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. Ryah, P.E.

Senior Principal Project Manager

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TABLE OF CONTENTS

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

<u>Secti</u>	on	Description	Page No.
1.0	INTROD	UCTION	1-1
2.0	2.1 S 2.2 S	DWATER MONITORINGScope of WorkSummary of Results	2-1 2-1
3.0	3.1 F 3.2 A 3.3 F 3.4 C	CICAL PROGRAM	
4.0	CONCL	USIONS AND RECOMMENDATIONS	4-1
5.0	REFER	ENCES	5-1
A A A A	ENDICES ppendix A: ppendix B: ppendix C ppendix D ppendix E: ppendix F: ppendix G	Periodic Review Report Tables Laboratory Reports (see enclosed CD) Chain-of-Custody Forms (see enclosed CD) Field Data Records (see enclosed CD)	

LIST OF FIGURES

Description

Figure No.

Figures are contained in Appendix A.						
Figure 1	Well Locations					
Figure 2	VOCs in Overburden Monitoring Wells					
Figure 3	VOCs in Bedrock Monitoring Wells					
Figure 4	Overburden Molar Mass Graph					
Figure 5	Bedrock Molar Mass Graph					
Figure 6	Overburden Potentiometric Surface Map, May 2012 Sampling Event					
Figure 7	Bedrock Groundwater Elevations, May 2012 Sampling Event					
Figure 8	Overburden Potentiometric Surface Map, October/November 2012 Sampling Event					
Figure 9	Bedrock Groundwater Elevations, October/November 2012 Sampling Event					

LIST OF TABLES

Table No	. Description
Tables ar	e contained in Appendix C.
Table 1	Overburden Monitoring Wells with COCs Exceeding Class GA Standards –October/ November 2012
Table 2	Bedrock Monitoring Wells with COCs Exceeding Class GA Standards – October/ November 2012
Table 3	Summary of VOC Results for the Existing Overburden Wells for the 2000-2012 Sampling Events
Table 4	Summary of VOC Results for the Existing Bedrock Wells for the 2000-2012 Sampling Events

LIST OF ACRONYMS

 $\begin{array}{ll} \mu g/L & \text{micrograms per liter} \\ \mu \text{mole/L} & \text{micromoles per liter} \end{array}$

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 μ g/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 μ g/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 μ g/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 μ g/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

		Practical	Sample Result		Duplicate Result		
Sample ID	Analyte	Quantitation Limit	(µg/L)	Flag	(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.

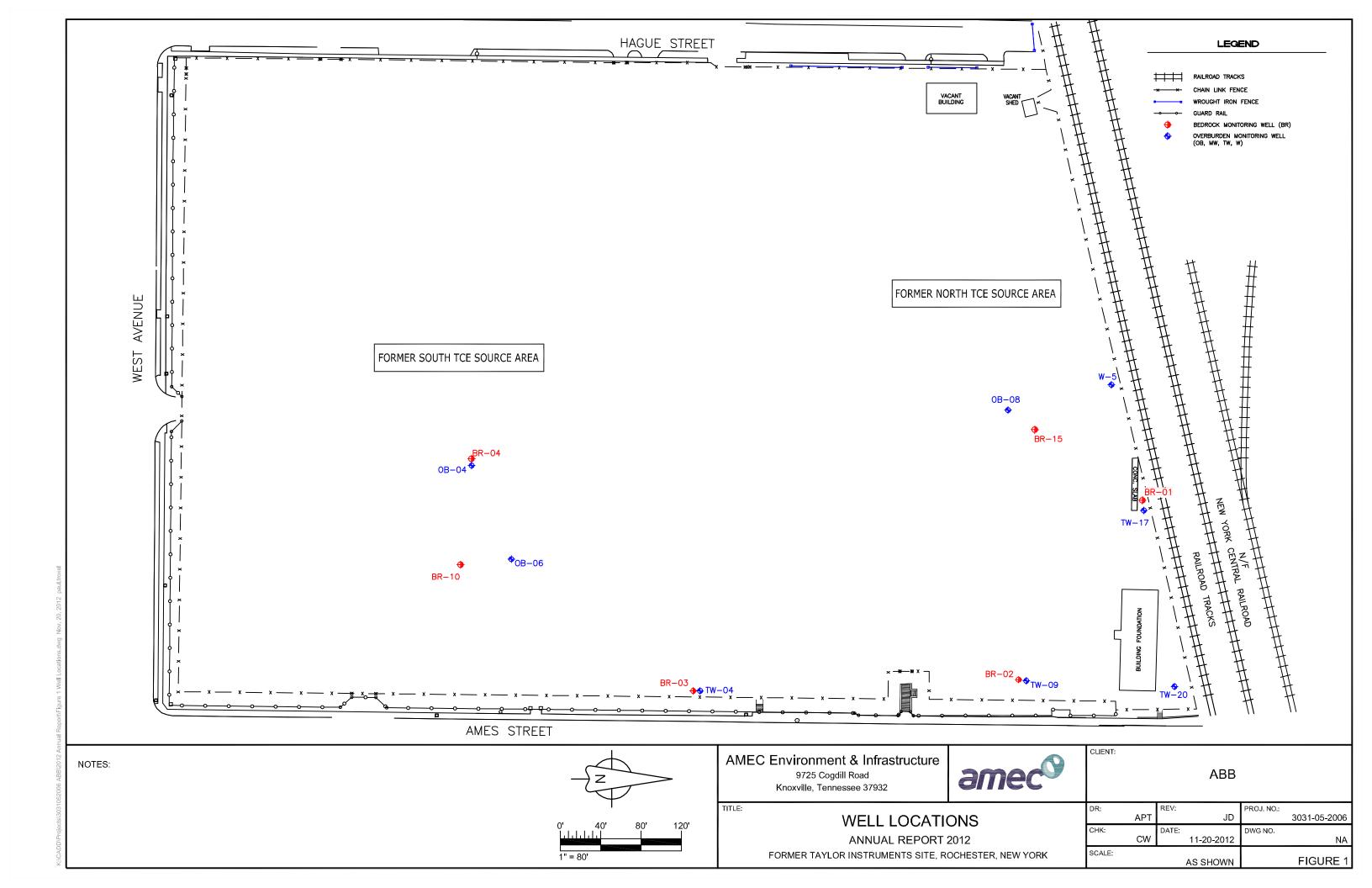
- Groundwater monitoring events will continue to be conducted semi-annually on all 14 remaining monitoring wells as detailed in the Revised Operations, Maintenance, and Monitoring Manual (MACTEC, 2010). As noted above, AMEC is evaluating selected monitoring wells for removal from the groundwater monitoring 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.

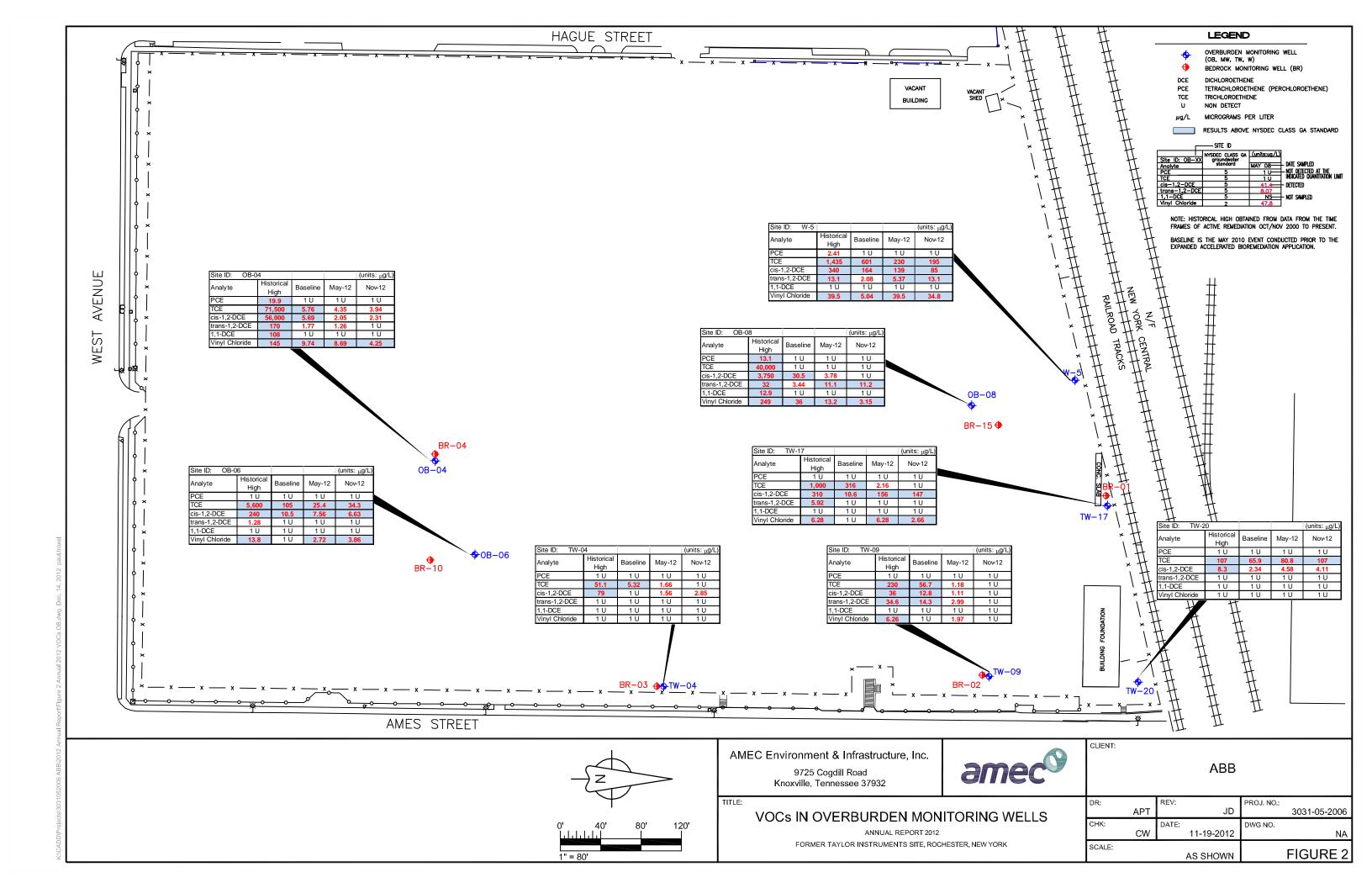
5.0 REFERENCES

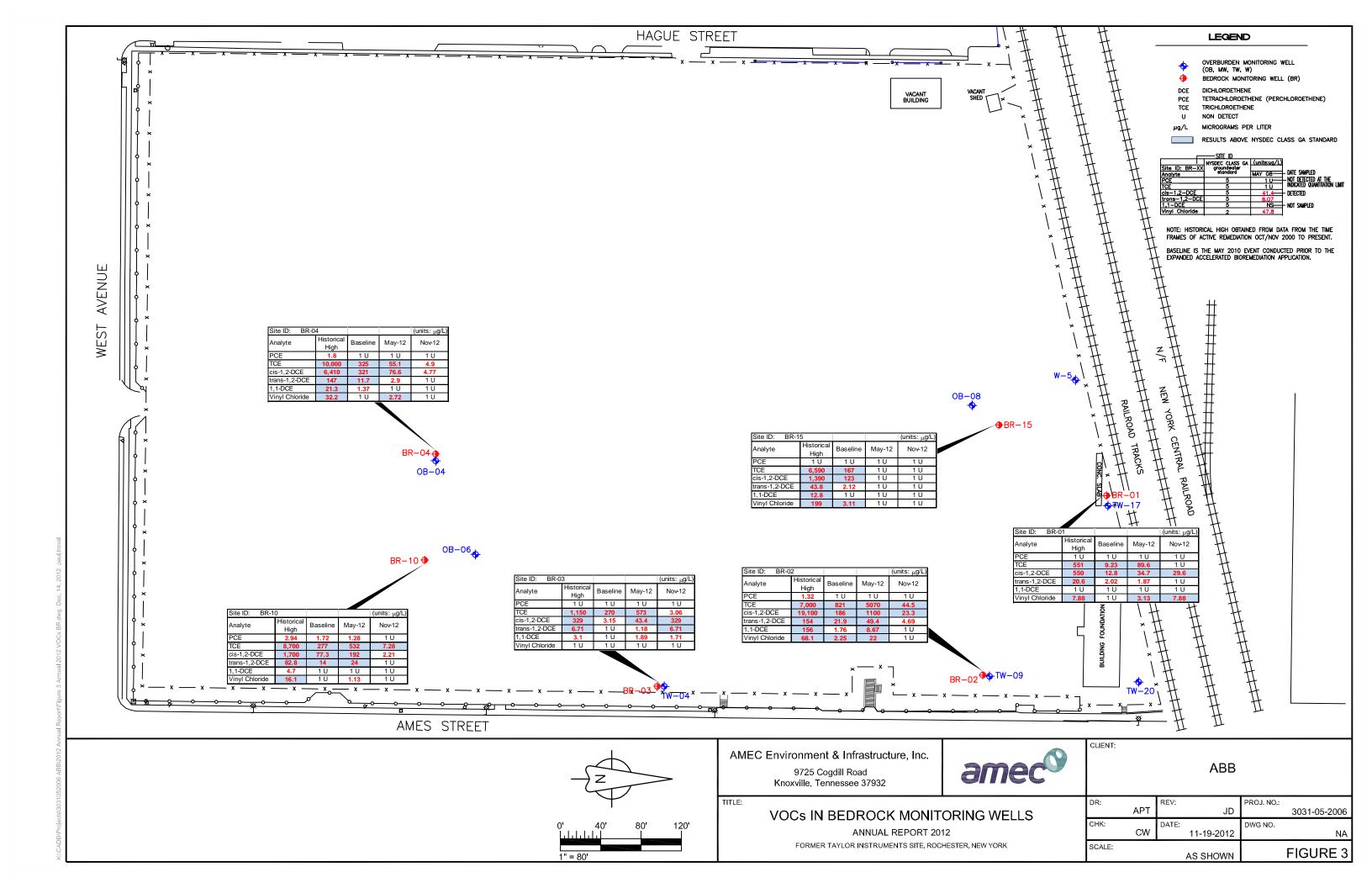
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 Ames Street in Rochester, New York. Prepared for Combustion Engineering by Harding Lawson Associates (April).
- MACTEC, 2010. Operations, Maintenance, and Monitoring Manual, Rev. 1, Former Taylor Instruments Site, Monroe County, New York. Prepared 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.

