 TW-04	5/16/12	1039	G	Water	N		X			
11 TW-09	5/16/12	1315	G	Water	N		X			

Page 37 of 38

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Courtney Wolf	5/17/12 1500	AMEC			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

5/31/2012

Client Information	Sampler: Courtney Wolf	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-513-112.2
Client Contact: Mr. Joe Deatherage	Phone:	E-Mail: shali.brown@testamericainc.com		Page: Page 2 of 2
Company: AMEC Environment & Infrastructure, Inc.		Analysis Requested		Job #:
Address: 9725 Cogdill Road	Due Date Requested:			Preservation Codes:
City: Knoxville	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TN, 37932				
Phone: 865-218-1049(Tel)	PO #: Purchase Order Requested			
Email: joe.deatherage@amec.com	WO #:			Other:
Project Name: Former Taylor Instruments	Project #: 49001213			
Site:	SSOW#:			

NWE2216
06/04/12 23:59

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - 8260Custom TCE PCE 1,1-DCE cis/trans 1,2	624_6ml - 624 Volatiles	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A		
12 TW-17	5/16/12	1855	G	Water	N		X			
13 TW-20	5/17/12	1042	G	Water	N		X			
14 W-5	5/17/12	1359	G	Water	N		X			
15 QAFB01	5/16/12	1055	G	Water	N		X			
16 W-5 (DUP)	5/17/12	1359	G	Water	N		X			
17 BR-04 (MS)	5/15/12	1607	G	Water	N		X			
BR-04 (MSD)	5/15/12	1607	G	Water	N		X			
18 QARB01	5/16/12	1903	G	Water	N		X			
~~Extra Set~~ QATB-01	—	—	—	Water	N		X			
~~IDW-1~~				Water						
~~IDW-2~~				Water						

Page 38 of 38

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Courtney Wolf	5/17/12 1500	AMEC	TAW	5/18/12 0830	0.1
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

11/14/2012

Client Information	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Mr. Joe Deatherage	Phone:	E-Mail: shali.brown@testamericainc.com		Page: 1 of 2
Company: AMEC Environment & Infrastructure, Inc.		Analysis Requested		Job #:
Address: 9725 Cogdill Road	Due Date Requested:			
City: Knoxville	TAT Requested (days):			
State, Zip: TN, 37932				
Phone: 865-218-1049(Tel)	PO #: C012600052			
Email: joe.deatherage@amec.com	WO #:			
Project Name: Former Taylor Instruments	Project #: 49001213			
Site: Rochester, NY	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B TCE PCE 1,1-DCE dis/trans 1,2 DCE vinyl chloride	Loc: 490 10489	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A			
QATB01	—	—	—	Water	N		X			01
OB-06	10/30/12	1622	G	Water	N		X			2
OB-04	10/30/12	1745	G	Water	N		X			3
BR-04	10/31/12	0955	G	Water	N		X			4
BR-04 MS	10/31/12	0955	G	Water	N		X			1
BR-04 MSD	10/31/12	0955	G	Water	N		X			1
BR-10	10/31/12	1048	G	Water	N		X			5
TW-04	10/31/12	1215	G	Water	N		X			6
BR-03	10/31/12	1330	G	Water	N		X			7
QAFB01	10/31/12	1352	G	Water	N		X			8
BR-01	10/31/12	1621	G	Water	N		X			9

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 10/31/12 1800	Company: AMEC	Received by: 1-5
Relinquished by:	Date/Time:	Company:	Received by:
Relinquished by:	Date/Time:	Company:	Received by:

Date/Time:	Company
11/01/12 0830	TA Nashville
Date/Time:	Company
Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

11/14/2012

Client Information	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Mr. Joe Deatherage	Phone:	E-Mail: shali.brown@testamericainc.com		Page: 2 of 2
Company: AMEC Environment & Infrastructure, Inc.		Analysis Requested		Job #:
Address: 9725 Cogdill Road	Due Date Requested:			Preservation Codes:
City: Knoxville	TAT Requested (days):			A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify)
State, Zip: TN, 37932				
Phone: 865-218-1049(Tel)	PO #: C012600052			Other:
Email: joe.deatherage@amec.com	WO #:			
Project Name: Former Taylor Instruments	Project #: 49001213			
Site: Rochester, NY	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B TCE PCE 1,1-DCE cis/trans 1,2 DCE vinyl chloride	Total Number of containers	Special Instructions/Note:
	Preservation Code:						A		
~~OBC~~ OB-08	10/31/12	1730	G	Water	N		X		10
QARB01	10/31/12	1743	G	Water	N		X		11
W-5	11/1/12	0924	G	Water	N		X		12
W-5 DUP	11/1/12	0924	G	Water	N		X		13
TW-09	11/1/12	1012	G	Water	N		X		14
BR-02	11/1/12	1138	G	Water	N		X		15
TW-20	11/1/12	1305	G	Water	N		X		16
TW-17	11/1/12	1355	G	Water	N		X		17
BR-15				Water				1	18
~~BB~~				Water					
				Water					

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11/1/12 1800	AMEC		11/02/12 0820	TA Nashville
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

APPENDIX F

FIELD DATA RECORDS

MAY 2012 DATA RECORDS

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 5/16/12

SITE ID: TW-04

SITE TYPE: Monitor Well

SITE ACTIVITY: START 0820 END 1045

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER

PROTECTIVE CASING STICKUP (FROM GROUND): 2.6 FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.25 FT

INITIAL DEPTH TO WATER: 9.57 FT

WELL DEPTH: 17.3 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 2 IN

FINAL DEPTH TO WATER: 12.40 FT

SCREEN LENGTH: 5 FT

PID WELL MOUTH: — PPM

WELL INTEGRITY: CAP YES X NO — N/A —; CASING YES X NO — N/A —; LOCKED YES X NO — N/A —; COLLAR YES — NO — N/A —

DRAWDOWN: 2.83 FT

DRAWDOWN VOLUME: 0.45 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: .1/.2 L/MIN

BEGIN PURGING: 0829

END PURGING: 1036

TOTAL VOL. PURGED: 3.9 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
☆ 0834	Fc	7.03	0.800	27.8	6.11	13.67	160.0	10.51	
0844	1	7.03	0.764	31.0	1.18	13.67	-42.8	11.03	
0854	1	7.08	0.763	16.2	0.87	13.67	-77.1	11.34	
0905	1	7.12	0.760	9.6	0.79	13.59	-100.7	11.53	
0925	2	7.17	0.757	4.1	0.68	13.77	-127.7	11.75	
0931	0.6	7.17	0.757	6.2	0.74	13.74	-129.5	11.80	
0937	0.6	7.18	0.759	5.3	0.61	13.67	-132.7	11.85	
0947	1	7.19	0.757	3.5	0.58	13.77	-139.1	11.91	
0957	1	7.20	0.756	4.0	0.58	13.81	-142.5	11.96	
1005	1	7.20	0.750	4.0	0.62	13.55	-139.1	12.09	turned pump up
1017	1.5	7.20	0.733	3.9	0.55	13.26	-141.3	12.40	
1025	1	7.21	0.724	2.3	0.46	13.28	-143.7	12.60	slowed pump
1031	0.6	7.22	0.721	3.0	0.47	13.63	-146.2	12.48	
1036	0.6	7.22	0.720	1.2	0.50	13.87	-144.1	12.40	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC [ ] SUBMERSIBLE [ ] OTHER

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [X] HIGH DENSITY POLYETHYLENE [ ] OTHER

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable): [ ] TEFLON [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 14.8'

☆ pump on slowest speed

SIGNATURE:

NOTES

[X] VOC — Preservation: HCL — Time Collected: 1039

GW_Sample_Form

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 5/16/12

SITE ID: TW-09

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1215 END 1322

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.3 FT

INITIAL DEPTH TO WATER: 11.45 FT

WELL DEPTH: 17.70 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 2 IN

FINAL DEPTH TO WATER: 12.20 FT

SCREEN LENGTH: 5 FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:	YES	NO	N/A
CAP	X	—	—
CASING	X	—	—
LOCKED	X	—	—
COLLAR	X	—	—

DRAWDOWN: 0.75 FT

DRAWDOWN VOLUME: 0.12 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: .16 L/MIN