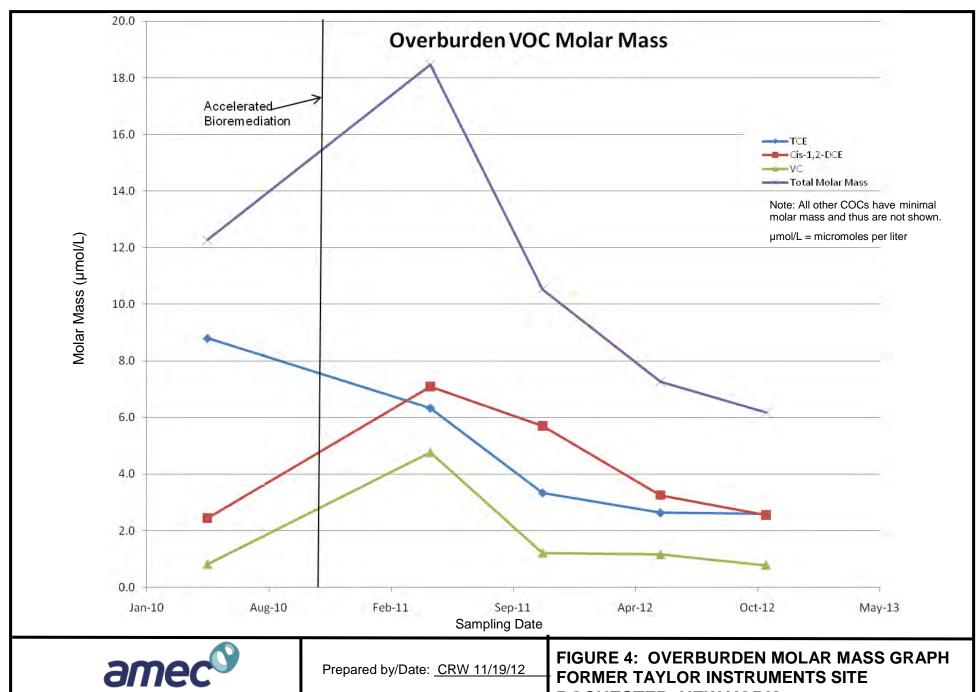
APPENDIX A

FIGURES





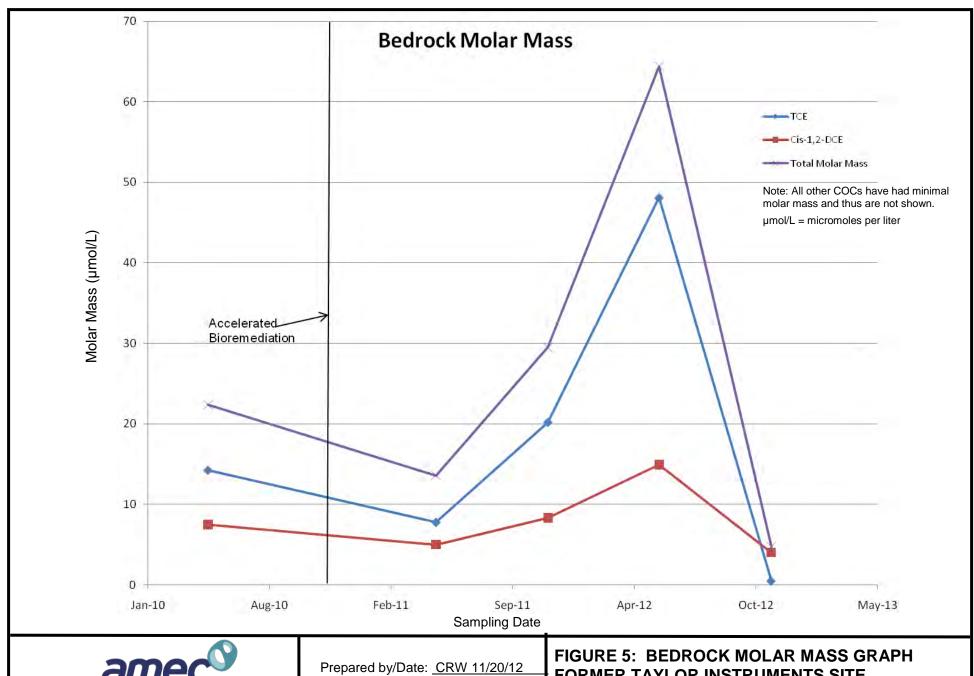




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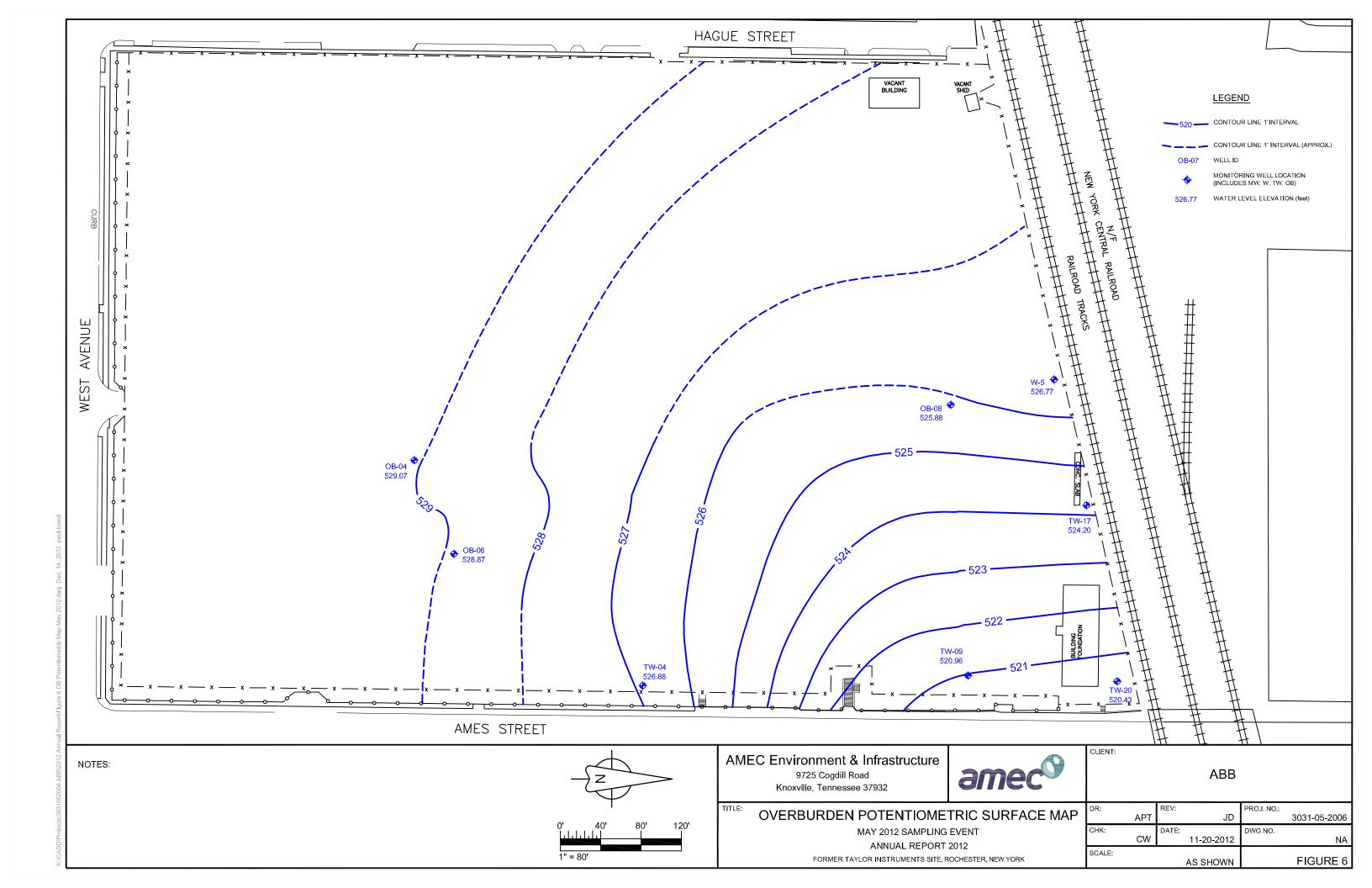
ROCHESTER, NEW YORK

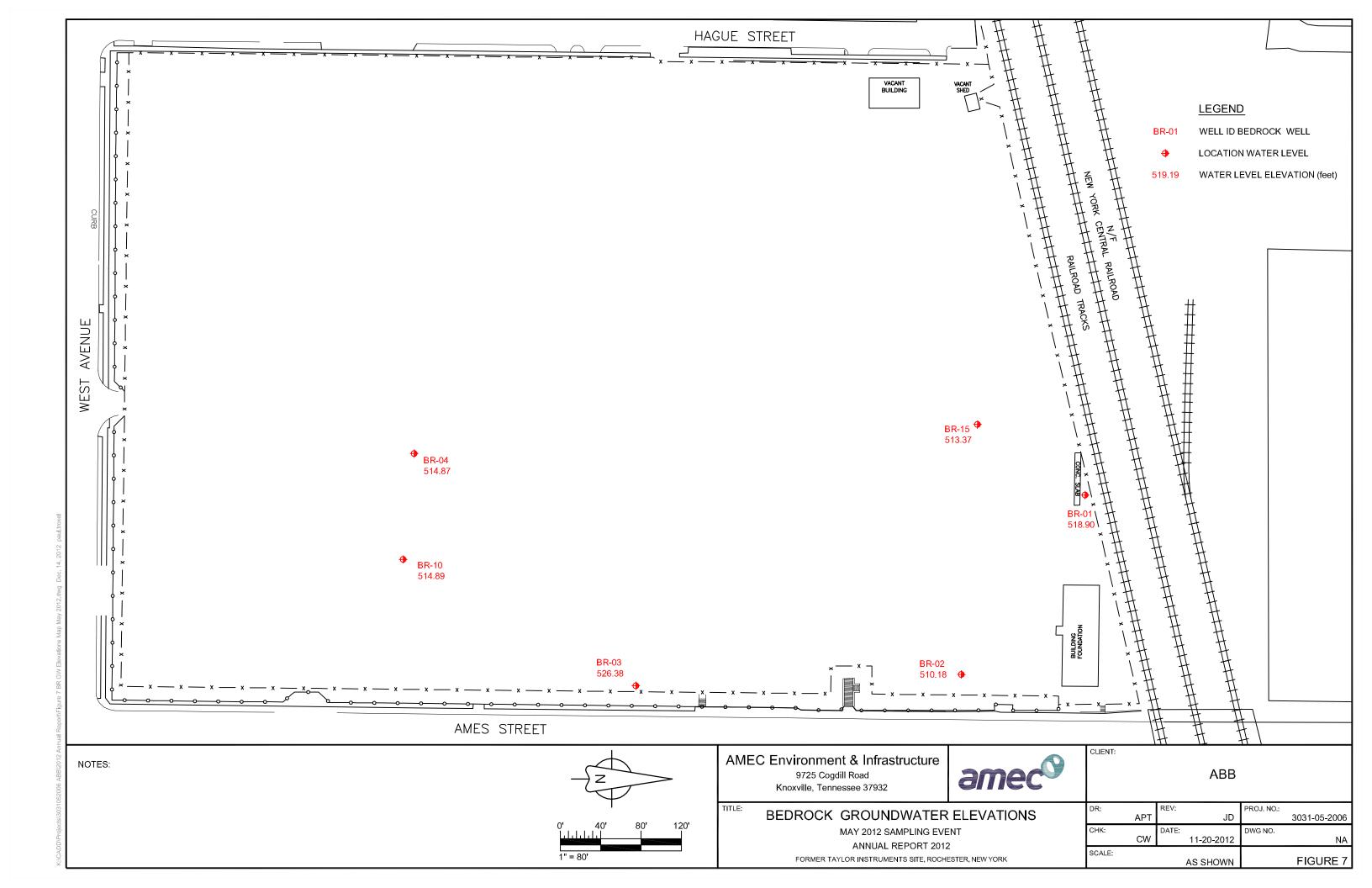


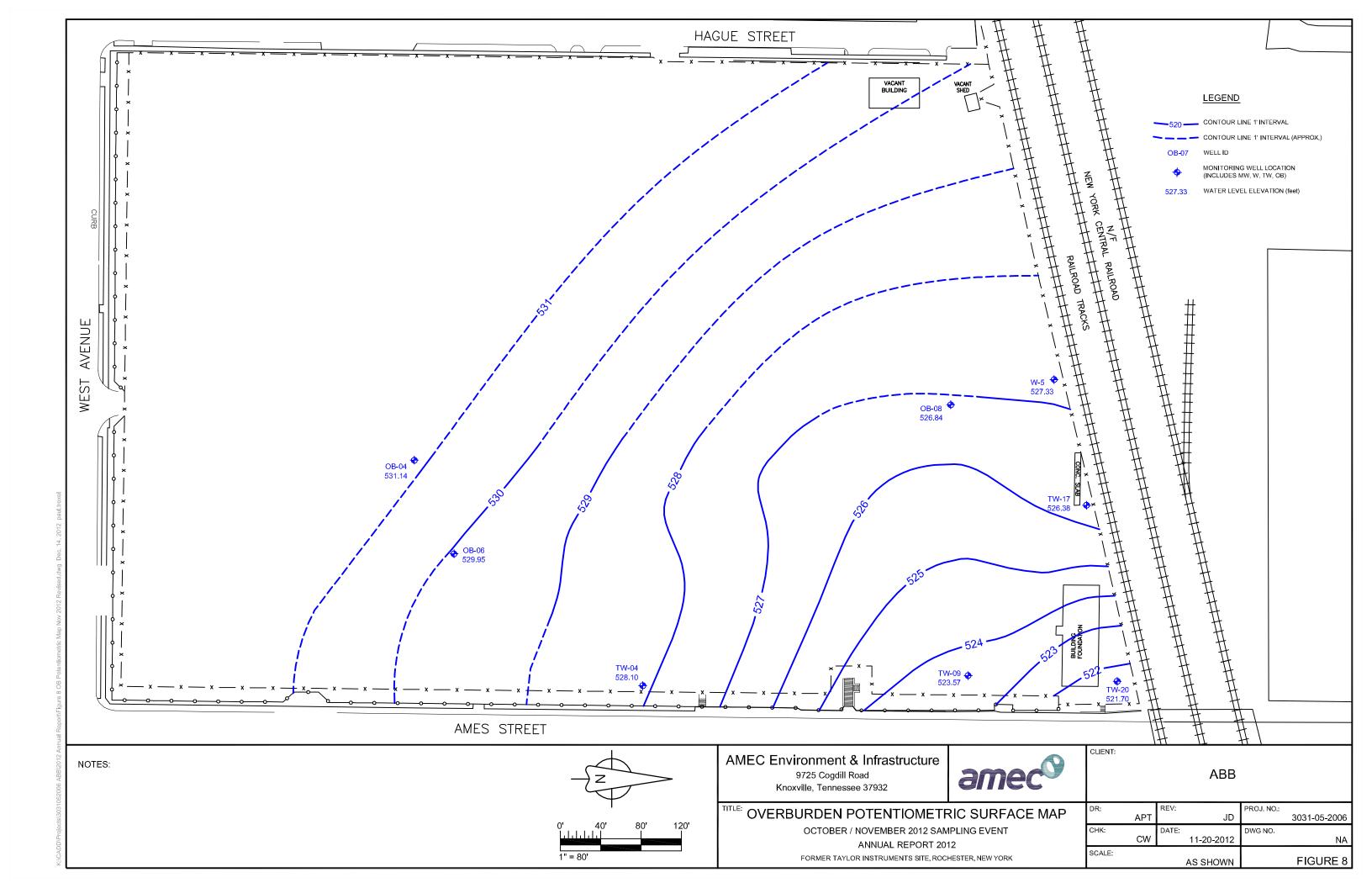
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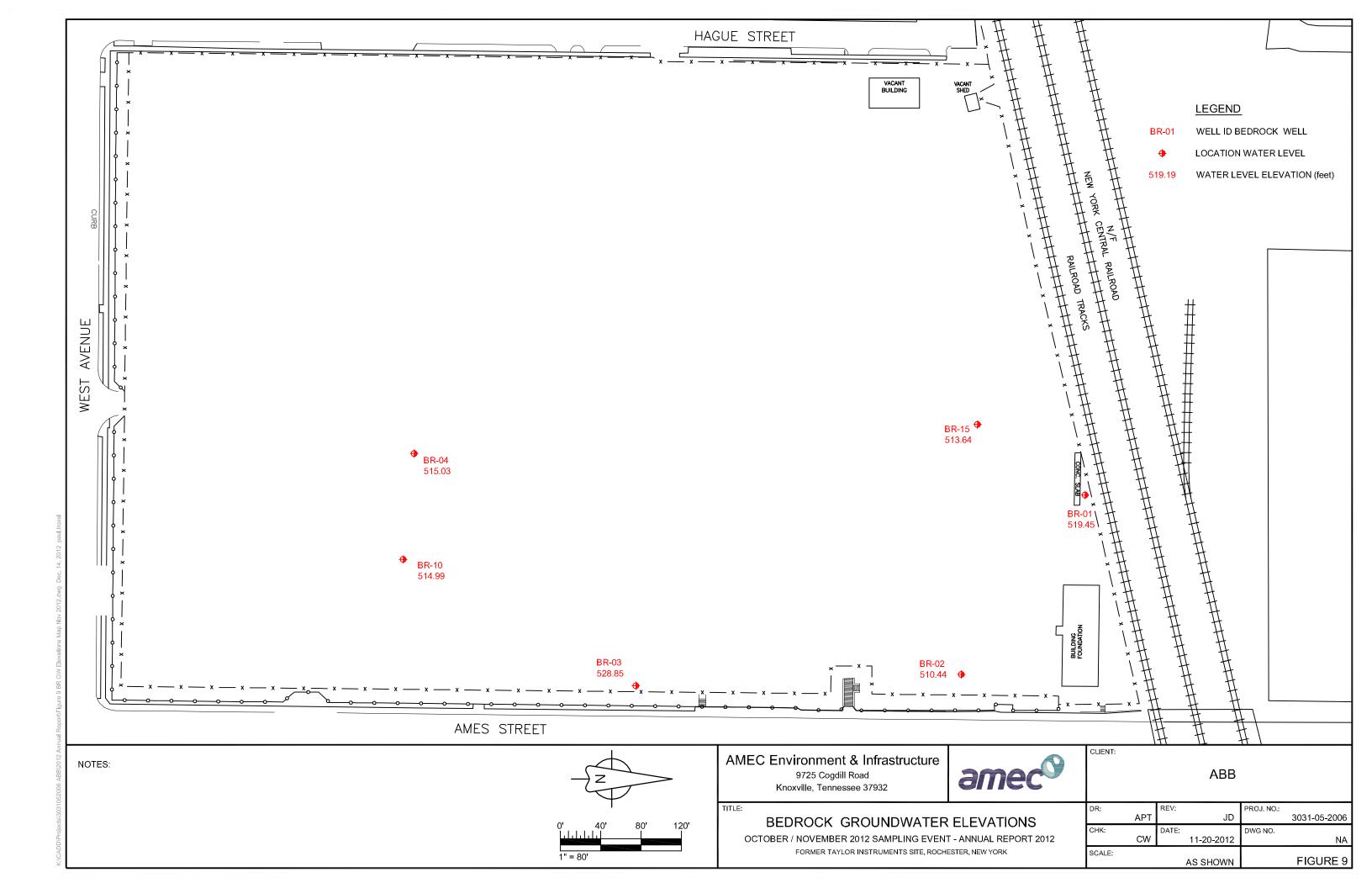
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FIGURE 5: BEDROCK MOLAR MASS GRAPH FORMER TAYLOR INSTRUMENTS SITE ROCHESTER, NEW YORK









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 postclosure 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 postclosure 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 onsite 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 semiannually 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 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 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

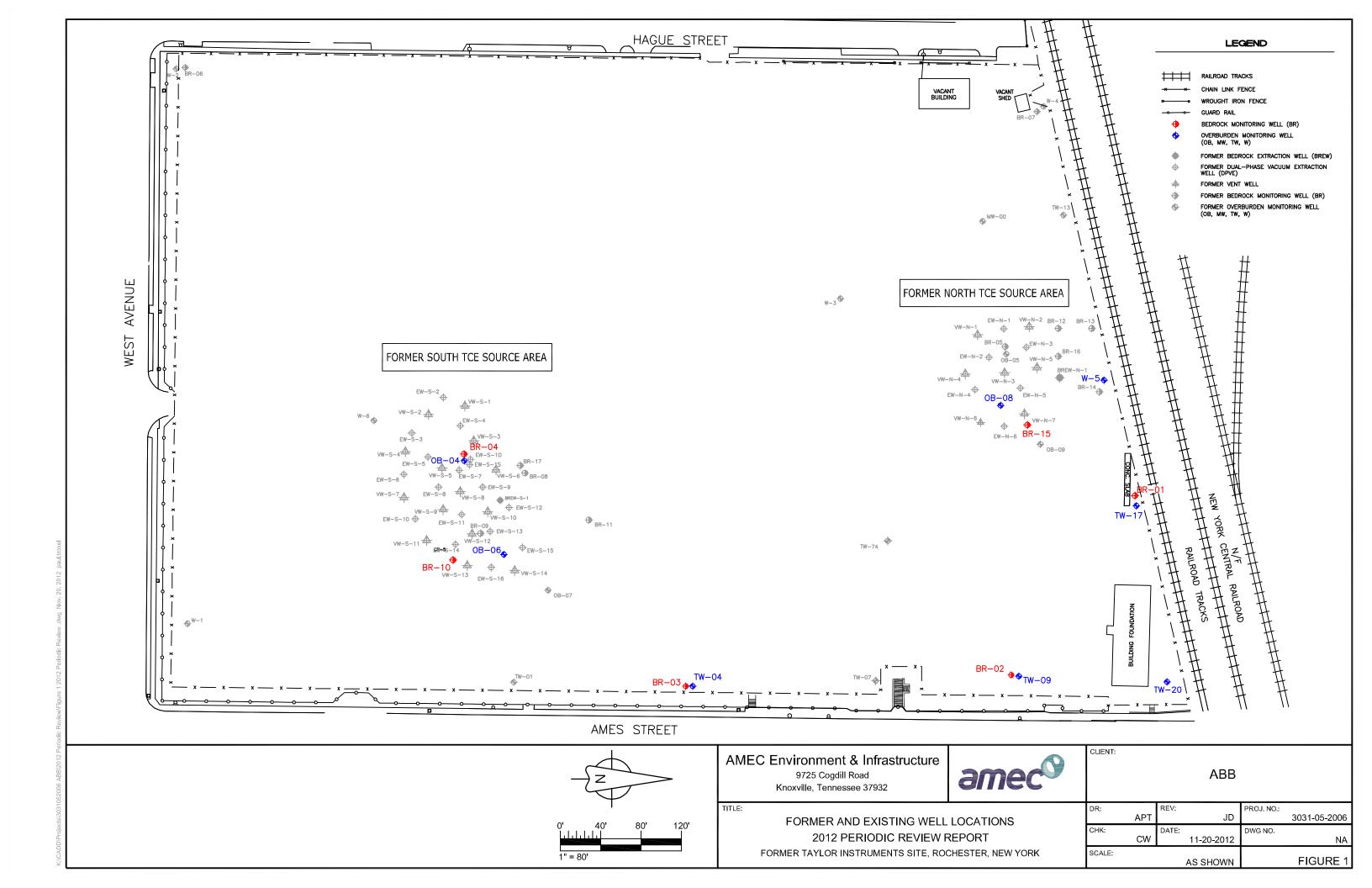
System DPVE and bedrock groundwater extraction and treatment system