BEGIN PURGING: 1220

END PURGING: 1311

TOTAL VOL. PURGED: 2.2 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1224	5c	7.21	0.928	6.0	3.02	15.03	-149.7	11.78	slight odor
1233	1	7.01	0.910	0.1	0.61	13.68	-151.9	11.95	
1246	2	7.05	0.899	1.1	0.43	13.34	-157.6	12.12	
1253	1	7.05	0.902	1.1	0.42	13.14	-157.3	12.17	
1258	1	7.04	0.907	1.1	0.38	12.96	-157.0	12.26	
1304	1	7.04	0.912	1.1	0.37	13.26	-157.4	12.21	
1311	1	7.04	0.915	1.2	0.38	13.20	-156.7	12.20	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC [ ] SUBMERSIBLE [ ] OTHER

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [X] HIGH DENSITY POLYETHYLENE [ ] OTHER

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable): [ ] TEFLON [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 15

NOTES

	Preservation	Time Collected
[ ] VOC	HCL	1315

SIGNATURE:

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 5/15/12 5/16/12

SITE ID: TW-17

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1620 END 1743

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): 2.4 FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.25 FT

INITIAL DEPTH TO WATER: 7.71 FT

WELL DEPTH: 17.45 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 2 IN

FINAL DEPTH TO WATER: 10.43 FT

SCREEN LENGTH: 5 FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

DRAWDOWN: 2.72 FT

DRAWDOWN VOLUME: 0.44 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-Inch})

PURGE RATE: .1 L/MIN

BEGIN PURGING: 5/15 1635 5/16 1830

END PURGING: 1732 1852

TOTAL VOL. PURGED: 2.2 GAL
(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1639	fc	6.34	1.171	3.0	2.31	18.57	-99.2	8.87	clear/no odor
1650	1.5	6.15	1.175	2.8	CW30 1.94	17.02	-69.8	10.94	
1700	1	6.13	1.172	0.8	1.84	16.73	-61.1	12.49	
1711	1.5	6.11	1.182	1.1	1.81	16.04	-54.0	14.40	lowered tubing
1725	1.5	6.12	1.209	9.6	2.89	15.91	-43.5	16.20	
1732	~1	6.12	1.208	344.2	3.64	14.26	-43.3	17.15	white/cloudy
end purge - well dry - will collect sample tomorrow									
5/16/12	WL=	7.86							
1840	fc	6.44	1.457	85.5	3.69	13.77	-63.9	9.06	
~~1848~~	~~CW 0.6 1~~	~~6.31~~							
1852	1	6.23	1.483	85.1	3.40	12.38	-48.0	10.43	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (If applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 15

* pump set as low as possible

NOTES

		Preservation	Time Collected
[X]	VOC	HCL	1855
[ ]			
[ ]			
[ ]			

SIGNATURE: _____

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 5/17/12

SITE ID: TW-20

SITE TYPE: Monitor Well

SITE ACTIVITY: START 0925 END 1050

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): 2.3 FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.27 FT

INITIAL DEPTH TO WATER	12.28 FT	WELL DEPTH	17.22 FT	PID AMBIENT AIR	— PPM	WELL DIAMETER	2 IN
FINAL DEPTH TO WATER	12.56 FT	SCREEN LENGTH	5 FT	PID WELL MOUTH	— PPM		
DRAWDOWN	0.28 FT	DRAWDOWN VOLUME	0.04 GAL	PRODUCT THICKNESS	— FT		

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

WELL INTEGRITY:	YES	NO	N/A
CAP	✓	—	—
CASING LOCKED	✓	—	—
COLLAR	✓	—	—

PURGE RATE: .08/.07 L/MIN

BEGIN PURGING: 0935

END PURGING: 1039

TOTAL VOL. PURGED: 1.2 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
0942	5c	7.44	0.790	6.1	3.85	15.78	-39.0	12.42	
0957	1	7.16	0.799	7.1	2.06	14.10	4.5	12.49	
1009	1	7.12	0.805	7.2	2.14	13.89	25.6	12.53	
1021	1	7.11	0.815	7.3	2.17	13.96	39.6	12.55	
1031	0.6	7.11	0.822	7.4	2.23	14.24	42.2	12.56	
1039	0.6	7.10	0.824	7.3	2.24	13.27	51.3	12.56	
~~TB~~									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL	TYPE OF BLADDER MATERIAL (if applicable)
[X] PERISTALTIC	[ ] TEFLON OR TEFLON LINED	[ ] POLYVINYL CHLORIDE	[ ] TEFLON
[ ] SUBMERSIBLE	[X] HIGH DENSITY POLYETHYLENE	[ ] STAINLESS STEEL	[X] OTHER NA
[ ] OTHER _____	[ ] OTHER _____	[X] OTHER NA	

PURGE OBSERVATIONS

Tubing Intake @ 14.75

SIGNATURE: _____

NOTES

		Preservation	Time Collected
[X]	VOC	HCL	1042
[ ]			
[ ]			

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 5/15/12

SITE ID: OB-04

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1135 END 1338

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.3 FT

INITIAL DEPTH TO WATER: 3.84 FT

WELL DEPTH: 16.45 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 2 IN

FINAL DEPTH TO WATER: 7.85 FT

SCREEN LENGTH: 5 FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	X	—	—
CASING	X	—	—
LOCKED	X	—	—
COLLAR	X	—	—

DRAWDOWN: 4.01 FT

DRAWDOWN VOLUME: 0.64 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))

PURGE RATE: 0.130 / 0.115 L/MIN

BEGIN PURGING: 1147

END PURGING: 1326

TOTAL VOL. PURGED: 3.2 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1152	fc	6.59	0.760	16.5	5.46	17.10	-229.7	5.04	strong odor/
1159	1	6.54	0.732	15.4	4.47	16.38	-274.5	6.04	black flat
1237	4.5	6.43	0.951	12.1	0.82	16.84	-251.2	7.71	
1246	1	6.40	1013	11.6	0.97	16.84	-261.7	7.71	
1304	2	6.38	1.157	12.9	1.27 ~~1.157~~	15.80	-263.3	7.72	
1309	0.6	6.40	1.179	14.5	1.53	15.45	-269.4	7.76	
1315	0.6	6.41	1.201	16.3	1.72	15.56	-261.9	7.79	
1321	0.6	6.42	1.224	15.6	1.84	15.66	-270.1	7.82	
1326	0.6	6.43	1.232	17.7	1.89	15.86	-265.4	7.85	
1330	collect	samples							

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC [ ] SUBMERSIBLE [ ] OTHER

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [X] HIGH DENSITY POLYETHYLENE [ ] OTHER

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable): [ ] TEFLON [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 14'

initial slug black - then clear w/ black flakes

* pump set slow as possible

SIGNATURE:

NOTES

[X] VOC

Preservation: HCL

Time Collected: 1330

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 5/15/12

SITE ID: OB-06

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1338 END 1450

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER

PROTECTIVE CASING STICKUP (FROM GROUND)	— FT	PROTECTIVE CASING / WELL DIFFERENCE	0.4 FT		
INITIAL DEPTH TO WATER	3.73 FT	WELL DEPTH	16.45 FT	PID AMBIENT AIR	— PPM
WELL DIAMETER	2 IN	FINAL DEPTH TO WATER	6.39 FT	SCREEN LENGTH	10 FT
PID WELL MOUTH	— PPM	DRAWDOWN	2.66 FT	DRAWDOWN VOLUME	0.43 GAL
PRODUCT THICKNESS	— FT				

WELL INTEGRITY:

	YES	NO	N/A
CAP	X		
CASING			
LOCKED			
COLLAR	X		

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: .125/0.11 L/MIN

BEGIN PURGING: 1342

END PURGING: 1441

TOTAL VOL. PURGED: 1.8 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1346	FC	7.02	0.909	3.2	4.20	18.67	-240.3	4.57	slowed pump
1357	1.5	6.71	0.848	3.7	2.42	16.97	-267.5	5.49	clear/slight black tint & odor
1412	2	6.76	0.824	6.5	1.74	17.51	-302.1	6.22	
1424	1.5	6.73	0.817	7.6	1.31	17.72	-259.2	6.35	
1430	1	6.72	0.813	6.3	1.34	17.31	-268.1	6.38	
1435	0.6	6.70	0.810	8.3	1.40	17.26	-270.9	6.38	
1441	0.6	6.70	0.809	7.1	1.52	17.17	-265.5	6.39	
1444	collect samples								

125

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL	TYPE OF BLADDER MATERIAL (if applicable)
[X] PERISTALTIC	[ ] TEFLON OR TEFLON LINED	[ ] POLYVINYL CHLORIDE	[ ] TEFLON
[ ] SUBMERSIBLE	[X] HIGH DENSITY POLYETHYLENE	[ ] STAINLESS STEEL	[X] OTHER NA
[ ] OTHER	[ ] OTHER	[X] OTHER NA	

PURGE OBSERVATIONS

Tubing Intake @ 11'

NOTES

		Preservation	Time Collected
[X]	VOC	HCL	1444

SIGNATURE:

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 5/17/12

SITE ID: OB-08

SITE TYPE: Monitor Well

SITE ACTIVITY: START 0750 END 0925

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.35 FT

INITIAL DEPTH TO WATER: 6.10 FT

WELL DEPTH: 25.3 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 2 IN

FINAL DEPTH TO WATER: 7.61 FT

SCREEN LENGTH: 10 FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	N/A		
CASING			
LOCKED	N/A		
COLLAR			

DRAWDOWN: 1.51 FT

DRAWDOWN VOLUME: 0.24 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: .136 / .1 L/MIN

BEGIN PURGING: 0757

END PURGING: 0914

TOTAL VOL. PURGED: 2.3 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
0801	Fc	7.02	0.901	4.2	6.22	14.41	-108.7	6.79	strong odor
0812	1.5	7.02	0.866	0.8	0.92	14.21	-171.2	7.56	
0821	1	7.03	0.861	1.2	0.65	14.70	-178.9	7.51	slowed pump
0833	1	7.04	0.864	2.5	0.51	14.86	-176.3	7.47	
0841	1	7.04	0.863	1.0	0.47	14.84	-179.1	7.51	
0852	1	7.03	0.867	1.9	0.41	14.85	-180.7	7.55	
0902	1.5	7.03	0.872	0.7	0.43	14.67	-182.9	7.83	
CW 0908 ~~0910~~	0.6	7.02	0.872	0.1	0.40	15.06	-178.4	7.70	
0914	0.6	7.02	0.872	1.3	0.42	15.51	-178.3	7.61	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC [ ] SUBMERSIBLE [ ] OTHER _____

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [X] HIGH DENSITY POLYETHYLENE [ ] OTHER _____

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [X] OTHER NA

TYPE OF BLADDER MATERIAL (If applicable): [ ] TEFLON [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 20

SIGNATURE: _____

NOTES

	Preservation	Time Collected
[X] VOC	HCL	0918
[ ]		
[ ]		
[ ]		

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 5/17/12

SITE ID: W-5

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1233 END 1410

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.25 FT

INITIAL DEPTH TO WATER: 5.56 FT

WELL DEPTH: 21.8 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 2 IN

FINAL DEPTH TO WATER: 8.93 FT

SCREEN LENGTH: 5 FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

DRAWDOWN: 3.37 FT

DRAWDOWN VOLUME: 0.54 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))

PURGE RATE: 0.2/0.125 L/MIN

BEGIN PURGING: 1241

END PURGING: 1355

TOTAL VOL. PURGED: 3.4 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX.POTENTIAL (mV)	WATER LEVEL	Comments
1245	fc	7.22	01.189	3.2	4.86	15.94	-143.7	6.48	
1301	3	6.76	1.208	0.6	0.62	13.81	-153.9	9.00	slowed pump
1307	1	6.74	1.220	0.3	0.58	14.01	-152.4	9.35	
1321	3	6.70	1.244	0.1	0.57	14.34	-140.1	9.76	
1336	1.5	6.68	1.274	0.4	0.64	15.27	-125.1	9.18	
1344	1	6.67	1.285	4.5	0.62	15.25	-117.2	9.07	
1355	1	6.67	1.287	4.6	0.64	15.26	-112.3	8.93	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC [ ] SUBMERSIBLE [ ] OTHER

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [X] HIGH DENSITY POLYETHYLENE [ ] OTHER

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable): [ ] TEFLON [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 19.3

slight black tint to water

SIGNATURE:

NOTES

		Preservation	Time Collected
[X]	VOC	HCL	1359
[X]	VOC - DUP	HCL	1359
[ ]			
[ ]			

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments, 2012 Semi-Annual Sampling Event

DATE: 5/17/12

SITE ID: BR-01

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1050 END 1233

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [ ] TOP OF WELL RISER [X] TOP OF PROTECTIVE CASING [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): 2.3 FT

PROTECTIVE CASING / WELL DIFFERENCE: NA FT

INITIAL DEPTH TO WATER	13.22 FT	WELL DEPTH	38.6 FT	PID AMBIENT AIR	— PPM	WELL DIAMETER	4 IN
FINAL DEPTH TO WATER	14.05 FT	SCREEN LENGTH	NA FT	PID WELL MOUTH	— PPM		
DRAWDOWN	0.83 FT	DRAWDOWN VOLUME	0.54 GAL	PRODUCT THICKNESS	— FT		

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

WELL INTEGRITY:	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

PURGE RATE: .15/.125 L/MIN

BEGIN PURGING: 1053

END PURGING: 1220

TOTAL VOL. PURGED: 2.9 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1057	Fc	8.85	0.277	4.4	4.63	15.33	-15.5	13.43	
1114	2	9.12	0.256	4.3	0.53	13.83	+58.2	13.85	
1123	1.5	9.15	0.256	4.7	0.50	13.90	63.7	13.98	slow pump
1131	1	9.17	0.256	5.0	0.59	14.14	66.1	13.99	
1139	1	9.18	0.256	5.2	0.59	14.40	65.8	14.02	
1152	2	9.18	0.256	5.5	0.37	14.22	69.5	14.15	
1159	1	9.19	0.256	5.2	0.36	14.11	71.1	14.20	
1207	1	9.20	0.256	6.0	0.47	14.88	71.0	14.12	
1215	0.6	9.20	0.256	5.7	0.45	14.92	71.7	14.08	
1220	0.6	9.21	0.256	6.0	0.41	14.96	73.0	14.05	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC [ ] SUBMERSIBLE [ ] OTHER _____

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [X] HIGH DENSITY POLYETHYLENE [ ] OTHER _____

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable): [ ] TEFLON [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 16.2

SIGNATURE: _____

NOTES

	Preservation	Time Collected
[X] VOC	HCL	1224
[ ]		
[ ]		
[ ]		

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 5/16/12

SITE ID: BR-02

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1322 END 1511

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [ ] TOP OF WELL RISER [X] TOP OF PROTECTIVE CASING [ ] OTHER ____

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.45 FT

INITIAL DEPTH TO WATER: 22.22 FT

WELL DEPTH: 44.0 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 4 IN

FINAL DEPTH TO WATER: 22.75 FT

SCREEN LENGTH: NA FT

PID WELL MOUTH: — PPM

WELL INTEGRITY: CAP YES; CASING LOCKED YES; COLLAR YES; NO —; N/A —

DRAWDOWN: 0.53 FT

DRAWDOWN VOLUME: 0.34 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: .1/.2 L/MIN

BEGIN PURGING: 1329

END PURGING: 1500

TOTAL VOL. PURGED: 2.8 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1334	2	7.54	0.729	50.1	4.61	14.53	-107.3	22.40	
1344	1	7.45	0.729	37.3	0.87	14.44	-119.2	22.45	
1400	1	7.45	0.732	32.3	0.74	14.77	-124.5	22.47	
1412	1	7.45	0.733	34.9	0.62	14.85	-123.1	22.51	
1424	1	7.44	0.737	0.3	0.57	14.59	-125.0	22.57	sped pump up
1429	1	7.44	0.745	29.5	0.41	14.36	-125.6	22.68	
1439	2	7.42	0.764	28.2	0.35	14.49	-123.5	22.76	slowed pump
1448	1	7.40	0.775	26.5	0.42	14.58	-121.2	22.75	
1454	0.6	7.40	0.788	25.1	0.45	14.76	-119.3	22.75	
1500	0.6	7.40	0.804	26.1	0.43	14.48	-116.6	22.75	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC [ ] SUBMERSIBLE [ ] OTHER ____

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [X] HIGH DENSITY POLYETHYLENE [ ] OTHER ____

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable): [ ] TEFLON [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 25