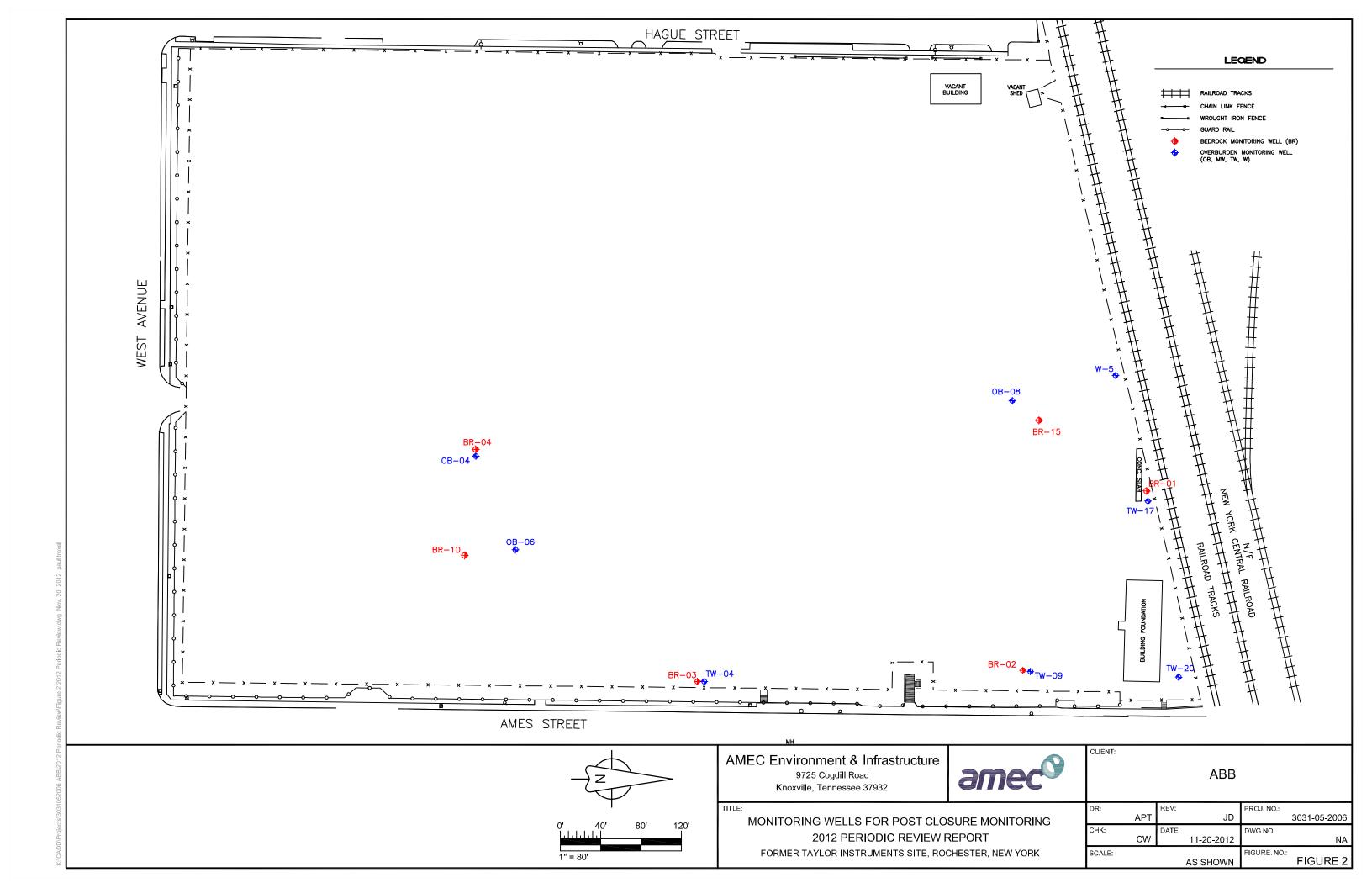
TCE trichloroethene

VCA Voluntary Clean-up Agreement VOC volatile organic compound

Attachment A

Figures





Attachment B NYSDEC-Approved Certification Form





Enclosure 2 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form



1 2 A	(*) -	Site Detail	8	9	Box	1
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Site Name	Former Taylor Ins	struments Facility	<u>G</u> _N			
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120.42-1.4	Kevin Carter	Site Manag	ement Plan	
				Box 4
Description of Eng	gineering Controls		0.28	
Parcel 120.410-1-2	Engineeri	ng Control		행
120.42-1.4	Gover Bye Vaper Miti	gation		
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Parcel: 120.42-1.4 Sub-slab depressurization	tion system			i

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

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Other	a) the Periodic Review report and all attachments were prepared under the deviewed by, the party making the certification; b) to the best of my knowledge and belief, the work and conclusions describe are in accordance with the requirements of the site remedial program, and geen gineering practices; and the information presented is accurate and competed this site has an IC/EC Plan (or equivalent as required in the Decision Document), Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below lilowing statements are true: (a) the institutional Control and/or Engineering Control(s) employed at this site date that the Control was put in-place, or was last approved by the Depart (b) nothing has occurred that would impair the ability of such Control, to prote the environment; (c) access to the site will continue to be provided to the Department, to evaluate including access to evaluate the continued maintenance of this Control; (d) nothing has occurred that would constitute a violation or failure to comply Management Plan for this Control; and (e) If a financial assurance mechanism is required by the oversight document mechanism remains vaild and sufficient for its intended purpose established in DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continual policy Measures Work Plan must be submitted along with this form to address and policy and the province when the province and the province continual policy.	a) the Periodic Review report and all attachments were prepared under the direction of reviewed by, the party making the certification; b) to the best of my knowledge and belief, the work and conclusions described in this care in accordance with the requirements of the site remedial program, and generally accordance with the requirements of the site remedial program, and generally according practices; and the information presented is accurate and compete. YES this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each in Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of illiowing statements are true: (a) the institutional Control and/or Engineering Control(s) employed at this site is unchanged 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 the environment; (c) access to the site will continue to be provided to the Department, to evaluate the remincluding access to evaluate the continued maintenance of this Control; (d) nothing has occurred that would constitute a violation or failure to comply with the Si Management Plan for this Control; and (e) If a financial assurance mechanism is required by the oversight document for the site mechanism remains valid and sufficient for its intended purpose established in the document for the site mechanism remains valid and sufficient for its intended purpose established in the document for Complete The REST OF THIS FORM. Otherwise continue.

IC CERTIFICATIONS SITE NO. V00144

Box 6

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 at 5 Waterside Crossing, Windsor CTOCOS, print name 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 at 5 Waterside Crossing, Windsor CTOCOS, print business address

am certifying as Remedial Party (Owner or Remedial Party)

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

IG/EC CERTIFICATIONS

Professional Engineer Signature

Box 7

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.

Ricky Ryan at 9725 Cogdill Road, Knoxville, TN 3793 Z print hame print business address

am certifying as a Professional Engineer for the ABB Inc., Remedial Party

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

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.





Enclosure 2 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Sits Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form



SI	te No.	V00144	Site Details	10 28	Box :	1 8	
	-	*	,		7		
31	te Name I	Former Taylor Instr	uments Facility	± 120			
CI	te Address ty/Town: F ounty: Mon		Zip Code; 14611	w -			
Si	le Acreage	:- 17.0 - 14.5			*		
36	porting Pe	nfod: February 14, 2	2012 to February 14, 2013	K p			9 20
		***	2 9 18	*	YES	NO	
1.	is the Info	ormation above corre	ect?	5 ⁴⁰ . 5		×	
	If NO, Inc	ciude handwritten ab	ove or on a separate sheet.		*:	2	
).	Has some tax map a	e or all of the site pro amendment during th	operty been sold, subdivided, his Reporting Period?	merged, or undergone a	σ.	×	
١.,	Has there (see 6NY	been any change of CRR 375-1.11(d))?	f use at the site during this R	eporting Period		×	
r.	Have any for or at ti	r federal, state, and/o	or local permits (e.g., building ils Reporting Period?	discharge) been issued		×	
	If you an	swered YES to que umentation has bee	stions 2 thru 4, include doe in previously submitted wit	umentațion or evidence h this certification form			
	that doci	swered YES to que umentation has been currently undergoin	n previously submitted wit	umentation or evidence in this certification form		×	•
	that doci	umentation has bee	n previously submitted wit	umentation or evidence h this certification form		X	
	that doci	umentation has bee	n previously submitted wit	umentation or evidence h this certification form	C	NO NO	
	Is the site	umentation has been currently undergoing	n previously submitted wit	h this certification form	Box 2	en Garilar	
	Is the currindustrial	umentation has been currently undergoing	n previously submitted wit	h this certification form	Box 2	en Garilar	
3.	Is the cur industrial	umentation has been currently undergoing rent site use consiste s/ECs in place and fu	in previously submitted wit g development? ant with the use(s) listed belo	h this certification form	Box 2 YES	NO □	
	Is the currindustrial Are all IC:	rent site use consiste s/ECs in place and fu	en previously submitted with g development? ent with the use(s) listed below unotioning as designed?	w? O, sign and date below a	Box 2 YES	NO	
	Is the currindustrial Are all IC:	rent site use consiste s/ECs in place and fu	en previously submitted with g development? ent with the use(s) listed below unotioning as designed? THER QUESTION 6 OR 7 IS NOTE THE REST OF THIS FORM	w? O, sign and date below a	Box 2 YES	NO	

SITE NO. V00144 Box 3 Description of Institutional Controls Owner Melody Christopher Institutional Control
ABB, Inc. (Attn: John Genant) Parcel 120.410-1-2 Ground Water Use Restriction Landuse Restriction Soil Management Plan Olto Menagement Plan Box 4 **Description of Engineering Controls Engineering Control** Parcel 120.410-1-2 Cover System Vapor Mitigation (Future buildings) Vaper-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

Annual Certification

Sub-slab depressurization-eyetem

Box	5
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		Panart (PDB) Car	tification St	atements	19		
	Periodic Review F	rebout (Livis) cei					
1.	I certify by checking "YES" be	elow that:	- Sa				к.
	a) the Periodic Review reviewed by, the party r	report and all atte making the certific	achments we atlon;	re prepare	d under the	direction of	f, and
	 b) to the best of my known are in accordance with engineering practices; 	the requirements	of the site rei	mediai pro	gram, and g	enerally ac	ertificatio cepted
		1.	(max)		onia aoriipo	YES	NO
		n jje		4,		×	
2.	If this site has an IC/EC Plan or Engineering control listed in following statements are true:	n Boxes 3 and/or	required in th 4, I certify by	e Decision checking '	Document) 'YES" below	for each in that all of	nstitutions the
	(a) the institutional Contro	ntrol and/or Engine ol was put in-place	ering Contro , or was last	il(s) emplo approved l	yed at this s by the Depa	ite is uncha rtment;	anged sind
						200	
	(b) nothing has occurre the environment;	ed that would impa	air the ability	of such Co	ntrol, to prot	tect public !	nealth and
	(b) nothing has occurre the environment; (c) access to the site wi including access to eval	ill continue to be ;	provided to the	e Departn	ent, to evalu	•	
3	the environment; (c) access to the site w	ill continue to be pluate the continue	provided to the	e Departm ce of this C	ent, to evalu Control;	iate the rer	nedy,
1	the environment; (c) access to the site windleding access to evaluating has occurre	ill confinue to be pluate the continue of that would consile Control; and	provided to the dimaintenance stitute a violate street by	e Departmoe of this Color or falluthe oversit	nent, to evalue control; are to comply that documen	uate the removed with the S	medy, lite
	the environment; (c) access to the site wincluding access to evaluate (d) nothing has occurre Management Plan for the (e) if a financial assurance.	ill confinue to be pluate the continue of that would consile Control; and	provided to the dimaintenance stitute a violate street by	e Departmoe of this Color or falluthe oversit	nent, to evalue control; are to comply that documen	uate the removed with the S	medy, lite
1	the environment; (c) access to the site wincluding access to evaluate (d) nothing has occurre Management Plan for the (e) if a financial assurance.	ill confinue to be pluate the continue of that would consile Control; and	provided to the dimaintenance stitute a violate street by	e Departmoe of this Color or falluthe oversit	nent, to evalue control; are to comply that documen	with the S t for the sli	nedy, lite ce, the ment.
	the environment; (c) access to the site wincluding access to evaluating access to evaluate (d) nothing has occurre Management Plan for the (e) if a financial assurant mechanism remains valuating the control of the c	ill confinue to be pluate the continue of that would consile Control; and	provided to the dimaintenance stitute a violate required by or its intended	e Departmoe of this Color falluthe oversign purpose	nent, to evalue control; are to comply the document established at the below an	with the S nt for the sil in the docu	nedy, lite e, the ment.
2	the environment; (c) access to the site wincluding access to evaluating access to evaluate (d) nothing has occurre Management Plan for the (e) if a financial assurant mechanism remains valuating the control of the c	ill continue to be pluate the continue of that would consider the Control; and noe mechanism is lid and sufficient for the control; were to questionally the control of the	provided to the dimaintenance stitute a violate required by provided intended on its intended	e Department of this Color or falluthe oversign purpose ign and da RM. Other	nent, to evalue control; are to comply ght document established at the below an wise continuous con	with the S at for the sit in the docu YES d	medy, lite se, the ment. NO
· A	the environment; (c) access to the site wincluding access to evaluating access to evaluate (d) nothing has occurre Management Plan for the (e) if a financial assurant mechanism remains value of the control of the co	ill continue to be pluate the continue of that would consider the Control; and noe mechanism is lid and sufficient for the control; were to questionally the control of the	provided to the dimaintenance stitute a violate required by provided intended on its intended	e Department of this Color or falluthe oversign purpose ign and da RM. Other	nent, to evalue control; are to comply ght document established at the below an wise continuous con	with the S at for the sit in the docu YES d	medy, lite se, the ment. NO
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k	the environment; (c) access to the site wincluding access to evaluating access to evaluate (d) nothing has occurre Management Plan for the (e) if a financial assurant mechanism remains value of the control of the co	ill continue to be pluate the continue of that would consider that would consider the control; and note mechanism is lid and sufficient for the control of t	provided to the dimaintenance stitute a violate required by or its intended by DN 2 IS NO, so OF THIS FO	e Departmee of this Color or falluthe oversign and da RM. Other	nent, to evalue control; are to comply ght document established at the below an wise continuous con	with the S at for the sli in the docu YES d ue.	medy, lite se, the ment. NO

•.

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 Glass "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Melody B. Christopher a	t 5 Waterside Crossing print business address	Windsor CTOGOS,
am certifying as Remedial		(Owner or Remedial Party)
for the Site named in the Site Details Section	on of this form.	. 100
Melody B. Christipher , Signature of Owner, Remedial Party, or De Rendering Certification	A&B Inc. signated Representative	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.

am certifying as a Professional Engineer for the ABB Inc., Remedial Party

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

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

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.

Mahl & Maryons Nicholas E. Mouganis

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

	Class GA		Monitoring Well							
COC	Standard	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: <u>CRW</u> on <u>11/16/12</u> Checked by: <u>KJD</u> on <u>11/20/12</u>

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

Troditoroi, Trovi Tota									
	01 04	Monitoring Well							
coc	Class GA Standard	BR-01	BR-01 BR-02 BR-03 I						
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: <u>CRW</u> on <u>11/16/12</u> Checked by: <u>KJD</u> on <u>11/21/12</u>

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

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	(μg/L) 2,900	(μg/ L)	(μg/L)	(μg/L)
OB-04 OB-04	03/24/01	150	2,900 3.2 J			
OB-04 OB-04	06/18/01	39,000	21,000			
OB-04 OB-04	09/01	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)
OB-04 OB-04	12/17/01	71,500	56,000	170	108	10.2
OB-04 OB-04	03/12/02	65,600	1,640	16.6	3.8	10.2
OB-04 OB-04	06/09/02	3,650	554		3.0 	
OB-04 OB-04						2
	09/23/02	3,760	1,950	7.5	4.9	
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		5 1.0	1.0			

	Date	TCE	Rochester, New Yo cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
Sample ID	Sampled	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(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						