SIGNATURE: _____

NOTES

	Preservation	Time Collected
[X] VOC	HCL	1504

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 5/16/12

SITE ID: BR-03

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1045 END 1215

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: — FT

INITIAL DEPTH TO WATER	10.07 FT	WELL DEPTH	40.1 FT	PID AMBIENT AIR	— PPM	WELL DIAMETER	4 IN
FINAL DEPTH TO WATER	11.55 FT	SCREEN LENGTH	NA FT	PID WELL MOUTH	— PPM		
DRAWDOWN	1.48 FT	DRAWDOWN VOLUME	0.96 GAL	PRODUCT THICKNESS	— FT		

WELL INTEGRITY:	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: .16/.15/.14 L/MIN

BEGIN PURGING: 1047

END PURGING: 1202

TOTAL VOL. PURGED: 3.1 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1051	6	7.69	0.879	48.5	4.34	14.31	-195.4	10.37	clear/no odor
1057	1	7.77	0.881	31.9	0.91	13.32	-214.1	10.63	
1110	2	7.83	0.882	21.7	0.50	13.39	-224.3	11.11	
1116	1	7.84	0.882	14.3	0.47	13.67	-224.1	11.29	
1122	1	7.84	0.881	15.5	0.41	13.54	-223.0	11.40	
1128	1	7.85	0.880	18.2	0.39	13.68	-225.0	11.50	
1134	1	7.85	0.880	15.1	0.40	14.09	-224.6	11.55	slowed pump
1141	1	7.84	0.879	12.6	0.39	14.58	-220.2	11.58	
1148	1	7.83	0.880	12.4	0.41	14.45	-224.9	11.60	
1155	1	7.83	0.878	12.6	0.39	14.41	-218.6	11.60	
1202	1	7.82	0.876	4.3	0.40	14.92	-221.6	11.55	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL	TYPE OF BLADDER MATERIAL (if applicable)
[X] PERISTALTIC	[ ] TEFLON OR TEFLON LINED	[ ] POLYVINYL CHLORIDE	[ ] TEFLON
[ ] SUBMERSIBLE	[X] HIGH DENSITY POLYETHYLENE	[ ] STAINLESS STEEL	[X] OTHER NA
[ ] OTHER	[ ] OTHER	[X] OTHER NA	

PURGE OBSERVATIONS

Tubing Intake @ 13

NOTES

		Preservation	Time Collected
[X]	VOC	HCL	1205
[ ]			
[ ]			

SIGNATURE:

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments, 2012 Semi-Annual Sampling Event

DATE: 5/15/12

SITE ID: BR-04

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1450 END 1620

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER; [ ] TOP OF PROTECTIVE CASING; [ ] OTHER

INITIAL DEPTH TO WATER	17.80 FT	WELL DEPTH	44.2 FT	PROTECTIVE CASING STICKUP (FROM GROUND)	— FT
FINAL DEPTH TO WATER	17.81 FT	SCREEN LENGTH	NA FT	PROTECTIVE CASING / WELL DIFFERENCE	0.25 FT
DRAWDOWN	0.01 FT	DRAWDOWN VOLUME	0.0065 GAL	PID AMBIENT AIR	— PPM
				PID WELL MOUTH	— PPM
				PRODUCT THICKNESS	— FT
				WELL DIAMETER	4 IN

WELL INTEGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

((initial - final) x 0.16 {2-inch} or ~~x 0.65 (4-inch)~~ or x 1.5 {6-inch})

PURGE RATE	BEGIN PURGING	END PURGING	TOTAL VOL. PURGED
.120 L/MIN	1505	1603	1.8 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1509	fc	8.03	0.139	88.1	3.24	19.37	-120.0	17.82	cloudy
1526	2	8.13	0.130	36.5	2.41	15.87	-42.1	17.81	clear
1542	2	8.22	0.131	32.1	2.47	15.77	-30.5	17.82	
1548	1	8.28	0.132	27.9	(w) 1.44	15.83	-31.7	17.82	
1553	0.6	8.30	0.131	27.4	1.19	15.64	-38.8	17.81	
1558	0.6	8.31	0.131	28.3	1.15	15.58	-43.6	17.82	
1603	0.6	8.32	0.131	9.8	1.14	15.49	-52.7	17.81	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL	TYPE OF BLADDER MATERIAL (if applicable)
[X] PERISTALTIC	[ ] TEFLON OR TEFLON LINED	[ ] POLYVINYL CHLORIDE	[ ] TEFLON
[ ] SUBMERSIBLE	[X] HIGH DENSITY POLYETHYLENE	[ ] STAINLESS STEEL	[X] OTHER NA
[ ] OTHER	[ ] OTHER	[X] OTHER NA	

PURGE OBSERVATIONS

Tubing Intake @ ~20.8'

SIGNATURE:

NOTES

		Preservation	Time Collected
[ ]	VOC	HCL	1607
[ ]	VOC (MS)	HCL	1607
[ ]	VOC (MSD)	HCL	1607
[ ]			

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments, 2012 Semi-Annual Sampling Event

DATE: 5/15/12

SITE ID: BR-10

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1743 END

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [X] TOP OF PROTECTIVE CASING [ ] OTHER _____

INITIAL DEPTH TO WATER	17.35 FT	WELL DEPTH	47.0 FT	PID AMBIENT AIR	— PPM	WELL DIAMETER	6 IN
FINAL DEPTH TO WATER	17.41 FT	SCREEN LENGTH	NA FT	PID WELL MOUTH	— PPM	PROTECTIVE CASING STICKUP (FROM GROUND)	— FT
DRAWDOWN	0.04 FT	DRAWDOWN VOLUME	0.06 GAL	PRODUCT THICKNESS	— FT	PROTECTIVE CASING / WELL DIFFERENCE	0.3 FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

WELL INTEGRITY:	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

PURGE RATE: 0.2 L/MIN | BEGIN PURGING: 1747 | END PURGING: 1829 | TOTAL VOL. PURGED: 2.2 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1755	fc	7.08	0.539	60.4	3.19	17.73	-119.3	17.41	
1805	2	7.59	0.493	28.1	2.48	14.23	-60.3	17.41	
1809	1	7.64	0.493	25.9	0.50	14.14	-71.6	17.41	
1814	1	7.68	0.492	23.0	0.35	14.08	-76.1	17.41	
1819	1	7.72	0.492	25.0	0.30	13.87	-81.4	17.41	
1824	1	7.75	0.492	24.0	0.29	13.91	-86.8	17.41	
1829	1	7.75	0.492	22.8	0.28	14.13	-90.1	17.41	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL	TYPE OF BLADDER MATERIAL (if applicable)
[X] PERISTALTIC	[ ] TEFLON OR TEFLON LINED	[ ] POLYVINYL CHLORIDE	[ ] TEFLON
[ ] SUBMERSIBLE	[X] HIGH DENSITY POLYETHYLENE	[ ] STAINLESS STEEL	[X] OTHER NA
[ ] OTHER _____	[ ] OTHER _____	[X] OTHER NA	

PURGE OBSERVATIONS

Tubing Intake @ 20.4'

SIGNATURE: _____

NOTES

Preservation	Time Collected
[X] VOC	HCL 1832
[ ]	
[ ]	
[ ]	

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 5/16/12

SITE ID: BR-15

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1511 END 1830

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [ ] TOP OF WELL RISER [X] TOP OF PROTECTIVE CASING [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.35 FT

INITIAL DEPTH TO WATER: 18.36 FT

WELL DEPTH: 72 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 6 IN

FINAL DEPTH TO WATER: 21.80 FT

SCREEN LENGTH: NA FT

PID WELL MOUTH: — PPM

DRAWDOWN: 3.44 FT

DRAWDOWN VOLUME: 5.16 GAL

PRODUCT THICKNESS: — FT

WELL INTEGRITY:	YES	NO	N/A
CAP	X	—	—
CASING	X	—	—
LOCKED	X	—	—
COLLAR	X	—	—

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: .165/ Varies - sampled @ 100 mL/min L/MIN