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 08/15/01 TW-04 09/14/01 27 38 TW-04 09/14/01 27 38 TW-04 03/05/02 51 3.7 TW-04 03/05/02 51 3.7 TW-04 03/16/02 42.5 5.5 TW-04 12/40/02 42.5 5.5	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 05/17/12 3.78 11.1 13.2 OB-08 10/31/12 11.2 3.15 TW-04 10/24/20 42 79 TW-04 03/22/01 14 16 TW-04 06/15/01 TW-04 09/14/01 27 38 TW-04 09/14/01 27 38 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 12/04/02 42.5 5.5 <t< td=""><td>OB-08</td><td>05/04/11</td><td></td><td>67.9</td><td>22.7</td><td></td><td>249</td></t<>	OB-08	05/04/11		67.9	22.7		249
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 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 08/18/03 TW-04 08/16/03 19.3 TW-04 09/16/03 29.2 3.1 <t< td=""><td>OB-08</td><td>11/02/11</td><td></td><td></td><td>15.5</td><td></td><td>4.73</td></t<>	OB-08	11/02/11			15.5		4.73
TW-04	OB-08	05/17/12		3.78	11.1		13.2
TW-04 03/22/01 14 16	OB-08	10/31/12			11.2		3.15
TW-04 06/15/01	TW-04	10/24/00	42	79			
TW-04 09/14/01 27 38 -	TW-04	03/22/01	14	16			
TW-04 12/13/01 51.1 19.4 TW-04 03/05/02 51 3.7	TW-04	06/15/01					
TW-04 03/05/02 51 3.7	TW-04	09/14/01	27	38			
TW-04 06/04/02 20.7	TW-04	12/13/01	51.1	19.4			
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 12/09/03 49.8 1.1 TW-04 12/09/03 49.8 1.1 TW-04 12/13/04 40.0 TW-04 16/24/05 9.20 1.7 TW-04 16/24/05 31.4 TW-04 12/11/05 31.4 <	TW-04	03/05/02	51	3.7			
TW-04 12/04/02 42.5 5.5 TW-04 03/18/03 <	TW-04	06/04/02	20.7				
TW-04 03/18/03	TW-04	09/17/02	21.2	7.1			
TW-04 06/10/03 19.3	TW-04	12/04/02	42.5	5.5			
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 11/04/08 21.3	TW-04	03/18/03					
TW-04	TW-04	06/10/03	19.3				
TW-04 06/15/04 12.7	TW-04	09/16/03	29.2	3.1			
TW-04 11/30/04 40.0	TW-04	12/09/03	49.8	1.1			
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 05/03/11 6.17 TW-04 05/03/11 8.9 </td <td>TW-04</td> <td>06/15/04</td> <td>12.7</td> <td></td> <td></td> <td></td> <td></td>	TW-04	06/15/04	12.7				
TW-04 12/01/05 31.4	TW-04	11/30/04	40.0				
TW-04 07/18/06 27.9	TW-04	06/24/05	9.20	1.7			
TW-04 12/11/06 8.99	TW-04	12/01/05	31.4				
TW-04	TW-04	07/18/06	27.9				
TW-04 12/11/07 15.2	TW-04	12/11/06	8.99				
TW-04	TW-04	05/03/07	4.66				
TW-04 11/04/08 21.3 TW-04 05/04/09 4.78	TW-04	12/11/07	15.2				
TW-04 05/04/09 4.78 TW-04 10/19/09	TW-04	05/03/08	4.40				
TW-04 10/19/09	TW-04	11/04/08	21.3				
TW-04 05/11/10 5.32 TW-04 05/03/11 6.17	TW-04	05/04/09	4.78				
TW-04 05/03/11 6.17 TW-04 11/01/11 8.9 2.44	TW-04	10/19/09					
TW-04 11/01/11 8.9 2.44 TW-04 05/16/12 1.66 1.56	TW-04	05/11/10	5.32				
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 09/19/02 91.5 4	TW-04	05/03/11	6.17				
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-04	11/01/11	8.9	2.44			
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-04	05/16/12	1.66	1.56			
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-04	10/31/12		2.85			
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	10/24/00	230	36			
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	03/27/01	120	1.9 J			
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	06/16/01	200	7.4			
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	09/16/01	150	9.6			
TW-09 06/05/02 36.5 TW-09 09/19/02 91.5 4	TW-09	12/15/01	110	4			
TW-09 09/19/02 91.5 4	TW-09	03/06/02	55.4	2			
	TW-09	06/05/02	36.5				
TW-09 12/05/02 38	TW-09	09/19/02	91.5	4			
	TW-09	12/05/02	38				

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				1.46		
	05/03/07	31.2	3.01			
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			

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 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		-	-	-		

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 (DOI)	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 (BOI)	11/06/08	687	143	3.28		8.86
W-5 (DUP)	11/06/08	703	126	2.88		8.85
W-5 (DOI)	05/06/09	961	124	2.61	 	1.33
W-5 (DUP)		961	123			
W-5 (DOF)	05/06/09 10/21/09	664	59.9	2.69 1.55		5.39 J
W-5 (DUP)	10/21/09	642	68.2	1.61	- 	7.42
W-5 (DUP) W-5	05/12/10	601	164	2.08	 -	7.42 5.04
W-5 (DUP)	05/12/10	591	159	2.08	- 	5.04
W-5 (DOP) W-5	05/12/10	591 445	117			5.2 <i>1</i> 1.51
w-5 W-5 (DUP)				1.39		
W-5 (DOP) W-5	05/04/11	432	141	1.62		1.53
	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.					

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)
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

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 t	table.					

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 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			

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

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

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





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

Review your project results through

Total Access

Have a Question?



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.

Client: AMEC Environment & Infrastructure Inc. (4997)

TestAmerica Job ID: NWE2216

Project/Site: 3031052006-16

Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions	
Client Sample Results	5
QC Sample Results	23
QC Association	28
Chronicle	30
Method Summary	34
Certification Summary	35
Chain of Custody	36

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Sample Summary

Client: AMEC Environment & Infrastructure Inc. (4997)

Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

ab Sample ID	Client Sample ID	Matrix	Collected	Received
IWE2216-01	BR-01	Water	05/17/12 12:24	05/18/12 08:30
IWE2216-02	BR-02	Water	05/16/12 15:04	05/18/12 08:30
IWE2216-03	BR-03	Water	05/16/12 12:05	05/18/12 08:30
IWE2216-04	BR-04	Water	05/15/12 16:07	05/18/12 08:30
IWE2216-05	BR-10	Water	05/15/12 18:32	05/18/12 08:30
IWE2216-06	BR-15	Water	05/16/12 18:21	05/18/12 08:30
IWE2216-07	OB-04	Water	05/15/12 13:30	05/18/12 08:3
IWE2216-08	OB-06	Water	05/15/12 14:44	05/18/12 08:30
IWE2216-09	OB-08	Water	05/17/12 09:18	05/18/12 08:30
IWE2216-10	TW-04	Water	05/16/12 10:39	05/18/12 08:3
WE2216-11	TW-09	Water	05/16/12 13:15	05/18/12 08:3
IWE2216-12	TW-17	Water	05/16/12 18:55	05/18/12 08:3
IWE2216-13	TW-20	Water	05/17/12 10:42	05/18/12 08:3
IWE2216-14	W-5	Water	05/17/12 13:59	05/18/12 08:30
IWE2216-15	QAFB01	Water	05/16/12 10:55	05/18/12 08:3
IWE2216-16	W-5 (DUP)	Water	05/17/12 13:59	05/18/12 08:3
WE2216-17	QARB01	Water	05/16/12 19:03	05/18/12 08:3
IWE2216-18	QATB01	Water	05/16/12 00:01	05/18/12 08:3

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Definitions/Glossary

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

Lab Sample ID: NWE2216-01

TestAmerica Job ID: NWE2216

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND 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

Client Sample ID: BR-02

Lab Sample ID: NWE2216-02

TestAmerica Job ID: NWE2216

Matrix: Water

Date Collected: 05/16/12 15:04 Date Received: 05/18/12 08:30

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 - Volat	ile Organic Comp	ounds by E	PA Method 826	OB - RE	1				
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

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

Lab Sample ID: NWE2216-03

Matrix: Water

TestAmerica Job ID: NWE2216

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

Client Sample ID: BR-03

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

WELLIOU. 344040 02000 - VOI	atile Organic Comp	ounus by E	PA WEUTOU 620	ND - KE					
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

Lab Sample ID: NWE2216-04

TestAmerica Job ID: NWE2216

Matrix: Water

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

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

Lab Sample ID: NWE2216-05

Matrix: Water

TestAmerica Job ID: NWE2216

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

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 - Vo	latile Organic Comp	ounds by E	PA Method 826	OB - RE	1				
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

Lab Sample ID: NWE2216-06

TestAmerica Job ID: NWE2216

Matrix: Water

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

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

Lab Sample ID: NWE2216-07

TestAmerica Job ID: NWE2216

Matrix: Water

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

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

Lab Sample ID: NWE2216-08

TestAmerica Job ID: NWE2216

Matrix: Water

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

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

Client Sample ID: OB-08

Date Collected: 05/17/12 09:18

Date Received: 05/18/12 08:30

4-Bromofluorobenzene

Lab Sample ID: NWE2216-09

Matrix: Water

TestAmerica Job ID: NWE2216

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

70 - 130

110

1.00

Client: AMEC Environment & Infrastructure Inc. (4997)

Project/Site: 3031052006-16

Lab Sample ID: NWE2216-10

TestAmerica Job ID: NWE2216

Matrix: Water

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

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

Lab Sample ID: NWE2216-11

TestAmerica Job ID: NWE2216

Matrix: Water

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

Method: SW846 8260B - Volat	tile Organic Comp	ounds by E	PA Method 826	0B					
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

Lab Sample ID: NWE2216-12

TestAmerica Job ID: NWE2216

Matrix: Water

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

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

Lab Sample ID: NWE2216-13

TestAmerica Job ID: NWE2216

Sample ID. HVVLZZ 10-10

Matrix: Water

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

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

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Client: AMEC Environment & Infrastructure Inc. (4997)

Project/Site: 3031052006-16

Client Sample ID: W-5

Lab Sample ID: NWE2216-14

TestAmerica Job ID: NWE2216

Matrix: Water

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

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 - Vo	latile Organic Comp	ounds by E	PA Method 826	50B - RE	1				
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

Lab Sample ID: NWE2216-15

TestAmerica Job ID: NWE2216

Matrix: Water

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

Client Sample ID: QAFB01

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

Lab Sample ID: NWE2216-16

Matrix: Water

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

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 - Vo	latile Organic Comp	oounds by E	EPA Method 826	60B - RE	1				
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

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Client: AMEC Environment & Infrastructure Inc. (4997)

Project/Site: 3031052006-16

Lab Sample ID: NWE2216-17

TestAmerica Job ID: NWE2216

Matrix: Water

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

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

Lab Sample ID: NWE2216-18

TestAmerica Job ID: NWE2216

Matrix: Water

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

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

Client: AMEC Environment & Infrastructure Inc. (4997)

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

Lab Sample ID: 12E6063-BLK1 Client Sample ID: Method Blank **Matrix: Water Prep Type: Total** Analysis Batch: V008844 Prep Batch: 12E6063_P Riank Riank

	Diank i	Diank							
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 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

Blan	k Blank				
Surrogate %Recover	/ Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	3	70 - 130	05/25/12 08:07	05/25/12 12:27	1.00
Dibromofluoromethane 10	7	70 - 130	05/25/12 08:07	05/25/12 12:27	1.00
Toluene-d8 9	ô	70 - 130	05/25/12 08:07	05/25/12 12:27	1.00
4-Bromofluorobenzene 10)	70 - 130	05/25/12 08:07	05/25/12 12:27	1.00

Lab Sample ID: 12E6063-BS1 Client Sample ID: Lab Control Sample **Matrix: Water Prep Type: Total**

Prep Batch: 12E6063_P Analysis Batch: V008844

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%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	

	LCS	LCS	
Surrogate	%Recovery	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

	Sample	Sample	Spike	Matrix Spike	Matrix Spil	(e			%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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	
Vinyi chloride	ND		10000	11900		ug/L		119	50 - 129	

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

56 - 129

Client: AMEC Environment & Infrastructure Inc. (4997)

Project/Site: 3031052006-16

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

Lab Sample ID: 12E6063-MSD1

Client Sample ID: Matrix Spike Duplicate **Matrix: Water Prep Type: Total** Prep Batch: 12E6063_P Analysis Batch: V008844

Sample Sample Spike ıtrix Spike Dup Matrix Spike Dur %Rec. Result Qualifier Added Result Qualifier RPD Analyte %Rec Limits Limit 1,1-Dichloroethene ND 10000 11600 ug/L 116 70 - 142 8.0 17 ND 10000 ug/L trans-1,2-Dichloroethene 12200 122 66 - 143 0.9 16 10000 12200 cis-1,2-Dichloroethene ND ug/L 122 68 - 138 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 121 2

ug/L

Matrix Spike Dup Matrix Spike Dup

Surrogate	%Recovery	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 Client Sample ID: Method Blank **Matrix: Water Prep Type: Total**

Analysis Batch: V008860 Prep Batch: 12E6105_P Blank Blank

ı		DIAIIK	DIdIIK						
	Analyte	Result	Qualifier R	L MDL	Unit	D	Prepared	Analyzed	Dil Fac
	1,1-Dichloroethene	ND	1.0	0	ug/L		05/29/12 09:07	05/29/12 11:27	1.00
١	trans-1,2-Dichloroethene	ND	1.0	0	ug/L		05/29/12 09:07	05/29/12 11:27	1.00
١	cis-1,2-Dichloroethene	ND	1.0	0	ug/L		05/29/12 09:07	05/29/12 11:27	1.00
ı	Tetrachloroethene	ND	1.0	0	ug/L		05/29/12 09:07	05/29/12 11:27	1.00
١	Trichloroethene	ND	1.0	0	ug/L		05/29/12 09:07	05/29/12 11:27	1.00
١	Vinyl chloride	ND	1.0	0	ug/L		05/29/12 09:07	05/29/12 11:27	1.00

	Blank Blank				
Surrogate	%Recovery 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 **Client Sample ID: Lab Control Sample**

Matrix: Water Prep Type: Total Analysis Batch: V008860 Prep Batch: 12E6105_P

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%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	

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

Client: AMEC Environment & Infrastructure Inc. (4997)

Project/Site: 3031052006-16

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

	Sample	Sample	Spike	Matrix Spike	Matrix Spi	ke			%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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	

Matrix Spike Matrix Spike

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

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Prep Batch: 12E6105_P

	Sample	Sample	Spike	ıtrix Spike Dup	Matrix Spil	ke Dur			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	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

Matrix Spike Dup Matrix Spike Dup

Surrogate	%Recovery	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

Lab Sample ID: 12E6105-MSD1

Analysis Batch: V008860

Matrix: Water

Matrix: Water

Analysis Batch: V008886

Client Sample ID: Method Blank Prep Type: Total

Prep Batch: 12E6141_P

	Dialik	Dialik							
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 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

Blank	Rlank
Dialin	Dialin

Rlank Rlank

Surrogate	%Recovery	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

Spike

Added

50.0

50.0

50.0

50.0

50.0

50.0

Limits

70 - 130

70 - 130

70 - 130

70 - 130

LCS LCS

41.8

43.0

49.0

47.8

49.3

50.7

Result Qualifier

Unit

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

%Rec.

Limits

79 - 124

79 - 126

76 - 125

80 - 126

80 - 123

68 - 120

%Rec

84

86

98

96

99

101

Lab Sample ID: 12E6141-BS1

Analysis Batch: V008886

Matrix: Water

1,1-Dichloroethene

Tetrachloroethene

Trichloroethene

Vinyl chloride

Surrogate

Toluene-d8

trans-1,2-Dichloroethene

cis-1,2-Dichloroethene

1,2-Dichloroethane-d4

Dibromofluoromethane

4-Bromofluorobenzene

Analyte

Client: AMEC Environment & Infrastructure Inc. (4997)

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

LCS LCS %Recovery Qualifier

101

100

103

110

Client Sample ID: Lab Control Sample **Prep Type: Total**

Prep Batch: 12E6141_P

Matrix: Water

Analysis Batch: V008886

Client Sample ID: Lab Control Sample Dup

Prep Type: Total

Prep Batch: 12E6141_P

	Spike	LCS Dup	LCS Dup				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	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

	LCS Dup	LCS Dup	
Surrogate	%Recovery	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

	Sample	Sample	Spike	Matrix Spike	Matrix Spik	е			%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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	

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

QC Sample Results

Client: AMEC Environment & Infrastructure Inc. (4997)

Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

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

		Sample	Sample	Spike	ıtrix Spike Dup	Matrix Spil	ke Dur			%Rec.		RPD
١.	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	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

Init	D	%Rec	Limits	RPD	Limit
g/L		92	70 - 142	0.1	17
g/L		93	66 - 143	2	16
g/L		97	68 - 138	0.4	17
g/L		105	72 - 145	3	16
g/L		107	73 - 144	0.9	17

Matrix Spike Dup	Matrix Spike Dup
watrix Spike Dup	Matrix Spike Dup

Surrogate	%Recovery	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)

Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

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

QC Association Summary

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	

QC Association Summary

Client: AMEC Environment & Infrastructure Inc. (4997)

Project/Site: 3031052006-16

TestAmerica Job ID: NWE2216

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	

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Project/Site: 3031052006-16

Client: AMEC Environment & Infrastructure Inc. (4997)

Client Sample ID: BR-01

Lab Sample ID: NWE2216-01

Matrix: Water

Date Collected: 05/17/12 12:24 Date Received: 05/18/12 08:30

Client Sample ID: BR-02

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

Lab Sample ID: NWE2216-02

Matrix: Water

Date Collected: 05/16/12 15:04 Date Received: 05/18/12 08:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

Matrix: Water

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

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

Project/Site: 3031052006-16

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

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

Date Received: 05/18/12 08:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

Lab Sample ID: NWE2216-10 Client Sample ID: TW-04

Date Collected: 05/16/12 10:39

Date Received: 05/18/12 08:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	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

Matrix: Water

Matrix: Water

Client: AMEC Environment & Infrastructure Inc. (4997)

Project/Site: 3031052006-16

Client Sample ID: TW-17

Lab Sample ID: NWE2216-12

Matrix: Water

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

Client Sample ID: TW-20

Date Collected: 05/17/12 10:42

Date Received: 05/18/12 08:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	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

Lab Sample ID: NWE2216-13

Lab Sample ID. NVVE2210-13

Matrix: Water

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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 Matrix: Water

Date Received: 05/17/12 13:59

Date Received: 05/18/12 08:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

Matrix: Water

Date Received: 05/18/12 08:30

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

Lab Sample ID: NWE2216-17

Matrix: Water

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

Client Sample ID: QARB01

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	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

Lab Sample ID: NWE2216-18

Client Sample ID: QATB01

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

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

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

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Protocol References:

Laboratory References:

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

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TestAmerica Job ID: NWE2216

Client: AMEC Environment & Infrastructure Inc. (4997)

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
estAmerica Nashville	Arizona	State Program	9	AZ0473
estAmerica Nashville	Arkansas DEQ	State Program	6	88-0737
estAmerica Nashville	California	NELAC	9	1168CA
estAmerica Nashville	Canadian Assoc Lab Accred (CALA)	Canada		3744
estAmerica Nashville	Colorado	State Program	8	N/A
estAmerica Nashville	Connecticut	State Program	1	PH-0220
estAmerica Nashville	Florida	NELAC	4	E87358
estAmerica Nashville	Illinois	NELAC	5	200010
estAmerica Nashville	Iowa	State Program	7	131
estAmerica Nashville	Kansas	NELAC	7	E-10229
estAmerica Nashville	Kentucky	State Program	4	90038
estAmerica Nashville	Kentucky (UST)	State Program	4	19
estAmerica Nashville	Louisiana	NELAC	6	30613
estAmerica Nashville	Louisiana	NELAC	6	LA110014
estAmerica Nashville	Maryland	State Program	3	316
estAmerica Nashville	Massachusetts	State Program	1	M-TN032
estAmerica Nashville	Minnesota	NELAC	5	047-999-345
estAmerica Nashville	Mississippi	State Program	4	N/A
estAmerica Nashville	Montana (UST)	State Program	8	NA
estAmerica Nashville	New Hampshire	NELAC	1	2963
estAmerica Nashville	New Jersey	NELAC	2	TN965
estAmerica Nashville	New York	NELAC	2	11342
estAmerica Nashville	North Carolina DENR	State Program	4	387
estAmerica Nashville	North Dakota	State Program	8	R-146
estAmerica Nashville	Ohio VAP	State Program	5	CL0033
estAmerica Nashville	Oklahoma	State Program	6	9412
estAmerica Nashville	Oregon	NELAC	10	TN200001
estAmerica Nashville	Pennsylvania	NELAC	3	68-00585
estAmerica Nashville	Rhode Island	State Program	1	LAO00268
estAmerica Nashville	South Carolina	State Program	4	84009
estAmerica Nashville	South Carolina	State Program	4	84009
estAmerica Nashville	Tennessee	State Program	4	2008
estAmerica Nashville	Texas	NELAC	6	T104704077-09-TX
estAmerica Nashville	USDA	Federal	v	S-48469
estAmerica Nashville	Utah	NELAC	8	3-46409 TAN
estAmerica Nashville		NELAC	3	460152
estAmerica Nashville	Virginia Virginia	State Program	3	00323
estAmerica Nashville	Virginia Washinatan	<u> </u>	3 10	00323 C789
	Washington	State Program		
estAmerica Nashville	West Virginia DEP	State Program	3	219
estAmerica Nashville	Wisconsin	State Program	5	998020430
estAmerica 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.



COOLER RI



Cooler	Received/O	pened C	n (5/18/2	2012	@	0830	
000.0.	Received/O		,		.0	100,	000	_

Cooler Received/Opened On 5/18/2012 @ 0830	/E2216						
1. Tracking #(last 4 digits, FedEx)							
Courier: FedEx IR Gun ID 14740456							
2. Temperature of rep. sample or temp blank when opened:Degrees Celsius	-						
3. If Item #2 temperature is 0° C or less, was the representative sample or temp blank frozen	? YES NONA						
4. Were custody seals on outside of cooler?	ESNONA						
If yes, how many and where:							
5. Were the seals intact, signed, and dated correctly?	ESNONA						
6. Were custody papers inside cooler?	YES., NONA						
I certify that I opened the cooler and answered questions 1-6 (intial)	<u> </u>						
7. Were custody seals on containers: YES NO and Intact	YESNO(NA						
Were these signed and dated correctly?	YESNO(NA)						
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Pap	er Other None						
9. Cooling process: (Ice Ice-pack Ice (direct contact) Dry ice	e Other None						
10. Did all containers arrive in good condition (unbroken)?	FSNONA						
11. Were all container labels complete (#, date, signed, pres., etc)?	ÉsNONA						
12. Did all container labels and tags agree with custody papers?	ESNONA						
13a. Were VOA vials received?	ESNONA						
b. Was there any observable headspace present in any VOA vial?	YESNONA						
14. Was there a Trip Blank in this cooler? YESNONA If multiple coolers, sequence #							
I certify that I unloaded the cooler and answered questions 7-14 (intial)	<u>~</u> G,						
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level	? YESNONA						
b. Did the bottle labels indicate that the correct preservatives were used	YESNONA						
16. Was residual chlorine present?	YESNONA						
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial	1 - OG.						
17. Were custody papers properly filled out (ink, signed, etc)?	YBSNONA						
18. Did you sign the custody papers in the appropriate place?	ÉSNONA						
19. Were correct containers used for the analysis requested?	ESNONA						
20. Was sufficient amount of sample sent in each container?	E3NONA						
I certify that I entered this project into LIMS and answered questions 17-20 (intial)	<u>49.</u>						
I certify that I attached a label with the unique LIMS number to each container (intial)	-G-						

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

Chain of Custody Record

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		Chain c	Chain of Custody Record	41 22 44	THE LEADER IN ENVIRONMENTAL TESTING
Client Information	Sampler Look	Lab PM: Brown,	Shali	Carrier Tracking No(s): ICOC	COC No: 490-513-112.1
Client Contact: Mr. Joe Deatherage	Phone: 865 207 - 4625		E-Mail: shali.brown@testamericainc.com	Page:	Page: 10f 8 2
Company: AMEC Environment & Infrastructure, Inc.	, v		Analysis Requested	-	# 1
Address: 9725 Cogdill Road	Due Date Requested:				ation Code
City: Knoxville	TAT Requested (days):		1,2	7 00 3	
State, Zip: TN, 37932			s/trans	mo	D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3
Phone: 865-218-1049(Tel)	Po# Purchase Order Requested	ă.		Ε φ Τ	F - MeUH R - Na282803 G - Amchlor S - H2SO4 H - Assorbis Asid F - TSD Dodensbudgets
Email: joe.deatherage@amec.com	WO#		No)	عتنسب	
Project Name: Former Taylor Instruments	Project #: 49001213		s or	taine	K - EDTA W - ph 4-5 L - EDA Z - other (specify)
Site:	SSOW#		D (Yo	con	ñ
		Matrix	/MSI		vi=2216
ere en		Sample	Filtere orn: MS 3 - 8260C	000	06/04/12 23:59
Sample Identification	Sample Date Time	G=grab)	Per 8260	Tota	ctions/Note:
		-	A A	X	
18R-01	5/17/12 1224	G Water	<u> </u>		87 o
1 BR-02	5/16/12 1504	Water	X	2	ле 3
\$ BR-03	5/16/12 1205		X		Pa
\$ BR-04	15/15/12 1607		X		
S BR-10	5/15/12 1832	⊘ Water	X	3777	
BR-15	5/16/12 1821	⊘ Water	X		
1 OB-04	5/15/12 1330		X		
SOB-06	5/15/12 1444		X		
OB-08	15/17/12 0918	S Water	X		
(5) TW-04	5/16/12 1039	⊘ Water	X		
(TW-09	15/16/12 13/15	G Water	X		
Possible Hazard Identification Non-Hazard Flammable Skin Initant I	Poison B Unknown []	Radiological	Sample Disposal (A fee may be assessed if	assessed if samples are retained longer	than 1 mo
ested: I, II, III, IV, Othe			ons/QC Requirem	-	
Empty Kit Relinquished by:	Date:		Time:	Method of Shipment	
Relinquished by: Wath Smill	5/17/12 500	Company AMEC		Tow Date/Time: 08%	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: ¹	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:	arks:	

TestAmeric

Chain of Custody Record

		and Other Remarks:	Cooler Temperature(s) °C and Other Remarks:						Custody Seal No.:
Company	Date/Time:		Received by:		Company			Date/Time:	Relinquished by:
Company	7		Received by:		Company			Date/Time:	Relinquished by:
O, Company	Date/Time: / /2 /2 6850	In the	Received by:		Company AMEC		1500	Date/Time:/ 5/17/12	relinquished by: [which have]
	Method of Shipment:	Method of		Time:			Date:		Empty Kit Relinquished by:
		ns/QC Requirements:	Special Instructions/QC	Spe					Deliverable Requested: I, II, III, IV, Other (specify)
er than 1 month) Months	amples are retained tonger	e may be assessed if samples Disposal By Lab	Sample Disposal (A fee	San	al	Radiological	<i>Unkпоwn</i>	Poison B 🔲 Un	ant 🔲
المرادن والمتعادية وال					Water				7.2
					Wet				
	-				Water				NDW-1
			<u>×</u> 	7	Water	1	1	1	Extraser QAT6-01
			×	Z	Water	0	1903	5/116/12	QARB01
			X	Σ,	Water	8	7607	5/15/12	BR-04 (MSD)
			X	2	Water	0	1607	3/15/12	BR-04 (MS)
			X 	2	Water	0	1359	5/17/12	W-5 (DUP)
			× 	≥.	Water	0	i Sign Sign Sign Sign Sign Sign Sign Sig	3/16/12	QAFB01
Pa			X 	Y	Water	0	1359	5/17/12	W-5
ne 3			X 	MI	Water		1042	5/17/12	TW-20
8 0			X	Z	Water	0	1885	5/16/12	TW-17
3			A A	****	Preservation Code:	Preserva	$\nabla 7$	\sqrt{N}	
NVV CALCON NV CA	06/07 08/07 NAN		8260B - 826 624_6ml - 6	Field Filte Perform N	(W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Type (C=comp, G=grab)	Sample Time	Sample Date	Sample Identification
re2216	<u> </u>		··		Matrix	Sample			
	of cor			ariet rimetion.				SSOW#:	
	otalne L-EDA							Project #: 49001213	
	مفارح والمراج		E 1,1-					#OW	Enait: joe:deatherage@amec.com
lior S - H2SO4 bic Acid T - TSP Dodecahydrate	G - Amchior H - Ascorbic Acid		DCE c	6)		ed	er Request	Po.#. Purchase Order Requested	Phone: 865-218-1049(Tel)
	D - Nitric Acid E - NaHSO4		is/trans						State, Zlp: TN, 37932
	B - NaOH C - Zn Acetate		1,2	e V			days):	TAT Requested (days):	City: Knoxville
ပ္သ	Preserva:						sted:	Due Date Requested:	Address: 9725 Cogdill Road
	Job#:	Analysis Requested							Company: AMEC Environment & Infrastructure, Inc.
ජ ් ව ව	Page:	3	E-Mail: shali.brown@testamericainc.com	il: i.brown(E-Mail: shali.l		1	Phone:	Client Contact: Mr. Joe Deatherage
190-513-112.2	.	Carrier Tracking No(s):		Lab PM: Brown, Shali	Lab F Brov	SPO	ourthen	اَحُ	Client Information
DER IN ENVIRONMENTAL TESTING	THE LEAD								





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

Panula a Sauford

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

Total Access

Have a Question?



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

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Definitions	6
Client Sample Results	7
QC Sample Results	25
QC Association	29
Chronicle	30
Method Summary	33
Certification Summary	34
Chain of Custody	35
Receipt Chacklists	38

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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

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TestAmerica Job ID: 490-10489-1

Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

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.

TestAmerica Nashville 11/14/2012

Page 4 of 38

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.

TestAmerica Job ID: 490-10489-1

Project/Site: Former Taylor Instruments

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.

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Definitions/Glossary

 $\label{limit} \textbf{Client: AMEC Environment \& Infrastructure, Inc.}$

Decision level concentration

Reporting Limit or Requested Limit (Radiochemistry only)

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

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

DLC

RL

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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)

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1:

Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

Client Sample ID: QATB01

Date Collected: 10/30/12 00:01

Date Received: 11/02/12 08:00

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-1

Matrix: Water

Method: 8260B - Volatile Orga	nic 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

Client Sample ID: OB-06

Date Collected: 10/30/12 16:22

Date Received: 11/02/12 08:00

Toluene-d8 (Surr)

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-2

11/02/12 17:48

Matrix: Water

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

70 - 130

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-3

Matrix: Water

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

Method: 8260B - Volatile Orga	nic 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

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-4

11/02/12 18:43

Matrix: Water

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

Toluene-d8 (Surr)

Method: 8260B - Volatile Orga	nic Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL (Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.00	ι	ug/L			11/02/12 18:43	1
cis-1,2-Dichloroethene	4.77		1.00	ι	ug/L			11/02/12 18:43	1
Tetrachloroethene	ND		1.00	ι	ug/L			11/02/12 18:43	1
trans-1,2-Dichloroethene	ND		1.00	ι	ug/L			11/02/12 18:43	1
Trichloroethene	4.90		1.00	ι	ug/L			11/02/12 18:43	1
Vinyl chloride	ND		1.00	ι	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

70 - 130

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-5

Matrix: Water

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

Method: 8260B - Volatile Orga	nic 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

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1:

Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-6

Matrix: Water

Client Sample ID: TW-04

Date Collected: 10/31/12 12:15

Date Received: 11/02/12 08:00

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

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-7

Matrix: Water

Date	Collected:	10/31/12	13:30
Date	Received:	11/02/12	กละกก

Client Sample ID: BR-03

Method: 8260B - Volatile Organ	ic 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

TestAmerica Nashville 11/14/2012

Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-8

Matrix: Water

Client Sample ID: QAFB01
Date Collected: 10/31/12 13:52

Date Received: 11/02/12 08:00

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

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-9

Matrix: Water

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_		_					_				_		_	_

Date Collected: 10/31/12 16:21 Date Received: 11/02/12 08:00

Method: 8260B - Volatile Organ	nic 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

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-10

Matrix: Water

Date Collected: 10/31/12 17:30 Date Received: 11/02/12 08:00

Client Sample ID: OB-08

Method: 8260B - Volatile Organ	nic 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

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

Client Sample ID: QARB01

Date Collected: 10/31/12 17:43

Date Received: 11/02/12 08:00

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-11

Matrix: Water

ic Compounds ((GC/MS)							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		1.00		ug/L			11/02/12 21:52	1
ND		1.00		ug/L			11/02/12 21:52	1
ND		1.00		ug/L			11/02/12 21:52	1
ND		1.00		ug/L			11/02/12 21:52	1
ND		1.00		ug/L			11/02/12 21:52	1
ND		1.00		ug/L			11/02/12 21:52	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
		70 - 130			-		11/02/12 21:52	1
90		70 - 130					11/02/12 21:52	1
108		70 - 130					11/02/12 21:52	1
96		70 - 130					11/02/12 21:52	1
	Result	ND ND ND ND ND ND 107 90 108	Result Qualifier RL ND 1.00 ND 7.00 ND 1.00 ND 1.00 ND 1.00 ND 1.00	Result Qualifier RL MDL ND 1.00 1.00 WRecovery Qualifier Limits 107 70 - 130 70 - 130 108 70 - 130	Result Qualifier RL MDL Unit ND 1.00 ug/L ND 1.00 ug/L	Result Qualifier RL MDL Unit D ND 1.00 ug/L ug/	Result Qualifier RL MDL Unit D Prepared ND 1.00 ug/L ug/L <td< td=""><td>Result ND Qualifier RL MDL Unit D Prepared Analyzed ND 1.00 ug/L 11/02/12 21:52 WRecovery Qualifier Limits Prepared Analyzed 107 70 - 130 11/02/12 21:52 90 70 - 130 11/02/12 21:52 108 70 - 130 11/02/12 21:52</td></td<>	Result ND Qualifier RL MDL Unit D Prepared Analyzed ND 1.00 ug/L 11/02/12 21:52 WRecovery Qualifier Limits Prepared Analyzed 107 70 - 130 11/02/12 21:52 90 70 - 130 11/02/12 21:52 108 70 - 130 11/02/12 21:52

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-12

Matrix: Water

Date Collected: 11/01/12 09:24 Date Received: 11/02/12 08:00

Client Sample ID: W-5

Method: 8260B - Volatile Organ	ic 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

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-13

Matrix: Water

Date Collected: 11/01/12 09:24 Date Received: 11/02/12 08:00

Client Sample ID: W-5 Dup

Method: 8260B - Volatile Orga	nic 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

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-14

Matrix: Water

Date Collected: 11/01/12 10:12 Date Received: 11/02/12 08:00

Client Sample ID: TW-09

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	-

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-15

Matrix: Water

Date Collected: 11/01/12 11:38 Date Received: 11/02/12 08:00

Client Sample ID: BR-02

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

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-16

Matrix: Water

Date Collected: 11/01/12 13:05 Date Received: 11/02/12 08:00

Client Sample ID: TW-20

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

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-17

11/05/12 15:42

Matrix: Water

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

Toluene-d8 (Surr)

Method: 8260B - Volatile Orga	nic 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

70 - 130

95

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Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

Lab Sample ID: 490-10489-18

Matrix: Water

Client Sample ID: BR-15
Date Collected: 11/01/12 17:06

Date Received: 11/02/12 08:00

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

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Project/Site: Former Taylor Instruments

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

	IVID	VID							
Analyte	Result (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

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepare	ed 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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%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	

LCS LCS

Surrogate	%Recovery	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	

	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits	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

LCSD LCSD	CSD	LCSD	
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Surrogate	%Recovery	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

TestAmerica Nashville 11/14/2012

Page 25 of 38

Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

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

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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	

MS MS

Surrogate	%Recovery	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

		Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	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
ı												

MSD MSD

Surrogate	%Recovery	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

	IVID	IVID							
Analyte	Result	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

MD MD

Surrogate	%Recovery	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)

Client Sample ID: Lab Control Sample

Matrix: Water

Analysis Batch: 33568

Lab Sample ID: LCS 490-33568/3

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%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	

LCS LCS

Surrogate	%Recovery	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

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 33568

Lab Sample ID: LCSD 490-33568/4

	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit E	%Rec	Limits	RPD	Limit
1,1-Dichloroethene	50.0	49.07		ug/L	98	79 - 124	0	17
cis-1,2-Dichloroethene	50.0	41.29	ı	ug/L	83	76 - 125	2	17
Tetrachloroethene	50.0	47.25	ı	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	ı	ug/L	96	80 - 123	4	17
Vinyl chloride	50.0	39.06	į	ug/L	78	68 - 120	2	17

LCSD LCSD

Surrogate	%Recovery	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	Client Sample ID: BR-15
Matrix: Water	Prep Type: Total/NA
Analysis Batch: 33568	

	Sample Sample	Spike	MS	MS				%Rec.	
Analyte	Result Qualifier	Added	Result	Qualifier	Unit	D	%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	%Recovery	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

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

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

Lab Sample ID: 490-10489-18 MSD

Matrix: Water

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

Analysis Batch: 33568											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	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
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								

Surrogate	%Recovery	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

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QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

TestAmerica Job ID: 490-10489-1

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	

TAL NSH

Matrix: Water

Client: AMEC Environment & Infrastructure, Inc.

Analysis

8260B

Project/Site: Former Taylor Instruments

Client Sample ID: QATB01 Lab Sample ID: 490-10489-1

Date Collected: 10/30/12 00:01

Date Received: 11/02/12 08:00

Matrix: Water

33042

11/02/12 17:21

ВМ

Batch Batch Dilution Batch Prepared
Prep Type Type Method Run Factor Number or Analyzed Analyst Lab

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

Total/NA

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

Client Sample ID: OB-04 Lab Sample ID: 490-10489-3

Date Collected: 10/30/12 17:45

Date Received: 11/02/12 08:00

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

Client Sample ID: BR-04

Date Collected: 10/31/12 09:55

Lab Sample ID: 490-10489-4

Matrix: Water

Date Collected: 10/31/12 09:55 Date Received: 11/02/12 08:00

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

Client Sample ID: BR-10

Lab Sample ID: 490-10489-5

Matrix: Water

Date Collected: 10/31/12 10:48 Date Received: 11/02/12 08:00

Batch Batch Dilution Batch P

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

Client Sample ID: TW-04 Lab Sample ID: 490-10489-6

Date Collected: 10/31/12 12:15
Date Received: 11/02/12 08:00

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

Client Sample ID: BR-03 Lab Sample ID: 490-10489-7

Date Collected: 10/31/12 13:30 Date Received: 11/02/12 08:00

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

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

TAL NSH

Project/Site: Former Taylor Instruments

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

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number 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

Date Received: 11/02/12 08:00

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

Client Sample ID: BR-01 Lab Sample ID: 490-10489-9

Date Collected: 10/31/12 16:21

Date Received: 11/02/12 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	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 Date Received: 11/02/12 08:00

Batch Batch Dilution Batch Prepared Method or Analyzed Lab Prep Type Type Run Factor Number Analyst

Client Sample ID: QARB01 Lab Sample ID: 490-10489-11

33042

11/02/12 21:25

BM

Date Collected: 10/31/12 17:43

Analysis

8260B

Total/NA

Date Received: 11/02/12 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	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 Date Received: 11/02/12 08:00

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

Client Sample ID: W-5 Dup Lab Sample ID: 490-10489-13

Date Collected: 11/01/12 09:24

Date Received: 11/02/12 08:00

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

Matrix: Water

Matrix: Water

Matrix: Water

Client: AMEC Environment & Infrastructure, Inc.