BEGIN PURGING: 1521

END PURGING: 1818

TOTAL VOL. PURGED: ~9 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1525	fc	8.47	0.165	3.2	7.20	17.90	-41.5	18.47	
1538	2	9.30	0.104	3.4	0.47	15.86	-35.3	18.78	
1600	3.6	9.35	0.104	1.3	0.35	15.54	-5.0	19.47	slowed pump (W)
1630	5	9.34	0.104	2.5	0.28	15.03	29.8	20.24	
1650	1.5	9.36	0.104	2.4	0.42	15.93	30.8	20.45	slowed pump
1724	6	9.38	0.104	2.2	0.34	14.65	-33.7	21.45	slowed pump
1733	1	9.38	0.104	1.7	0.32	15.30	-13.2	21.50	
1747	2.5	9.38	0.104	1.9	0.31	14.89	0.4	21.67	
1754	0.6	9.40	0.104	1.9	0.29	15.34	3.3	21.70	
1759	0.6	9.39	0.104	2.1	0.36	15.46	5.6	21.72	
1806	0.6	9.40	0.104	1.8	0.39	15.32	7.0	21.79	
1812	0.6	9.40	0.104	2.4	0.36	15.32	8.2	21.80	
1818	0.6	9.40	0.104	1.7	0.37	15.54	8.3	21.80	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC [ ] SUBMERSIBLE [ ] OTHER _____

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [X] HIGH DENSITY POLYETHYLENE [ ] OTHER _____

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [X] OTHER NA

TYPE OF BLADDER MATERIAL (If applicable): [ ] TEFLON [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 22.3

per KJD - turn up flow rate to drawdown well to about 21.5' then slow down and see if drawdown stabalizes

SIGNATURE: _____

NOTES

		Preservation	Time Collected
[X]	VOC	HCL	1821
[ ]			
[ ]			
[ ]			

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 5/16/12

SITE ID: QARB-01

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1900 END 1904

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [ ] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): ~~FT~~

PROTECTIVE CASING / WELL DIFFERENCE: ~~FT~~

INITIAL DEPTH TO WATER: ~~FT~~

WELL DEPTH: ~~FT~~

PID AMBIENT AIR: ~~PPM~~

WELL DIAMETER: ~~IN~~

FINAL DEPTH TO WATER: ~~FT~~

SCREEN LENGTH: ~~FT~~

PID WELL MOUTH: ~~PPM~~

WELL INTEGRITY:

	YES	NO	N/A
CAP	___	___	___
CASING	___	___	___
LOCKED	___	___	___
COLLAR	___	___	___

DRAWDOWN: ~~FT~~

DRAWDOWN VOLUME: ~~GAL~~

PRODUCT THICKNESS: ~~FT~~

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: ~~L/MIN~~

BEGIN PURGING: ~~~~

END PURGING: ~~~~

TOTAL VOL. PURGED: ~~GAL~~
(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
	collected using unused tubing and DI water from TOPS								

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON-LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ _____

SIGNATURE: _____

NOTES

		Preservation	Time Collected
[X]	VOC	HCL	1903
[ ]			
[ ]			

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

DATE: 5/16/12

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

SITE ID: QAFB01

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1053 END 1057

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [ ] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): ____ FT

PROTECTIVE CASING / WELL DIFFERENCE: ____ FT

INITIAL DEPTH TO WATER: ____ FT

WELL DEPTH: ____ FT

PID AMBIENT AIR: ____ PPM

WELL DIAMETER: ____ IN

FINAL DEPTH TO WATER: ____ FT

SCREEN LENGTH: ____ FT

PID WELL MOUTH: ____ PPM

DRAWDOWN: ____ FT

DRAWDOWN VOLUME: ____ GAL

PRODUCT THICKNESS: ____ FT

WELL INTEGRITY:	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

((Initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: ____ L/MIN

BEGIN PURGING: ____

END PURGING: ____

TOTAL VOL. PURGED: ____ GAL
(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
collected from TOPS DI water									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ _____

SIGNATURE: _____

NOTES

		Preservation	Time Collected
[X]	VOC	HCL	1055
[ ]			
[ ]			
[ ]			

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 5/15/12

SITE ID: QATB01

SITE TYPE: Monitor Well

SITE ACTIVITY: START ~ END ~

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [ ] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): ~ FT

PROTECTIVE CASING / WELL DIFFERENCE: ~ FT

INITIAL DEPTH TO WATER: ~ FT

WELL DEPTH: ~ FT

PID AMBIENT AIR: ~ PPM

WELL DIAMETER: ~ IN

FINAL DEPTH TO WATER: ~ FT

SCREEN LENGTH: ~ FT

PID WELL MOUTH: ~ PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	___	___	___
CASING	___	___	___
LOCKED	___	___	___
COLLAR	___	___	___

DRAWDOWN: ~ FT

DRAWDOWN VOLUME: ~ GAL

PRODUCT THICKNESS: ~ FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: ~ L/MIN

BEGIN PURGING: ~

END PURGING: ~

TOTAL VOL. PURGED: ~ GAL
(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
	LAB PROVIDED 1 VOA VIAL								

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ _____

SIGNATURE: _____

NOTES

		Preservation	Time Collected
[X]	VOC	HCL	_____
[ ]			_____
[ ]			_____
[ ]			_____

OCTOBER/NOVEMBER FIELD DATA RECORDS

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 10/30/12

SITE ID: OB-04

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1630 END 1750

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER

INITIAL DEPTH TO WATER	1.85 FT	WELL DEPTH	16.45 FT	PROTECTIVE CASING STICKUP (FROM GROUND)	— FT
FINAL DEPTH TO WATER	5.47 FT	SCREEN LENGTH	5 FT	PROTECTIVE CASING / WELL DIFFERENCE	0.3 FT
DRAWDOWN	3.62 FT	DRAWDOWN VOLUME	0.58 GAL	PID AMBIENT AIR	— PPM
				PID WELL MOUTH	— PPM
				PRODUCT THICKNESS	— FT
				WELL DIAMETER	2 IN

((Initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

WELL INTEGRITY:

	YES	NO	N/A
CAP	X	—	—
CASING	X	—	—
LOCKED	X	—	—
COLLAR	—	—	X

PURGE RATE: .125 L/MIN

BEGIN PURGING: 1633

END PURGING: 1742

TOTAL VOL. PURGED: 1.73 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1635	Ec	7.40	0.913	5.4	4.13	16.04	-178.1	3.05	clear/black flakes
1656	2	7.29	0.905	8.6	1.02	16.42	-282.2	4.81	
1713	2	7.23	0.928	6.4	1.53	16.36	-311.7	5.22	
1722	1	7.19	0.932	6.6	1.82	16.34	-312.5	5.38	
1732	1	7.16	0.934	7.3	1.64	16.32	-309.8	5.45	
1737	0.6	7.15	0.933	7.5	1.75	16.33	-307.3	5.46	
1742	0.6	7.13	0.932	7.8	1.84	16.21	-307.0	5.47	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC [ ] SUBMERSIBLE [ ] OTHER

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [X] HIGH DENSITY POLYETHYLENE [ ] OTHER

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [X] OTHER NA

TYPE OF BLADDER MATERIAL (If applicable): [ ] TEFLON [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 14

SIGNATURE:

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1745

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 10/30/12

SITE ID: OB-06

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1510 END 1625

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [ ] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.4 FT

INITIAL DEPTH TO WATER: 2.65 FT

WELL DEPTH: 16.45 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 2 IN

FINAL DEPTH TO WATER: 4.81 FT

SCREEN LENGTH: 10 FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	X	—	—
CASING	X	—	—
LOCKED	X	—	—
COLLAR	—	—	X

DRAWDOWN: 2.16 FT

DRAWDOWN VOLUME: 0.34 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: .125 L/MIN

BEGIN PURGING: 1514

END PURGING: 1620

TOTAL VOL. PURGED: 1.6 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1519	fc	6.92	0.840	6.8	3.80	16.17	-54.9	3.35	clear/slight odor dark tint
1534	2	6.98	0.823	5.8	0.67	17.06	-133.7	4.25	
1549	2	7.08	0.822	4.5	0.63	17.14	-168.6	4.61	
1558	1	7.11	0.824	3.9	0.65	17.21	-183.4	4.72	
1610	1.5	7.12	0.829	3.4	0.72	17.27	-200.6	4.80	
1615	0.6	7.12	0.833	3.2	0.73	17.21	-206.4	4.81	
1620	0.6	7.12	0.835	2.6	0.71	17.20	-209.3	4.81	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 11.5

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1622
[ ]			
[ ]			