Project/Site: Former Taylor Instruments

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

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	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

Date Received: 11/02/12 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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 Matrix: Water

Date Collected: 11/01/12 13:05

Date Received: 11/02/12 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

Date Received: 11/02/12 08:00

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	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

Date Received: 11/02/12 08:00

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	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

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TestAmerica Job ID: 490-10489-1

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

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
lowa	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		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		N/A	06-30-13
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-13
	NELAC			
New Hampshire	NELAC	2	2963 TN965	10-09-13 06-30-13
New Jersey				
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

Contain Ready No. 100 At 14/6/10040 Co. 0000	
Cooler Received/Opened On 11/2/2012 @ 0800	
1. Tracking #(last 4 digits, FedEx)	
Courier: FedEx IR Gun ID 94660220	
2. Temperature of rep. sample or temp blank when opened:Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NO
4. Were custody seals on outside of cooler?	XES)NONA
If yes, how many and where: (2) Front Back	
5. Were the seals intact, signed, and dated correctly?	(ES).NONA
6. Were custody papers inside cooler?	YES).NONA
Certify that I opened the cooler and answered questions 1-6 (intial)	
7. Were custody seals on containers: YES (NO) and Intact	YESNO. NA
Were these signed and dated correctly?	YESNONA
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Pape	r Other None
9. Cooling process: Ice lce-pack lce (direct contact) Dry ice	Other None
10. Did all containers arrive in good condition (unbroken)?	YESNONA
11. Were all container labels complete (#, date, signed, pres., etc)?	YESNONA
12. Did all container labels and tags agree with custody papers?	YESNONA
13a. Were VOA vials received?	YESNONA
b. Was there any observable headspace present in any VOA vial?	YESNONA
14. Was there a Trip Blank in this cooler? (ESNONA If multiple coolers, sequence	ce #
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?	YESNONA
b. Did the bottle labels indicate that the correct preservatives were used	YESNONA
16. Was residual chlorine present?	YESNO(NA)
certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	2
7. Were custody papers properly filled out (ink, signed, etc)?	YES.).NONA
8. Did you sign the custody papers in the appropriate place?	YESNONA
9. Were correct containers used for the analysis requested?	YESNONA
20. Was sufficient amount of sample sent in each container?	YESNONA
certify that I entered this project into LIMS and answered questions 17-20 (intial)	
certify that I attached a label with the unique LIMS number to each container (intial)	
21. Were there Non-Conformance issues at login? YESNO Was a PIPE generated? YES	NO)#

BIS = Broken in shipment Cooler Receipt Form.doc Suple
date of time
F. on contains
BR-15

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1706

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Chain of Custody Record

	-	arks:	Cooler Temperature(s) °C and Other Remarks:	Cooler Te					Custody Seals Intact: Custody Seal No.:
Company	Date/Time:	Dat	by:	Received by:	Company	0	,	Date/Time:	Relinquished by:
Company	Date/Time:	Dat	by: 6 1 1 5 7 1	Received by:	Company		ţ	Date/Time:	Relinquished by:
Company 12 AM	Date/Time:	1. j Dat	by:	Received by:	23/MEC		1800	Date/Tirgle: ////2	Relinquished by:
	ment	Method of Shipment		Time:	1		Date:		Empty Kit Relinquished by:
		5:	Requireme	Special Inst					I, III, IV, Ot
For Months	Archive For	Disposal By Lab	Retum To Client Dis	□ _{Retu}		Radiological	Unknown 🔲	Poison B 🔲 Uni	ıle Skin Irritant 🗀
are retained longer than 1 month)	les are refained	mav be assessed if samples	fee	Sample Disposal (A				(8) //	zard Identification
0				X	Water A	0	182	1/11/g	\$ 6 6
2				X	Water 1	0	1352	1/16/01	QA FBOI
7				×	Water W	0	1330	10/31/12	BR-03
8				X	Water _	0	1215	10/31/12	TW-04
Ŋ				X	Water /	0	8401	10/31/12	32-10
1				X	Water /	8	0955	10/31/12	5R-04 M50
				X	Water 🙏	6	0955	5/1/16/01	BR-04M5
Ţ				X	Water N	6	0955	21/16/01	BR-04
S				X	Water 🎤	6	1745	10/30/12	08-04
7					Water N	0	1622	10/20/12	06-08
0				X	Water N	(1	1	QATBO!
	X			X	on Code:	Preservation Code:	X		
Special Instructions/Note:	Tot				<u> </u>		Time	Sample Date	Sample Identification
,	tal Number			rform MS/N 60B TCE PCE	Matrix red (W=water, S=solid, G=wasteloil, G	Sample Type (C=comp,	Sample		
Other:	**********			SD (Y	Samo			SSOW#:	Site: Rochester, NY
(-EDTA W-ph 4-5 -EDA Z-other (specify)				es or	In IVo			Project #: 49001213	Project Name: Former Taylor Instruments
	rs	70489		No)	s or N			WO#:	Email: joe.deatherage@amec.com
<u> </u>		Loc: 4			0)			PO#: C012600052	Phone: 865-218-1049(Tel)
D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3	1 177 9	1		E vinyl				-	State, Zip: TN, 37932
A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2	O W P			chloric			days):	TAT Requested (days):	City: Knoxville
ation Code	Pre			de			ted:	Due Date Requested:	Address: 9725 Cogdill Road
l	Job#:	ested	Analysis Requested				i		Company: AMEC Environment & Infrastructure, Inc.
まれ	Page:		E-Mail: shali.brown@testamericainc.com	rown@testan	E-Mail: shali.b			Phone:	Client Contact Mr. Joe Deatherage
COC No:		Carrier Tracking No(s):	Q	Shali	Lab PM: Brown, Shali			Sampler:	Client Information

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Chain of Custody Record

	100000							2					
Client Information	Campion.			Brown	Brown, Shali			Came	Camer Iracking No(s):	o(s):	COCNO	Ö	
Client Contact Mr. Joe Deatherage	Phone:			E-Mait shali.l	prown@te	E-Mail: shali.brown@testamericainc.	c.com				Page:	بع	みれ
Company: AMEC Environment & Infrastructure, Inc.							Analysis	Requested	ted		Job #:		
Address: 9725 Cogdill Road	Due Date Requested:				de						Preserv	Preservation Codes:	des:
City: Knoxville	TAT Requested (days):	s):			chlor/						B - NaOH C - Zn Ace	B - NaOH C - Zn Acetate	N - None O - AsNaO2
State, Zip: TN, 37932					E vinyl			-			E-Na	D - Nitric Acid E - NaHSQ4	P - Na2O4S Q - Na2SO3
Phone: 865-218-1049(Tel)	PO#: C012600052										G - Amchlor	F - MEUH G - Amchlor H - Ascorbic Acid	K - Na2S2SO3 S - H2SO4 T - TSD Dodecahydrate
Email: loe.deatherade@amec.com	WO#				lo)							Vater	U - Acetone V - MCAA
Project Name:	Project #:				onl							ĀΑ	W-ph 4-5
Former Taylor Instruments	49001213				Yes							A	2 - otner (specify)
Rochester, NY	SSOW#:				ISD (of a Other:		
			Sample		MS/N						mber		
	j.	10	Type (C=comp,	S=solid, O=waste/oil,	eld Fil erform 60B TO						otal Nu	<u></u>	
	V Company	X	Preservation Code	Ŀ	X							Opcolar	prominent monoments and services.
5 08 08 08 08	10/31/12	1730	0	Water)	$\frac{Z}{X}$		-						10
QARBO!	10/31/12	143	0	Water	X	_							1 1
W-5	Willa	0924	0	Water	z X								7
W-5 DUP	, -	0924	Ø	Water	X								7
TWOO	11/11/12	1012	0	Water	X								14
BR-02	ulilia	1138	0	Water	×							-	15
10-20	11/1/12	-	0	Water /	X							1	6
たとう	1111/12	1355	0	Water	X	` 						1-1	7
07-15	*			Water								1/ 18	
B				Water								Ì	
				Water									
Identification]]			Sample	Sample Disposal (A fee		may be assessed if samples	sed if san	nples are ret	ained Ion	are retained longer than 1	1 month)
— Non-Hazard — Flammable — Skin Irritant — Poi. Deliverable Reguested: 1 II III IV Other (specify)	Poison B Unknown		Radiological			Return To Client	3 \$	Dispo	Disposal By Lab		Archive For	y	Months
(pp-vii)					Opcola	i i on donor.	á	requiemens.					
Empty Kit Relinquished by:		Date:		_	Time:				Method of Shipment	nipment			
Relinquished by:	Date/fine: 1/////2	1800	2. 0	くが記れ	Rec	Received by:	1 ha	8.1 CV		Date/Time:	/۲/	<u>an Sç</u>	Company Jacky
Reinquisned by:	Date/IIIAe:		2	Company	7,00	Received by:				Date/Irme:			Company
Relinquished by:	Date/Time:		Ω	Company	Rec	Received by:				Date/Time:			Company
Custody Seals Intact: Custody Seal No.:					Coc	Cooler Temperature(S) (S	and Other Remarks:	S.			i Nga	

Login Sample Receipt Checklist

Client: AMEC Environment & Infrastructure, Inc.

Job Number: 490-10489-1

SDG Number:

Login Number: 10489 List Source: TestAmerica Nashville

List Number: 1

Creator: Gambill, Shane

Greator. Gambin, Ghane		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	

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APPENDIX E CHAIN-OF-CUSTODY FORMS

Chain of Custody Record

<u>TestAmerico</u>

Sampler: L Courtney Wolf Lab PM: Carrier Tracking No(s): 31 Client Information Brown, Shali 490-513-112.1 Client Contact Phone: 865 207 - 4625 Mr. Joe Deatherage shali.brown@testamericainc.com Page 1 of \$ 2 AMEC Environment & Infrastructure, Inc. **Analysis Requested** Due Date Requested: Preservation Codes: 9725 Coadill Road TAT Requested (days): B - NaOH N - None Knoxville C - Zn Acetate 0 - AsNaO2 State, Zip: D - Nitric Acid P-Na204S TN. 37932 E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2SO3 Phone: PO# G - Amchior S-H2SO4 865-218-1049(Tel) Purchase Order Requested H - Ascorbic Acid T - TSP Dodecahydrate 1-ice U - Acetone joe.deatherage@amec.com J-DIWa K-EDTA L-EDA Other: J - DI Water V - MCAA K-EDTA W-ph 4-5 Project#: Z - other (specify) Former Taylor Instruments 49001213 NWE2216 Matrix 06/04/12 23:59 Sample (W=water, S=solid, Type Sample (C=comp, Sample Identification Sample Date Time G=grab) Special Instructions/Note: Preservation Code: BR-01 1224 Water 1504 BR-02 Water 1205 BR-03 Water 1607 BR-04 Water < BR-10 1832 Water BR-15 152 Water OB-04 1330 Water (IOB-06 Water 0918 OB-08 Water TW-04 1039 Water TW-09 Water Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For _______Mont Possible Hazard Identification Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological 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: らパ7/12 Received by: Company 1500 AMEC 5 hela Relinquished by: Received by: Company Relinguished by: Date/Time: Company Received by: Date/Time: Company Custody Seals Intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks: A Yes A No

Chain of Custody Record

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plant of the last	STATE OF THE	and the second	这种的第三条件	-
THE LEAD	DER IN SI	WROM	ENTAL TE	STING

Carrier Tracking No(s): Lab PM: 490-513-112.2 Brown, Shali Client Information Client Contact: E-Mail: Mr. Joe Deatherage shali.brown@testamericainc.com Page 2 of 3 Q **Analysis Requested** AMEC Environment & Infrastructure, Inc. Preservation Codes: Due Date Requested: 9725 Cogdill Road M - Hexane TAT Requested (days): B - NaOH N - None C - Zn Acetate O - AsNaO2 Knoxville D - Nitric Acid P - Na2O4S State, Zip: E-NaHSO4 Q - Na2SO3 TN, 37932 R - Na2S2SO3 Phone: S-H2SO4 G - Amchior 865-218-1049(Tel) Purchase Order Requested H - Ascorbic Acid T - TSP Dodecahydrate U - Acetone I-le Email: Other: Other: 7 - ED4 7 - ED4 J - DI Water V-MCAA joe:deatherage@amec.com K-EDTA W ~ ph 4-5 Project# Z - other (specify) L-EDA 49001213 Former Taylor Instruments SSOW#: NWE2216 Sample 06/04/12 23:59 Туре Sample (C=comp. Special Instructions/Note: Time G=grab) Sample Date A=Air) Sample Identification Preservation Code: 1855 Water TW-17 0 TW-20 Water W-5 Water QAFB01 Water Water 5 W-5 (DUP) BR-04 (MS) 1607 Water BR-04 (MSD) 1607 Water 1903 Water QARB01 Edward QATB-01 Water IDW-1 Mate ALTIDW2 Water Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Possible Hazard Identification Disposal By Lab Archive For Non-Hazard Flammable Skin Imitant Poison B Unknown Radiological Return To Client Months Special Instructions/QC Requirements: Deliverable Requested: I, II, III, IV, Other (specify) Method of Shipment Time: Empty Kit Relinquished by: Date: Company AMEC Received by: Company Relinquished by: 1500 *0*830 5/18/12 Received by: Company Relinquished by Received by: Company Date/Time: Company Relinquished by: Cooler Temperature(s) °C and Other Remarks: Custody Seals Intact: Custody Seal No.: Δ Yes Δ No

Chain of Custody Record

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					THE LEASER IN COVERONNENTAL TESTANG
Client Information	Sampler,	Lab PM Brown	PM: Ci wn, Shali	arrier Tracking No(s):	COC No:
Client Contact: Mr. Joe Deatherage	Phone:	E-Mail: shali.l	all: li.brown@testamericainc.com		Page: 122
Company: AMEC Environment & Infrastructure, Inc.			Analysis Regu	ested	Job#.
Address: 9725 Cogdill Road	Due Date Requested:				Preservation Codes:
City: Knoxville	TAT Requested (days):		chlorido		A - HCL M - Hexane B - NaOH N - None
State, Zip:	- Bankara		vinyi ah		C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S
TN, 37932 Phone:	PO#:		DOG VI	-	E-NaHSO4 Q-Na2SO3 F-MeOH R-Na2S2SO3
865-218-1049(Tel)	C012600052		1,2 D	Loc: 490	G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate
Email: joe.deatherage@amec.com	WO#.		Yos.or.\ olskrans	10489	1-ice U-Acetone J-DIWater V-MCAA
Project Name: Former Taylor Instruments	Project#: 49001213		- (7/9)	alla l	K-EDTA W-ph 4-5 L-EDA Z-other (specify)
Site: Rochester, NY	ssow#:		Sample((Tuga	Other:
Noticester, N1		N-4-i	OB 1		
	Sample Type	Matrix (w=water,	Field Filter of Report No. 10 Section 10 Sec		f e
Sample Identification	Sample (C=comp,	S=solid, O=waste/oil,	HOJIGOS:	Total N	
Cample Identification	Sample Date Time G=grab) ST	=Tissue, A=Air) >Ti Code			Special Instructions/Note:
QATBOI :		Water	MX		01
08-06	10/20/12 1622 6	Water	MIXIIII		7
06-04	10/30/12 1745 6	Water	MXIII		3
BR-04	10/31/12 0955 6	Water	WX		4
BR-04 MS	10/31/12 0955 6	Water	MX		
BR-04 M50	10/31/12 0955 6	Water	MXIIIII		
BR-10	10/31/12 1048 G	Water	MX		5
TW-04	10/31/12 1215 6	Water	MXIIII		b
BR-03	10/31/12 1330 G	Water	WX		7
aafboi	10/31/12 1352 G	Water	MX		J/ 8
BR-01	10/31/12 1621 6	Water	WX		9
Possible Hazard Identification			Sample Disposal (A fee may be as		
Non-Hazard Flammable Skin Infitant Pois Deliverable Requested: I, II, III, IV, Other (specify)	son B Unknown Radiological		Return To Client Dis		hive For Months
Empty Kit Relinquished by:	Date:	· ·			
Relinquished by:			Time:	Method of Shipment Date/Time:	(0,
Relinquished by:		MEC	- WITAN	11/02/07	
	Date/Time: Co	pripany	Received by:	Date/Time:	Company
Relinquished by:	Date/Time: Co	ompany	Received by:	Date/Time:	Company
Custody Seals Intact. Custody Seal No.: Δ΄ Yes Δ No. 1			Cooler Temperature(s) °C and Other Rem	arks:	