SIGNATURE: _____

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 10/31/12

SITE ID: OB-08

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1625 END

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.35 FT

INITIAL DEPTH TO WATER: 4.80 FT

WELL DEPTH: 25.3 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 2 IN

FINAL DEPTH TO WATER: 5.95 FT

SCREEN LENGTH: 10 FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	N/A	—	—
CASING	—	—	—
LOCKED	—	—	—
COLLAR	—	—	X

DRAWDOWN: 1.15 FT

DRAWDOWN VOLUME: 0.18 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: <100 L/MIN

BEGIN PURGING: 1632

END PURGING: 1727

TOTAL VOL. PURGED: ~~0.11~~ CW 1.08 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1641	<c+0.3	7.57	0.736	10.6	1.88	15.67	-137.2	5.45	slowed pump
1658	2	7.30	0.754	11.7	0.57	16.10	-146.2	5.87	strong odor
1713	1.5	7.30	0.759	10.9	0.45	16.07	-148.6	5.95	
1720	0.6	7.24	0.761	8.9	0.46	16.11	-148.8	5.95	
1727	0.6	7.23	0.765	8.3	0.45	16.06	-148.9	5.95	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 20

SIGNATURE: _____

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1730
[ ]			
[ ]			
[ ]			

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 10/31/12

SITE ID: TW-04

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1053 END 1218

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): 2.6 FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.25 FT

INITIAL DEPTH TO WATER: 6.68 FT

WELL DEPTH: 17.3 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 2 IN

FINAL DEPTH TO WATER: 9.93 FT

SCREEN LENGTH: 5 FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	X	—	—
CASING	X	—	—
LOCKED	X	—	—
COLLAR	X	—	—

DRAWDOWN: 3.25 FT

DRAWDOWN VOLUME: 0.52 GAL

PRODUCT THICKNESS: — FT

((Initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: 0.1 - 0.15 L/MIN

BEGIN PURGING: 1059

END PURGING: 1211

TOTAL VOL. PURGED: 1.53 GAL
(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1103	~~2~~	7.74	0.837	5.7	7.12	14.95	35.5	7.62	
1115	2	7.04	0.861	3.6	0.78	15.05	-50.1	9.23	slow pump
1137	2	7.04	0.789	1.4	0.56	15.13	-95.4	9.57	
1145	1	7.08	0.757	0.8	0.53	15.43	-107.5	9.75	
1202	2	7.11	0.752	0.7	0.48	15.59	-117.1	10.00	
1206	0.6	7.11	0.757	0.4	0.46	15.39	-122.9	9.95	
1211	0.6	7.11	0.762	0.1	0.48	15.33	-128.8	9.93	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 14.8

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1215
[ ]			
[ ]			

SIGNATURE: _____

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 11/1/12

SITE ID: TW-09

SITE TYPE: Monitor Well

SITE ACTIVITY: START 0931 END 1015

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.3 FT

INITIAL DEPTH TO WATER: 8.75 FT

WELL DEPTH: 17.70 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 2 IN

FINAL DEPTH TO WATER: 8.95 FT

SCREEN LENGTH: 5 FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	✓	—	—
CASING	✓	—	—
LOCKED	✓	—	—
COLLAR	—	—	✓

DRAWDOWN: 0.20 FT

DRAWDOWN VOLUME: 0.03 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: 0.1 L/MIN

BEGIN PURGING: 0939

END PURGING: 1010

TOTAL VOL. PURGED: 0.62 GAL
(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
0941	5c	7.09	0.702	3.7	2.67	15.08	-107.9	8.90	
0950	1	6.89	0.699	1.4	0.77	15.91	-105.1	8.95	
1000	1	6.86	0.698	1.2	0.70	15.89	-107.1	8.95	
1010	1	6.86	0.700	1.0	0.65	15.95	-108.4	8.95	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 15

SIGNATURE: _____

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1012
[ ]			
[ ]			

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 10/31/12

SITE ID: TW-17

SITE TYPE: Monitor Well

SITE ACTIVITY: START 10/31 1350 END 10/31 1507

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [ ] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): 2.4 (W ~~2~~) FT

PROTECTIVE CASING / WELL DIFFERENCE: (W 0.25) ~~0.25~~ FT

INITIAL DEPTH TO WATER: 5.77 FT

WELL DEPTH: 17.04 ~~17.45~~ FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 2 IN

FINAL DEPTH TO WATER: 10.15 FT

SCREEN LENGTH: 5 FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED			
COLLAR	X		

DRAWDOWN: 4.38 FT

DRAWDOWN VOLUME: 0.7 GAL

PRODUCT THICKNESS: — FT

((Initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: .111 / 0.1 L/MIN

BEGIN PURGING: 10/31 1351 / 11/1 1330

END PURGING: 10/31 1504 / 1353

TOTAL VOL. PURGED: 2.1 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
☆ 1355	fc	7.12	1.518	47.2	8.29	14.79	-131.6	6.94	
1409	2	6.76	1.527	27.1	0.75	14.88	-134.4	9.75	
1427	2	6.75	1.513	18.5	0.52	14.73	-130.3	12.29	
1446	2	6.73	1.493	17.9	0.62	14.59	-120.7	14.45	
1504	~2	6.79	1.516	1154.1	02.11	14.90	-115.1	17.01	-dry
end purge well dry - will collect sample tomorrow									
11/1/12	WL=	6.22							
1330	fc	6.72	1.237	45.9	3.38	13.65	-87.4	7.31	
1340	1	6.46	1.283	35.6	2.73	13.77	-85.9	8.63	
1353	1.25	6.48	1.299	48.4	1.35	13.64	-88.2	10.10	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC [ ] SUBMERSIBLE [ ] OTHER _____

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [X] HIGH DENSITY POLYETHYLENE [ ] OTHER _____

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable): [ ] TEFLON [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ —

☆ pump slow as possible

SIGNATURE: _____

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1355
[ ]			
[ ]			

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 11/1/12

SITE ID: TW-20

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1142 END 1315

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): 2.3 FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.27 FT

INITIAL DEPTH TO WATER: 10.91 FT

WELL DEPTH: 17.22 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 2 IN

FINAL DEPTH TO WATER: 11.18 FT

SCREEN LENGTH: 5 FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

DRAWDOWN: 0.27 FT

DRAWDOWN VOLUME: 0.04 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: .65/.75 L/MIN

BEGIN PURGING: 1156

END PURGING: 1301

TOTAL VOL. PURGED: 0.91 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1200	~~0~~	7.50	0.583	3.1	3.32	12.95	7.1	11.12	
1227	2	7.33	0.657	1.6	2.04	13.33	15.7	11.23	slowed pump
1240	1	7.33	0.660	1.7	1.77	12.88	18.1	11.19	
1249	0.6	7.33	0.657	1.7	1.72	12.80	20.5	11.18	
1301	0.6	7.32	0.661	2.1	1.62	13.04	16.7	11.18	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 14.75

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1305
[ ]			
[ ]			

SIGNATURE: _____

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 11/1/12

SITE ID: W-5

SITE TYPE: Monitor Well

SITE ACTIVITY: START 0825 END 0931

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.25 FT

INITIAL DEPTH TO WATER: 4.28 FT

WELL DEPTH: 21.8 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 2 IN

FINAL DEPTH TO WATER: 7.15 FT

SCREEN LENGTH: 5 FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR			X

DRAWDOWN: 2.87 FT

DRAWDOWN VOLUME: 0.459 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: .125/0.1 L/MIN

BEGIN PURGING: 0834

END PURGING: 0922

TOTAL VOL. PURGED: 1.1 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
0836	fc	6.78	0.939	4.6	6.41	13.92	-75.1	5.19	strong odor
0852	2	6.85	0.925	0.5	0.97	14.93	-126.8	6.65	black flakes
0909	2	6.88	0.961	1.4	0.73	15.09	-131.4	7.30	turned pump down
0916	0.6	6.88	0.977	1.6	0.73	14.83	-131.4	7.20	
0922	0.6	6.88	0.983	1.7	0.73	14.76	-128.7	7.15	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 19.3

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	0924
[X]	VOC Dup (W-5)	HCL	0924
[ ]			
[ ]			