Page 36 of 38

Chain of Custody Record



	Sampler:	······································		Lab	PM:					Carrie	r Tracking	No(s):	lo	OC No:		
Client Information			·	Bro E-M	own, S	Shali							Ľ			
ent Contact Toe Deatherage mpany:						wn@tes	stameric	ainc.cor	a				Р	age: 2	9	2
Company: AMEC Environment & Infrastructure, Inc.							•	Ana	ilysis R	equest	ted		J	ob#.		
Address: 9725 Cogdill Road	Due Date Requester	d:	****			9			ĪI					Preservation (Codes: M - He	
City: Knoxville	TAT Requested (day	ys):			74	chloride	-						E	B-NaOH C-Zn Acetate	N - No O - As	ne
State, Zip: TN, 37932						Ş								D - Nîtrîc Acid E - NaHSQ4	P - Na Q - Na	2803
Phone: 865-218-1049(Tel)	PO# C012600052					1,2 DCE							. (F - MeOH G - Amchlor H - Ascorbic Aci	S-H2	2S2SO3 SO4 P Dodecahydrate
Email: joe.deatherage@amec.com	WO集				10	cis/trans							ம ்	- Ice I - DI Water	U-Ac V-MC	AA
Project Name: Former Taylor Instruments	Project#. 49001213				(Ves	96.01Y								K-EDTA EDA	W-ph Z-oth	ı 4-5 er (specify)
Site: Rochester, NY	SSOW#:				Los	SD (Yes							0 to	Other:		
			Sample	Matrix (w=water,	tored	Reifform MS/M 8260B TCE PCE							umber			
Sample Identification	â I Dú	Sample	Type (C=comp,	S=solid, O=waste/oil,	E PICHE	Perform 8260B T							Total Numbe			
Sample Identification	Sample Date	Time	G=grab) [a Preservati			<u>в</u> (6) Х А							埭	Specia	Instruct	ions/Note:
W-08C 0B-08	10/31/12	17730	6	Water	N	\mathbb{X}									ìЮ	
QARBOI	10/31/12	1743	G	Water	N	\rightarrow							114		. į (
ω-5:	<i>WU[2</i>	0924	6	Water	M	X									15	
W-5 Dul	14/1/12	0924	6	Water	М	X					_				13	
TW-09	14/12	1012	6	Water	M	\times									14	
BR-02	11/1/12	1138	6	Water	М	_X		11							15	,
TW-20		1305	G	Water	M										lo	
TW-17 BR-15	11/1/12	1355	6	Water	Μ	X									17	
				Water										_:/	18	
<u> </u>				Water	\coprod	_	<u> </u>			\bot						· .
				Water	Щ											·
Possible Hazard Identification			Dadiolasias	,	-			sal (A f o Client	ee may b		sed if s sal By L	amples are	7			_
Deliverable Requested: I, II, III, IV, Other (specify)	OHB GIKH	OWH	Radiological						Requirer		sai By L	an	Arcni	ve For	fVI	onths
Empty Kīt Relinquished by:		Date:			Tim	ne:					Method o	f Shipment:				
Relinquished by:	Date/7/me://2	180	00	AME	C	Rec	eived by:	C	MA	N 1-0		Date/Time:	/12	BOU	Comp	A Nash
Relinquished by:	Date/Time:			Company	-		eived by:		<u> </u>			Date/Time:		<u> </u>	Comp	
Relinquished by:	Date/Time:			Company		Rec	eived by:					Date/Time:			Comp	pany
Custody Seals Intact: Custody Seal No.:					s Friedrich Langel	Coc	der Tempe	erature(s)	'C and Othe		##E	n g an		n e de la deni		

APPENDIX F FIELD DATA RECORDS



	AMEC	E&I, Inc.							**	
	FIELD DA	ATA RECOR	D - GROU	NDWATER :	SAMPLING	G VIA BAILER				
	PROJECT	Former Taylor Instru 2012 Semi-Annual S							DATE 3	5/16/12
		Tu1-04				Monitor We	ell		DATE	710110
	SITE ID	START OF	?()	1045	SHETYPE					
	SITE ACTIVITY					UMBER				
	WAIERLEVI	EL / PUMP SETTIN	1G5 3	MEASUREMENT F TOP OF WEL TOP OF PRO OTHER		PROTECTIVE IG CASING STICKUP (FROM GROUND)	2.6 FT	PROTECTIVE CASING / WEL DIFFERENCE	L 0.	25 _{FT}
	INITIAL DEPTH TO WATER	1 / 1 / 1 / 1	7 FT	WELL DEPTH	17,3 FT	PID AMBIENT AIR	PPM	WELL DIAMETER	2	IN
	FINAL DEPTH	1 r) u	O FT	SCREEN LENGTH	5 FI	PID WELL	PPM	WELL INTEGRITY:	YES	NO N/A
	DRAWDOWN		-3 DI	RAWDOWN	7 115	PRODUCT		CAS LOCI	ING 🔀	
	((initial - final)	x 0.16 {2-inch} or x 0		VOLUME	GAL	_ THICKNESS	FT	COL	LAR 🔀	
	PURGE	1/2 1/		GIN	ev?	END	036	OTAL VOL.	20	
	RATE	11/1× L/1	MIN PURG	ing		PURGING [PURGED(purge rate (L/min) :	3.9 c duration (m	GAL in) x 0.26 gal/L)
	PURGE DATA	\ VOLUME PURGED	 pH	SpC (cond)	TURBIDIT	Y DISSOLVED O2	TEMPERATURE	REDOX POTENTIAL	l WATER	I
-	Time	(L)	(units)	(mS/cm)	(NTU)	(mg/L)	(°C)	(mV)	LEVEL	Comments
別	0834	- Fc	7.03	0.764	27.8	6.11	13.67	160,0	10,51	
ŀ	0054 0254	<u> </u>	7,03		31.0	0.87	13.67	-42.8 -77.1	11.03	
ŀ	0905	<u> </u>		0.763 0.760			13.59	-100,7	11.34	
ŀ	<u>0905</u> 0925	2	7.12 2.12	0.750	9,6	0,79			11.53	
ŀ	0931	<i>-</i> 0	クルク	0.757	4./	0.68	13.00	-127.7 -120.5	11.75	
ŀ	0937		7.18		6,2	0.74	13.74	-129,5	11.80	
ŀ	0947	0.6	7.19	0.759	5.3	0.61	13.67	-132.7 -139.1	11.85	
ŀ	0957		7,20	0.757	3.5	0.58	13.77		11.91	
ŀ		1	4.	0.756 0.750	4.0	0,58	13.81	- 142.5	1196	- 0
ŀ	1005	1.5	7.20		4.0	0,62	13.55	-139,1	12.09	turned pump
ŀ		100	1100	0.733	3.9	0,55	13.26	- 141.3 143.N	12.40	1 .0
ŀ	1025	0,6	ク.22 ク.22	0.724 0.721	2.3	0.46	13.28	<u>- 143.5</u> -146.2		slowed pump
ŀ	1031	0,6	7.22	0.720	3.0	0.50	13.87	-144.(12.48	
ļ,		DOCUMENTATION		01700	1100	1010	15.07	77.011	12:10	
	TYPE OF P	<u>UMP</u>	TYPE O	<u>F TUBING</u>		TYPE OF PUMP MATER	RIAL :	TYPE OF BLADDEF	R MATERIAL	(if applicable)
Į	X PERIS	TALTIC	TE	FLON OR TEFLON	LINED	POLYVINYL CHLO	RIDE [TEFLON		
1	SUBME	ERSIBLE	X HIG	H DENSITY POLY	ETHYLENE	STAINLESS STEEL	L [X OTHER NA		
L	OTHER	}	ОТ	HER		X OTHER NA				
ŀ	PURGE OBSE	RVATIONS				NOTES				
	l ubing Intake «	"- 1.0	. 0			Voc	F	Preservation HCL	ime coll	ected Cy
	# pump	on slowest	speeck							
	•									
			_							
		pat		The same of the sa						
	SIGNATURE:	601/2	19	75						
			/ (THE PARTY OF THE P						

AMEC E&I, Inc.	
FIELD DATA RECORD - GROUNDWATER SAMPLING VIA	
Former Taylor Instruments PROJECT 2012 Semi-Annual Sampling Event	DATE \$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 TOP OF WELL RISER PRO	OTECTIVE PROTECTIVE
	SING STICKUP CASING / WELL DIFFERENCE 0.3 FT
INITIAL DEPTH TO WATER IN 45 FT WELL DEPTH 17.70 FT AM	BIENT AIR PPM DIAMETER 2 IN
	WELL YES NO N/A NUTH PPM INTEGRITY: CAP CASING
	ODUCT ICKNESS INTEGRITY: CAP CASING LOCKED COLLAR COLLAR
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))	
PURGE 16 L/MIN PURGING 220 PURG	ING 13/1 TOTAL VOL. PURGED QAL (purge rate (L/min) x duration (min) x 0.26 gal/L)
TOCOME TO TOCOME	DISSOLVED O ₂ TEMPERATURE REDOX POTENTIAL WATER
Time (L) (units) (mS/cm) (NTU) 1224 Sc 7.21 0.928 6.0	(mg/L) (°C) (mV) LEVEL Comments 3.02 15.03 - 149.7 11.78 slight abore
1001	0.61 13.68 - 151.9 11.95
1246 2 7.05 0.899 1.1	0.43 13.34 -1576 12.12
1253 1 7.05 0.902 1.1	0.42 13.14 -157.3 12.17
1258 1 7.04 0.90> 1.1	
1304 7.04 0.912 1.1	0.37 13.26 -157.4 12.21
1511 1 112	
X PERISTALTIC	OF PUMP MATERIAL TYPE OF BLADDER MATERIAL (if applicable) DLYVINYL CHLORIDE TEFLON TAINLESS STEEL X OTHER NA
	OTES Time Collected
Tubing Intake @\5	VOC HCL Time Colleged 1315
ate w/	
SIGNATURE:	

AMEC E&I, Inc.						······································
FIELD DATA RECORD - GROUNDWAT	ER SAMPLING	G VIA BAILER				
Former Taylor Instruments PROJECT 2012 Semi-Annual Sampling Event					DATE 5	115/12
SITE ID TW-17	SIT	E TYPE Monitor We	əll]	5	16/12
SITE ACTIVITY START 1620 END 1743		IUMBER 303105200	06,22		•	
WATER LEVEL / PUMP SETTINGS MEASUREM	MENT POINT	January 1				
TOP OI TOP OI OTHER	F WELL RISER F PROTECTIVE CASIN	PROTECTIVE IG CASING STICKUP (FROM GROUND)	2.4 FT	PROTECTIVE CASING / WE DIFFERENCE		25 FT
INITIAL DEPTH TO WATER FT FT WELL DEPT	17,45 FT	PID AMBIENT AIR	PPM	WELL DIAMETER	100) IN
FINAL DEPTH 10.43 FT LENGTH	5 F	PID WELL MOUTH	PPM	WELL INTEGRITY:	YES	NO N/A
DRAWDOWN 2.72 FT VOLUME	0.44 GAI	PRODUCT	FT	CA:	SING KED	· ·
((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch}	y .				-1411 2	
PURGE BEGIN L/MIN PURGING 5/16	1835		732 1 52	OTAL VOL. PURGED (purge rate (L/min)	2.2 x duration (min	GAL n) x 0.26 gal/L)
PURGE DATA VOLUME PURGED PH SpC (col			TEMPERATURE	REDOX POTENTIAL	_ WATER	
Time (L) (units) (mS/cr	,	(mg/L)	(°C)	(mV)	LEVEL	Comments
1650 105 6.15 1.12	5 2.8	2.31 W301.94	18.57	<u>-99.2</u> -69.8	8.87	Clear/nood
1700 6.13 1.17:		1.84	1673	-61,1	12.49	
1711 1.5 6.11 1.183		1.81	16.04	-540	14.40	lowered tib
1725 1.5 6.12 1.20 1732 ~1 6.12 1.20		2.89	15.91	- 43.5	16.20	ot Vic A
	11 . 1	364	14.26	- 43.3	V7.15	White/doude
5/16/12 WL= 7.86	llect sample	Emorrow				
1840 FC 6.44 1.457	85,5	3.69	13.77	-63.9	9.06	٠
1848 WO6 1 6:31	CONTRACTOR	Commence of the state of the st	Parkers Bloom of the parkers of the Control of the		and an internal control of the spinor of the	PARTICULAR CONTRACTOR CONTRACTOR SALES CONTRACTOR CONTR
1852 1 6.23 1.48	3 85,1	3.40	12.38	-48.0	10,43	

EQUIPMENT DOCUMENTATION					· · · · · · · · · · · · · · · · · · ·	
TYPE OF PUMP X PERISTALTIC TEFLON OR TEF	ELON LINED	TYPE OF PUMP MATER		TYPE OF BLADDE	R MATERIAL	(if applicable)
SUBMERSIBLE X HIGH DENSITY		POLYVINYL CHLOF STAINLESS STEEL	L .	TEFLON X OTHERNA		
OTHEROTHER		X OTHER NA			***************************************	
PURGE OBSERVATIONS		NOTES				
pump set as low as possible		Voc	1	Preservation HCL	Time Collect	eted 5
A Party of the second of the s						
1 1 1	· ·					
	-					
SIGNATURE:						

IMMEC EXI Inc						
AMEC E&I, Inc.						
FIELD DATA RECORD - GROUNDWATER SA	AMPLING V	IA BAILER				
PROJECT Former Taylor Instruments 2012 Semi-Annual Sampling Event					DATE 5	1/17/12
SITE ID TW-20	SITE TYP	PE Monitor We		7		
SITE ACTIVITY START 0925 END 1050	JOB NUMBE	200405000	6.22]		
WATER LEVEL / PUMP SETTINGS MEASUREMENT PO					·	
TOP OF WELL F	RISER ECTIVE CASING	PROTECTIVE CASING STICKUP (FROM GROUND)	2.3 FT	PROTECTIVE CASING / WEL DIFFERENCE	L 0.50	?'> _{FT}
INITIAL DEPTH 12.28 FT WELL DEPTH 1"		PID AMBIENT AIR	PPM	WELL DIAMETER	2	IN
FINAL DEPTH TO WATER 12.56 FT LENGTH		PID WELL MOUTH	PPM	WELL INTEGRITY:	CAP YES	NO N/A
DRAWDOWN D.28 FT DRAWDOWN VOLUME O.4		PRODUCT THICKNESS	FT	CAS	SING KED	
((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch} or x 1.5 {6-inch})	<u> </u>	111101114200		001	LAN 🗘	
PURGE 108 107 LMIN PURGING 0935	PU	END IRGING 16)39 1	TOTAL VOL. PURGED (purge rate (L/min) :	1,2 x duration (min	GAL n) x 0.26 gal/L)
PURGE DATA VOLUME PURGED pH SpC (cond)	TURBIDITY	DISSOLVED O ₂	TEMPERATURE	REDOX POTENTIAL	.I WATER I	<u> </u>
Time (L) (units) (mS/cm)	(NTU)	(mg/L)	(°C)	(mV)	LEVEL	Comments
0942 80 7.44 0.790	7.1	3.85 2.06	15.78	-39.0 4.5	12,42	
1009 1 7.12 0.805	7.2	2.14	13.89	25.6	12.53	
1021 1 7.11 0.815	7.3	217	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"	13 627	51,3	12,56	
描						
						,
					<u> </u>	
						Av
EQUIPMENT DOCUMENTATION TYPE OF PUMP TYPE OF TUBING TEFLON OR TEFLON LIN SUBMERSIBLE X HIGH DENSITY POLYETI	NED	E OF PUMP MATER POLYVINYL CHLOF STAINLESS STEEL	RIDE	TYPE OF BLADDER TEFLON X OTHER NA	,	if applicable)
OTHER OTHER	X	OTHER <u>NA</u>				
PURGE OBSERVATIONS Tubing Intake @ 14.75	,	NOTES		Preservation HCL	Time Collec <u>1042</u>	ited ,
SIGNATURE:						

AMEC E&I, Inc.										
FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER PROJECT Former Taylor Instruments 2012 Semi-Annual Sampling Event										
SITE ID OB-04 SITE TYPE Monitor Well										
SITE ACTIVITY START 1 35 END 1338 JOB NUMBER 3031052006.22										
WATER LEVEL / PUMP SETTINGS MEASUREMENT POINT TOP OF WELL RISER TOP OF PROTECTIVE CASING STICKUP OTHER OTHER FROM GROUND) PROTECTIVE CASING / WELL DIFFERENCE O. 3 FT										
INITIAL DEPTH 3.84 FT WELL DEPTH 16.45 FT AMBIENT AIR PPM DIAMETER 2 IN										
FINAL DEPTH SCREEN 5 PID WELL WELL YES NO N/A										
TO WATER 7.83 FT LENGTH 5 FT MOUTH PPM INTEGRALL CASING CASING CASING CASING COCKED LOCKED LOCKED LOCKED COLLAR THICKNESS FT COLLAR										
((initial - final) x 0.16 [2-inch] or x 0.65 (4-inch) or x 1.5 (6-inch)) PURGE RATE O.115 L/MIN PURGING D.115 L/MIN PURGING D.115 L/MIN PURGING D.115 L/MIN PURGING D.115 L/MIN PURGING PURGING D.115 L/MIN PU										
PURGE DATA Time Volume Purgeo (L) (units) (mS/cm) (NTU) (MTU) (mg/L) (m										
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 @ 144 Then clear w/ initial slug black										
SIGNATURE: (ASC)										

AMEC E&I, Inc.							
FIELD DATA RECORD -	GROUNDWATER S	SAMPLING VI	A BAILER				
Former Taylor Instrumen PROJECT 2012 Semi-Annual Samp				*		DATE	15/12
SITE ID OB-O	6	SITE TYPE Monitor Well					
SITE ACTIVITY START 1338	END 1450	JOB NUMBE		5.22			
WATER LEVEL / PUMP SETTINGS	MEASUREMENT F				4		
	TOP OF WELL TOP OF PRO OTHER	TECTIVE CASING C	PROTECTIVE CASING STICKUP FROM GROUND)	FT	PROTECTIVE CASING / WEI DIFFERENCE		4 FT
INITIAL DEPTH 7.53	WELL DEPTH FT		PID AMBIENT AIR	PPM	WELL DIAMETER	~	1N
FINAL DEPTH 6.39	SCREEN FT LENGTH	1/1	PID WELL	PPM	WELL INTEGRITY:	CAP YES	NO N/A
DBAWDOWN - C			PRODUCT		CAS LOC	SING SKED	
((initial - final) x 0.16 (2-inch) or x 0.65 (3,43 GAL T	HICKNESS	FT	COL	LAR <u>></u>	S
PURGE 13/0.11 L/MIN	BEGIN PURGING 134	FUF	END 1	141	FOTAL VOL. PURGED (purge rate (L/min)	18 x duration (m	GAL in) x 0.26 gal/L)
PURGE DATA	11 2 2 2 4 7 1	1 ruppipiry l	DISSOLVED O	TEMPEDATURE	L DEDOV POTENTIAL	∟ WATER	ı
	pH SpC (cond) (units) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O ₂ (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	LEVEL	Comments
	7.02 0.909 6.71 0,848	3.7 3.7	4.20 2.42	18,67	-240.3 -267.5	4,50 5,49	dowed pury
	5.76 0.824	6.5	1.74	17.51	~302.1	6.22	tint 80
The state of the s	5.73 0.817	7.6	1.31	17.72	- 259.2	6.35	
	5.72 0.813	6.3	1.34	17.31	-268.1	6.38	
	6.70 0.810	8.3	1,40	17.26	-270.9	6.38	
	5.70 0.809 Jeg	7.1	1,52	17.17	-265.5	6.39	V
						-	
							` `
EQUIPMENT DOCUMENTATION TYPE OF PUMP X PERISTALTIC SUBMERSIBLE	TYPE OF TUBING TEFLON OR TEFLON X HIGH DENSITY POLY	LINED	E OF PUMP MATER POLYVINYL CHLOR	RIDE	TYPE OF BLADDE TEFLON OTHER NA	\	∐_ (if applicable)
PURGE OBSERVATIONS	OTHER		OTHER <u>NA</u>			onlinition.	
Tubing Intake @			voc		Preservation HCL	Time Col	tected,
SIGNATURE:							