SIGNATURE: _____

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 10/31/12

SITE ID: BR-01

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1507 END

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER

PROTECTIVE CASING STICKUP (FROM GROUND): 2.3 FT

PROTECTIVE CASING / WELL DIFFERENCE: NA FT

INITIAL DEPTH TO WATER: 12.65 FT

WELL DEPTH: 38.6 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 4 IN

FINAL DEPTH TO WATER: 13.12 FT

SCREEN LENGTH: NA FT

PID WELL MOUTH: — PPM

WELL INTEGRITY: CAP YES X NO — N/A —; CASING LOCKED YES X NO — N/A —; COLLAR YES X NO — N/A —

DRAWDOWN: 0.47 FT

DRAWDOWN VOLUME: 0.31 GAL

PRODUCT THICKNESS: — FT

((Initial - final) x 0.16 {2-inch} ~~or x 0.65 {4-inch}~~ or x 1.5 {6-inch})

PURGE RATE: 0.1 L/MIN

BEGIN PURGING: 1510

END PURGING: 1619

TOTAL VOL. PURGED: 1.39 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1513	fc	8.18	0.210	22.9	9.09	13.90	-214.5	12.86	
1527	2	9.54	0.176	10.6	5.82	14.26	-200.5	13.12	slow pump
1537	1	9.60	0.169	7.6	3.56	13.68	-186.1	13.12	
1547	1	9.69	0.168	4.6	2.30	13.57	-180.7	13.12	
1557	1	9.76	0.168	4.6	1.60	13.44	-176.3	13.12	
1607	1	9.82	0.167	4.1	1.23	13.39	-161.0	13.12	
1613	0.6	9.86	0.167	3.8	1.13	13.29	-170.5	13.12	
1619	0.6	9.88	0.166	4.1	1.02	13.25	-173.1	13.12	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC [ ] SUBMERSIBLE [ ] OTHER

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [X] HIGH DENSITY POLYETHYLENE [ ] OTHER

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable): [ ] TEFLON [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 15.65

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1621
[ ]			
[ ]			
[ ]			

SIGNATURE:

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 11/1/12

SITE ID: BR-02

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1015 END 1142

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.45 FT

INITIAL DEPTH TO WATER: 21.83 FT

WELL DEPTH: 44.0 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 4 IN

FINAL DEPTH TO WATER: 22.16 FT

SCREEN LENGTH: NA FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR			X

DRAWDOWN: 0.33 FT

DRAWDOWN VOLUME: 0.21 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: <100 L/MIN

BEGIN PURGING: 1026

END PURGING: 1135

TOTAL VOL. PURGED: 1.3 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1028	[illegible]	7.67	0.480	4.8	3.58	14.03	-137.9	22.0	
1051	2	7.64	0.477	1.3	0.93	14.15	-148.8	22.11	slowed pump
1106	1	7.67	0.474	1.8	0.63	13.80	-149.9	22.15	
1125	1	7.68	0.472	1.3	0.68	13.62	-151.3	22.16	
1135	0.6	7.68	0.472	3.8	0.63	13.66	-151.6	22.16	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL	TYPE OF BLADDER MATERIAL (if applicable)
[X] PERISTALTIC	[ ] TEFLON OR TEFLON LINED	[ ] POLYVINYL CHLORIDE	[ ] TEFLON
[ ] SUBMERSIBLE	[X] HIGH DENSITY POLYETHYLENE	[ ] STAINLESS STEEL	[X] OTHER NA
[ ] OTHER _____	[ ] OTHER _____	[X] OTHER NA	

PURGE OBSERVATIONS

Tubing Intake @ ~~25~~ 24' CW

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1138
[ ]			
[ ]			
[ ]			

SIGNATURE: _____

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 10/31/12

SITE ID: BR-03

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1218 END

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: — FT

INITIAL DEPTH TO WATER: 7.53 FT

WELL DEPTH: 40.1 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 4 IN

FINAL DEPTH TO WATER: 8.83 FT

SCREEN LENGTH: NA FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

DRAWDOWN: 1.3 FT

DRAWDOWN VOLUME: 0.845 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: 0.115 L/MIN

BEGIN PURGING: 1221

END PURGING: 1328

TOTAL VOL. PURGED: 1.54 GAL
(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1225	fc	8.15	0.512	44.0	2.97	15.43	-105.6	7.80	
1242	2	8.68	0.508	31.7	0.45	15.65	-196.2	8.49	slowed pump
1255	1.5	8.72	0.509	30.6	0.36	15.81	-216.2	8.77	
1314	2	8.75	0.506	26.9	0.38	15.45	-187.7	8.82	
1323	1	8.76	0.505	28.0	0.38	15.53	-170.1	8.83	
1328	0.6	8.78	0.506	27.0	0.37	15.50	-179.3	8.83	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 10.5

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1330

SIGNATURE: _____

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 10/31/12

SITE ID: BR-04

SITE TYPE: Monitor Well

SITE ACTIVITY: START 0835 END

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.25 FT

INITIAL DEPTH TO WATER: 17.34 FT

WELL DEPTH: 44.2 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 4 IN

FINAL DEPTH TO WATER: 17.36 FT

SCREEN LENGTH: NA FT

PID WELL MOUTH: — PPM

WELL INTEGRITY:

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

DRAWDOWN: 0.02 FT

DRAWDOWN VOLUME: 0.013 GAL

PRODUCT THICKNESS: — FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: .15 L/MIN

BEGIN PURGING: 0851

END PURGING: 0952

TOTAL VOL. PURGED: 1.83 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
0857	fc	7.73	0.149	5.5	3.75	14.51	-111.1	17.36	
0914	2	8.21	0.100	6.9	0.66	15.47	-171.9	17.36	
0928	2	8.52	0.101	7.3	0.48	15.27	-202.7	17.36	
0941	1.5	8.63	0.101	7.5	0.42	15.10	-168.1	17.36	
0948	0.6	8.68	0.102	7.3	0.41	15.10	-162.7	17.36	
0952	0.6	8.71	0.102	7.4	0.39	14.98	-165.7	17.36	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ ~20.3

SIGNATURE:

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	0955
[ ]			
[ ]			
[ ]			

BR-04 MS
BR-04MSD

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 10/31/12

SITE ID: BR-10

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1007 END 1053

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.3 FT

INITIAL DEPTH TO WATER: 16.95 FT

WELL DEPTH: 47.0 FT

PID AMBIENT AIR: — PPM

WELL DIAMETER: 6 IN

FINAL DEPTH TO WATER: 16.93 FT

SCREEN LENGTH: NA FT

PID WELL MOUTH: — PPM

DRAWDOWN: 0.02 FT

DRAWDOWN VOLUME: 0.03 GAL

PRODUCT THICKNESS: — FT

WELL INTEGRITY:	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR			X

((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))

PURGE RATE: .125 L/MIN

BEGIN PURGING: 1012

END PURGING: 1044

TOTAL VOL. PURGED: 0.8 GAL
(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1015	fc	9.08	0.103	46.9	7.95	14.95	-18.4	16.92	
1028	1.5	9.41	0.099	26.7	5.95	15.19	+11.0	16.93	
1036	1	9.45	0.098	21.3	5.69	15.03	15.1	16.93	
1044	1	9.45	0.099	19.5	5.58	15.27	8.6	16.93	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ 19.95

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1048
[ ]			
[ ]			
[ ]			

SIGNATURE: _____

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments, 2012 Semi-Annual Sampling Event

DATE: 11/1/12

SITE ID: BR-15

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1415 END

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT: [X] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER

PROTECTIVE CASING STICKUP (FROM GROUND): — FT

PROTECTIVE CASING / WELL DIFFERENCE: 0.35 FT

INITIAL DEPTH TO WATER	18.05 FT	WELL DEPTH	72 FT	PID AMBIENT AIR	— PPM	WELL DIAMETER	6 IN
FINAL DEPTH TO WATER	21.43 FT	SCREEN LENGTH	NA FT	PID WELL MOUTH	— PPM		
DRAWDOWN	3.38 FT	DRAWDOWN VOLUME	5.07 GAL	PRODUCT THICKNESS	— FT		

WELL INTEGRITY:

	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			
COLLAR			X

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

sampled at

PURGE RATE: 0.1 L/MIN (varies)

BEGIN PURGING: 1420

END PURGING: 1704

TOTAL VOL. PURGED: ~8 GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
1423	~~6~~	9.73	0.095	6.8	5.68	13.04	-164.8	18.19	
1444	2	11.04	0.078	8.1	3.71	13.77	-85.4	18.50	
1511	3	11.26	0.083	18.1	3.58	14.88	-78.3	19.0	~~slowed pump~~ CRW
1558	6	11.36	0.087	23.0	4.72	15.34	-66.4	20.1	turned pump up
1620	6	11.34	0.088	19.5	5.16	15.92	-61.3	21.00	turn pump down
1636	2	11.32	0.084	10.7	4.96	15.20	-58.3	21.21	
1646	2	11.29	0.082	9.3	4.53	15.41	-59.9	21.46	
1654	0.6	11.30	0.079	3.0	4.59	13.86	-58.9	21.46	
1704	0.6	11.28	0.077	2.7	4.55	12.93	-55.9	21.43	

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL	TYPE OF BLADDER MATERIAL (if applicable)
[X] PERISTALTIC	[ ] TEFLON OR TEFLON LINED	[ ] POLYVINYL CHLORIDE	[ ] TEFLON
[ ] SUBMERSIBLE	[X] HIGH DENSITY POLYETHYLENE	[ ] STAINLESS STEEL	[X] OTHER NA
[ ] OTHER	[ ] OTHER	[X] OTHER NA	

PURGE OBSERVATIONS

Tubing Intake @ ~22

⊠ per historical events will draw down to ~ 21.5' and then slow pump down

SIGNATURE:

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1706
[ ]			
[ ]			
[ ]			

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: —

SITE ID: QATB-01

SITE TYPE: Monitor Well

SITE ACTIVITY: START — END —

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [ ] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): NA FT

PROTECTIVE CASING / WELL DIFFERENCE: NA FT

INITIAL DEPTH TO WATER: NA FT

WELL DEPTH: NA FT

PID AMBIENT AIR: NA PPM

WELL DIAMETER: NA IN

FINAL DEPTH TO WATER: NA FT

SCREEN LENGTH: NA FT

PID WELL MOUTH: NA PPM

DRAWDOWN: NA FT

DRAWDOWN VOLUME: NA GAL

PRODUCT THICKNESS: NA FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

PURGE RATE: NA L/MIN

BEGIN PURGING: NA

END PURGING: NA

TOTAL VOL. PURGED: NA GAL

(purge rate (L/min) x duration (min) x 0.26 gal/L)

WELL INTEGRITY:	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
LAB PROVIDED									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [ ] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [ ] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [ ] OTHER NA

TYPE OF BLADDER MATERIAL (If applicable)
- [ ] TEFLON
- [ ] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ _____

SIGNATURE: _____

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	
[ ]			
[ ]			
[ ]			

Q

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 10/31/12

SITE ID: QAFB-01

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1350 END 1355

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [ ] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): NA FT

PROTECTIVE CASING / WELL DIFFERENCE: NA FT

INITIAL DEPTH TO WATER: NA FT

WELL DEPTH: NA FT

PID AMBIENT AIR: NA PPM

WELL DIAMETER: NA IN

FINAL DEPTH TO WATER: NA FT

SCREEN LENGTH: NA FT

PID WELL MOUTH: NA PPM

DRAWDOWN: NA FT

DRAWDOWN VOLUME: NA GAL

PRODUCT THICKNESS: NA FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

WELL INTEGRITY:	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

PURGE RATE: NA L/MIN

BEGIN PURGING: NA

END PURGING: NA

TOTAL VOL. PURGED: NA GAL
(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
Collected from DI water									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ _____

SIGNATURE: _____

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1352
[ ]			
[ ]			
[ ]			

Q

AMEC E&I, Inc.

FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER

PROJECT: Former Taylor Instruments 2012 Semi-Annual Sampling Event

DATE: 10/31/12

SITE ID: QARB-01

SITE TYPE: Monitor Well

SITE ACTIVITY: START 1740 END 1745

JOB NUMBER: 3031052006.22

WATER LEVEL / PUMP SETTINGS

MEASUREMENT POINT
- [ ] TOP OF WELL RISER
- [ ] TOP OF PROTECTIVE CASING
- [ ] OTHER _____

PROTECTIVE CASING STICKUP (FROM GROUND): NA FT

PROTECTIVE CASING / WELL DIFFERENCE: NA FT

INITIAL DEPTH TO WATER: NA FT

WELL DEPTH: NA FT

PID AMBIENT AIR: NA PPM

WELL DIAMETER: NA IN

FINAL DEPTH TO WATER: NA FT

SCREEN LENGTH: NA FT

PID WELL MOUTH: NA PPM

DRAWDOWN: NA FT

DRAWDOWN VOLUME: NA GAL

PRODUCT THICKNESS: NA FT

((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})

WELL INTEGRITY:	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

PURGE RATE: NA L/MIN

BEGIN PURGING: NA

END PURGING: NA

TOTAL VOL. PURGED: NA GAL
(purge rate (L/min) x duration (min) x 0.26 gal/L)

PURGE DATA

Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O_2 (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments
Used Peristaltic pump and clean tubing to collect sample from DI water									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] OTHER _____

TYPE OF TUBING
- [ ] TEFLON OR TEFLON LINED
- [X] HIGH DENSITY POLYETHYLENE
- [ ] OTHER _____

TYPE OF PUMP MATERIAL
- [ ] POLYVINYL CHLORIDE
- [ ] STAINLESS STEEL
- [X] OTHER NA

TYPE OF BLADDER MATERIAL (if applicable)
- [ ] TEFLON
- [X] OTHER NA

PURGE OBSERVATIONS

Tubing Intake @ _____

SIGNATURE: _____

NOTES

		Preservation	Time Collected
[X]	VOC (modified list)	HCL	1743
[ ]			
[ ]			
[ ]			

Q

APPENDIX G

WELL CONSTRUCTION INFORMATION

Appendix G
Well Construction Information

2012 Annual Progress Report
and Remedial Progress Evaluation
Former Taylor Instruments Site
Rochester, New York

						Screen Interval		Survey Coordinates			Well Material	Completion		
Well ID	Date Installed	Well Purpose/Type	Well Location	Boring Depth	Well Depth	Top	Bottom	Easting	Northing	Elevation	Riser/Screen	Flush-mount	Vault	Stick-up
BR-01	09/02/97	Monitor	Perimeter	42.2	42.2	NA	NA	750364.06	1150086.89	531.92	Stainless / Open	X		
BR-02	09/02/97	Monitor	Perimeter	44.0	44.0	NA	NA	750541.81	1149964.51	532.39	Stainless / Open	X		
BR-03	09/02/97	Monitor	Perimeter	40.1	40.1	NA	NA	750552.93	1149641.68	536.32	Stainless / Open			X
BR-04	09/03/97	Monitor	South Source	44.2	44.2	NA	NA	750322.96	1149422.13	532.68	Stainless / Open	X		
BR-10	07/28/00	Monitor	South Source	47.0	47.0	NA	NA	750426.90	1149411.76	532.29	Iron / Open	X		
BR-15	07/26/00	Monitor	North Source	72.0	72.0	NA	NA	750293.39	1149980.43	531.69	Iron / Open	X		
OB-04	09/05/97	Monitor	South Source	17.5	17.5	2.5	17.5	750329.65	1149422.19	532.80	PVC	X		
OB-06	07/19/00	Monitor	South Source	17.0	17.0	6.8	16.8	750421.89	1149461.50	532.60	PVC	X		
OB-08	07/28/00	Monitor	North Source	25.5	25.3	15.3	25.1	750279.00	1149957.45	531.64	PVC	X		
TW-04	03/15/96	Monitor	Perimeter	17.5	17.3	12.3	17.3	750552.18	1149648.54	536.34	PVC			X
TW-09	03/30/96	Monitor	Perimeter	16.0	16.0	11.0	16.0	750542.22	1149971.84	532.30	PVC	X		
TW-17	03/13/96	Monitor	Perimeter	15.0	15.0	10.0	15.0	750373.39	1150088.34	531.86	PVC			X
TW-20	03/13/96	Monitor	Perimeter	15.0	15.0	10.0	15.0	750547.88	1150118.75	532.42	PVC			X
W-5	09/15/82	Monitor	Perimeter	24.0	20.5	15.5	20.5	750248.88	1150056.27	531.52	PVC	X		

Prepared by/Date: KJD 12/15/10
Checked by/Date: CRW 1/18/11