		E&I, Inc. ATA RECOR	D - GROU	NDWATER S	SAMPLING	VIA BAILER				
	PROJECT	Former Taylor Instru 2012 Semi-Annual							DATE 5	1/17/12
	SITE ID	OB-C	8		SITE T	YPE Monitor We	əll			
	SITE ACTIVITY	start 07	50 END	1925	JOB NUM	ABER 303105200	06.22	1		
		EL / PUMP SETTIN		MEASUREMENT F						
	į			TOP OF WELL		PROTECTIVE CASING STICKUP (FROM GROUND)	FI	PROTECTIVE CASING / WEL DIFFERENCE		.35 FT
	INITIAL DEPTH TO WATER		D _{FT}	WELL DEPTH	25.3 FT	PID AMBIENT AIR	PPN	WELL DIAMETER		2 IN
	FINAL DEPTH TO WATER	1 1 7	FT	SCREEN LENGTH	10 FT	PID WELL MOUTH	PPM	WELL INTEGRITY:	CAP YES	S NO N/A
	DRAWDOWN	1,5	/ FT D	RAWDOWN VOLUME	2,24 _{GAL}	PRODUCT THICKNESS	FT FT	LOC	CAP SING SKED	<u> </u>
	((initial - final)	x 0.16 {2-inch} or x 0	.65 {4-inch} or x	1.5 (6-inch))			- inid			
	PURGE RATE	,136 /al U	BE MIN PURG	ING 07	57	END PURGING (0914	TOTAL VOL. PURGED (purge rate (L/min)	2,3 x duration (m	GAL nin) x 0.26 gal/L)
	PURGE DATA	VOLUME PURGED	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O ₂	TEMPERATURE	REDOX POTENTIAL	WATER	Comments
	0801	€c_	7.02	0.901	4.2	6.22	14.41	-108.7	6.179	strong odo
	0812	1.5	7.02	0.866	0,8	0.92	14.21	-171.2	7.56	σ
	0821		7.03	0.861	1,2	0.65	14.70	-178,9	7.51	slowed pur
	0833		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	
	0902	1.5	7.03	0.867	1.9	0.41	14.85	-180.7	7.55	
ω 58	-0910	0.6	7.02	0.872	0.7	0,43	14.60	-1829	7.83	
סי	0914	0.6	7.02	0.872	1,3	0,40	15,51	-178,3	7.61	

				******		-				
	TYPE OF PL	-	TYPE C	PF TUBING	_	YPE OF PUMP MATE		TYPE OF BLADDE	R MATERIAL	_ (If applicable)
	X PERIST SUBME	ERSIBLE	X HIC	FLON OR TEFLON I AH DENSITY POLYE HER	ETHYLENE	POLYVINYL CHLO STAINLESS STEEI <		TEFLON X OTHER NA		·
	PURGE OBSE					NOTES		Preservation	Time Coll	ected
						voc		HCL	<u>091</u>	
										······································
		1.	and the second s	A Distriction in the second						
	SIGNATURE:	Contry	Welg	Enterwise and the second						
		-								

AMEC E&I, Inc.						· · · · · · · · · · · · · · · · · · ·
	.	·				
FIELD DATA RECORD - GROUNDWATE	R SAMPLING V	'IA BAILER			_	
Former Taylor Instruments PROJECT 2012 Semi-Annual Sampling Event					DATE 5//	7/12
SITE ID W-5	SITE TY	'PE Monitor Wel				<i>-</i> į, .
SITE ACTIVITY START 1233 END 1410	JOB NUME	2021050000	6.22			
WATER LEVEL / PUMP SETTINGS MEASUREM		7-11 <u> </u>	<u> </u>	*		
TOP OF	WELL RISER PROTECTIVE CASING	PROTECTIVE CASING STICKUP (FROM GROUND)	FT	PROTECTIVE CASING / WELI DIFFERENCE	0.25	FT
INITIAL DEPTH 5.56 FT WELL DEPTH	21,8 5	PID AMBIENT AIR	PPM	WELL DIAMETER	Q	IN
FINAL DEPTH 8.93 FT SCREEN LENGTH	5 FT	PID WELL MOUTH	PPM	WELL INTEGRITY: C	CAP 🚣 _	NO N/A
DRAWDOWN 3.37 FT DRAWDOWN VOLUME	0.54 GAL	PRODUCT THICKNESS	FT	CASI LOCK COLL	KED 🔀 🛚	
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))	#	1110111200	····		-O'' -() -	
PURGE , 167,2/125 L/MIN PURGING	124J P	END URGING	2 <i>2 -</i>	OTAL VOL. PURGED (purge rate (L/min) x		AL 0.26 gal/L)
PURGE DATA VOLUME PURGED PH SpC (con	d) TURBIDITY	DISSOLVED O2	TEMPERATURE	REDOX.POTENTIAL	WATER	
Time (L) (units) (mS/cm) (NTU)	(mg/L) 4,86	(°C)	(mV)		Comments
1301 3 6.76 1,20		0.62	13.81	-143.5 -153.9	aris I	wed auny
1307 1 6.74 1,28		0.58	14.01	-152,4	9.35	weex pury
1321 3 6.70 1.24		0.57	14,34	-140.1	9.76	
1336 1.5 6.68 1.27		0.64	15.20		9.18	
1344 6.67 1.28		0,62	15.25	-117,2	9:07	
1355 1 6.67 1.79	37 4.6	0,64	15.26	-112.3	8,93	- to a str
EQUIPMENT DOCUMENTATION IYPE OF TUBING	TY'	PE OF PUMP MATER	⊇ا∆ا	TYPE OF BLADDEF	R MATERIAL (if an	onlicable)
X PERISTALTIC TEFLON OR TEF		POLYVINYL CHLOF		TEFLON	1. Der ar an an an	ριιοασίο,
SUBMERSIBLE X HIGH DENSITY F] STAINLESS STEEL	- [X OTHER NA		
OTHER OTHER	X	OTHER <u>NA</u>				
PURGE OBSERVATIONS Tubing Intake @ 19.3		NOTES VOC		Preservation HCL	Time Collected	
Slight black tint to water		100 VOC -	pup	HCL	1359	_ _ _
						_
	er e					
SIGNATURE: Cash wiff						

AMEC E	E&I, Inc.	المراب ديد ديد المديد والمواجع							· · · · · · · · · · · · · · · · · · ·		
FIELD DA	ATA RECORE	o - GROUI	NDWATER S	AMPLING	VIA BAILER		· • • • • • • • • • • • • • • • • • • •				
PROJECT	Former Taylor Instru 2012 Semi-Annual S							DATE 5	117/12		
SITE ID	BR-C) [SITE T	Monitor Well						
	START 10	50 END	233	JOB NUM	TYPE 3031052006.22						
SITE ACTIVITY	EL / PUMP SETTIN		MEASUREMENT PO		WIDER [I		· · · · · · · · · · · · · · · · · · ·		
WATER LEVE	EL/ POMP SETTIN		TOP OF WELL		PROTECTIVE CASING STICKUP _ (FROM GROUND)	2.3 _{FT}	PROTECTIVE CASING / WEL DIFFERENCE	L	Δ) _{FT}		
INITIAL DEPTH TO WATER	13.0	(Q FT	WELL DEPTH	38.6 FT	PID AMBIENT AIR	PPM	WELL DIAMETER	2) IN		
FINAL DEPTH	1420	つ5 _{ET}	SCREEN LENGTH	VA FT	PID WELL MOUTH	PPM	WELL INTEGRITY: (YES	NO N/A		
DRAWDOWN	DRAWDOWN PRODUCT LOCKED LOCKED										
((initial - final)	x 0.16 {2-inch} or (0	Annual Company of the speciments		427 GAL	THICKNESS	FT	COL	LAN /			
PURGE RATE	15/125 1	BE:	gin ING 105	3	END PURGING	LD	OTAL VOL. PURGED (purge rate (L/min)	2.9 x duration (min	GAL n) x 0.26 gal/L)		
PURGE DATA								I WATER 1			
Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O₂ (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	LEVEL	Comments		
1057	€c_	8,85	0,277	4,4	00 4.63	15.33	-15.5	1343			
1114	2	9.12	0.256	4.3	0.53	13.83	+582	13.85			
1123	1,5	9,15	0,256	<u> </u>	0,50	13,90	63.7	13,98	slow pump		
1131		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	aa	9.18	0,256	5.5	0,37	14.22	· 69,5	14.15			
1159		9,19	0.256	5.2	0.36	14,11	クルー	14,20			
1207	<u> </u>	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	クルク	14,08			
1220	0.6	9.21	0.256	6.0	0.41	14.96	73.0	14.05			
~ · · · · · · · · · · · · · · · · · · ·											
						<u> </u>					
	**************************************								anno a sentir . '		
TYPE OF P		TYPE C	OF TUBING FLON OR TEFLON L BH DENSITY POLYE	INED	TYPE OF PUMP MATEF POLYVINYL CHLOI STAINLESS STEEL	RIDE	TÝPE OF BLADDE TEFLON OTHER NA		(if applicable)		
OTHER	₹	ОТ	HER	· •	X OTHER NA						
PURGE OBSE	ervations = 16.2				NOTES		Preservation HCL	Time Colle	cled		
SIGNATURE:	M	J /									

AMEC	C E&I, Inc.					Constitute Con-			
FIELD	DATA RECOR	D - GROU	NDWATER S	SAMPLING	VIA BAILER				
PROJECT	Former Taylor Instru 2012 Semi-Annual S							DATE 5	116/12
SITE ID	BR-C)Q		SITE	TYPE Monitor We	II]		
SITE ACTIV	VITY START 136	D END	511	JOB NU	000105000	3.22			
WATER L	EVEL / PUMP SETTIN	IGS	MEASUREMENT P						
			TOP OF WELL TOP OF PROT OTHER	_ RISER TECTIVE CASING	PROTECTIVE CASING STICKUP (FROM GROUND)	FT	PROTECTIVE CASING / WEL DIFFERENCE		1.45 FT
INITIAL DEF TO WAT	TH 22.	22 FT	WELL DEPTH	44.0 FT	PID AMBIENT AIR	PPM	WELL DIAMETER	L	t in
FINAL DEF		75 FT	SCREEN LENGTH	NA FT	PID WELL MOUTH	PPM	WELL INTEGRITY:	YES	NO N/A
DRAWDO	wn O.3	53 FT D	RAWDOWN O	34 GAL	PRODUCT THICKNESS	FT	CAS LOC COL		
((initial - fi	nal) x 0.16 {2-inch} or x	- Continue		J	THIORIVEGO		001	LAIT Y	
PURGE RATE	1/2 0	BE MIN PURG	IGIN 132	29	END PURGING	500	TOTAL VOL. PURGED (purge rate (L/min)	2.8 x duration (mi	GAL n) x 0.26 gal/L)
PURGE D	ATA VOLUME PURGED	l nu	l EnC (agaid)	1 TURRIDITY	DISSOLVED O₂	I TEMPERATURE	REDOX POTENTIAL	WATER	
Time	(L)	(units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	(mg/L)	TEMPERATURE (°C)	(mV)	LEVEL	Comments
1334 1344	1	7.54	0.729	30.3	0.87	14.44	-1023	72.40 22.45	
1400	1	7.45	0.732	32.3	0.74	14 5	-124,5	22,40	
14/2		7,45	0.733	34.9	0.62	14.85	-123.1	22.51	
1424		7.44	0.737	0.3	0.57	14.59	-125.0	22.57	sped ours up
1420	7 1	7.44	0.745	29.5	0.41	14,36	-125.6	22.68	40 for 12.131
1439	a	7.42	0,764	28,2	0.35	14,49	-123,5		slowed puny
1448	3 1	7.40	のククグ	265	0,42	14.58	-12/2	22.25	1 1
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	
					-				
	NT DOCUMENTATION	-		· · · · · · · · · · · · · · · · · · ·					
TYPE O			OF TUBING	,	TYPE OF PUMP MATER		TYPE OF BLADDE	R MATERIAL	(if applicable)
	RISTALTIC		FLON OR TEFLON I		POLYVINYL CHLOI		TEFLON		
	BMERSIBLE		GH DENSITY POLYE		STAINLESS STEEL		X OTHER NA		
	HER		HER		X OTHER NA				
	BSERVATIONS ake @ 25				NOTES		Preservation	Time Colle	ected
					Voc		HCL	150	/
	1.1	fanciero antico	1						
SIGNATURE		$\supset v_{\ell}$	<u>G</u>						:

AMEC	E&I, Inc.					han han han ha				
FIELD I	DATA RECORI	D - GROU	NDWATER S	SAMPLING	VIA	BAILER				
PROJECT	Former Taylor Instru 2012 Semi-Annual S								DATE 5	6/12
	BR-01					Monitor We	<u> </u>		<i>5</i> /112	
SITE ID	101		215	SITE	Ī	3031052006	3 22	_]		
SITE ACTIV	III ISIANI (O			JOB NUI	MBER [3031032000),CE			
WATER LE	EVEL / PUMP SETTIN	IGS	MEASUREMENT POP OF WELL TOP OF PROTOTHER		CAS	OTECTIVE SING STICKUP OM GROUND)	F	PROTECTIVE CASING / WEL DIFFERENCE	L	FT
INITIAL DEP TO WAT		7 FT	WELL DEPTH	40. FT	PID AME	BIENT AIR	PPN	WELL DIAMETER	۷	† IN
FINAL DEP TO WAT		55 FT	SCREEN LENGTH	NA FT	PID MOI	WELL	PPN			NO N/A
DRAWDOV	NN L.	48 FT D	RAWDOWN C).96 GAL		DDUCT CKNESS	FT	CAS LOCI COL	KED 🔽	
((initial - fir	nal) x 0.16 {2-inch} or).65 {4-inch} or)x				<u> </u>	-			
PURGE RATE	,16/.15/.14	BE MIN PURG	GIN 104	17	E PURGII	ND NG	202	TOTAL VOL. PURGED (purge rate (L/min))	3.1 duration (mi	GAL n) x 0.26 gal/L)
PURGE DA	ATA VOLUME PURGED	pH	SpC (cond)	TURBIDITY	DI	SSOLVED O ₂	TEMPERATURE	REDOX POTENTIAL		
Time 1051	(L)	(units) 7.69	(mS/cm) 0.879	(NTU) 48.5	<u> </u>	(mg/L) 4,34	14.31	(mV) 195,4	10.37	Comments
1057		クック	0.881	31.9		7,04 Do91	13.32	-214.1	10.63	<u>dear/nocdor</u>
1110	1 2	7.83	0.882	21.7	\neg	0,50	13.39	-224.3	11,11	
1116		7.84	0.882	14.3		7.47	13.67	-224,1	11,29	
1122		7.84	0.881	155		2141	13.54	-223.0	11.40	
1128		7.85	0.880	18.2		0.39	13.68	-225.0	11.50	
1134		7.85	0.880	15,1		2,40	14:09	-224,6		slowed pump
114)		7.84	0.879	12.6		0.39	14,58	_ 220,2	11.58	
1148	<u> </u>	7.83	0.880	12.4		0,41	14.45	-224,9	11,60	
115		7.83	0.878	12.6		0.39	14.41	-218.6	11,60	
1200	2 1	7.82	0.876	4,3		0,40	14,92	-221.6	11.55	
TYPE O	NT DOCUMENTATION F PUMP RISTALTIC BMERSIBLE	TYPE C	DE TUBING FLON OR TEFLON I GH DENSITY POLYE	LINED	POI	F PUMP MATER LYVINYL CHLO AINLESS STEEL	RIDE	TYPE OF BLADDE		
	HER	=	HER	_		HER <u>NA</u>				
PURGE OF	SSERVATIONS ake @				NO.	TES VOC		Preservation HCL	Time Colle	egted
		1 .	AND STREET, ST							
SIGNATURE	lotte	(ne								
		,								

AMEC E&I, Inc.					
FIELD DATA RECORD - GROUNDWATER	SAMPLING VIA BAILFI	₹			
Former Taylor Instruments	OAMI LING VIA BAILLI	•			1×10
PROJECT 2012 Semi-Annual Sampling Event	Parasitating a second and a		ı	DATE 5	17/12
SITE ID BR-04	SITE TYPE Monitor	r Well			
SITE ACTIVITY START 1450 END 1620	JOB NUMBER 303105	52006.22			
	ELL RISER PROTECTIVE OTECTIVE CASING CASING STICK		PROTECTIVE CASING / WELI	L 0:3	つぢ _
INITIAL DEPTH TO WATER FT WELL DEPTH	(FROM GROUNG PID AMBIENT AIR	ND) FT	DIFFERENCE WELL DIAMETER	4	FT
FINAL DEPTH TO WATER 17.81 FT LENGTH	NA FT MOUTH	PPM	WELL INTEGRITY: (CAD YES	NO N/A
	PRODUCT THICKNESS	FT	CAS LOCK COLL	SING E	
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))	JOO S GAL THORNECO	1	002.	-An _	
PURGE 120 L/MIN BEGIN PURGING	PURGING	1600	OTAL VOL. PURGED (purge rate (L/min) x	x duration (min	GAL n) x 0.26 gal/L)
PURGE DATA [VOLUME PURGED] pH SpC (cond)	TURBIDITY DISSOLVED	O ₂ TEMPERATURE	REDOX POTENTIAL	WATER	
Time (L) (units) (mS/cm)	(NTU) (mg/L)	(°C)	(mV)	LEVEL	Comments
1509 FC 8.03 0.139 1526 2 8.13 0.130	88.1 3.24 36.5 2.41	19.37		17.82	doudy
1526 2 8.13 0,130 1542 2 8.22 0,131	36.5 2.41 32.1 2.47	15.77	- 42.1 - 30,5	17.81	<u>Jear</u>
1548 8.28 0.132	27.9 02/4	10 -		17.82	
1553 0.6 8.30 0.131	204 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 X PERISTALTIC SUBMERSIBLE OTHER OTHER	YETHYLENE STAINLESS ST	HLORIDE [TYPE OF BLADDER TEFLON X OTHER NA		(if applicable)
PURGE OBSERVATIONS, Tubing Intake @ ~20.5	NOTES	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Anna Carlos
Tubing Intake @ ~~~~ \(\sqrt{\infty} \)	NOC NOC NOC	(ms) (ms0)	Preservation HCL HCC HCC	Time Collection	Z Z
SIGNATURE:					

AMEC E&I, Inc.							
FIELD DATA RECORD -	GROUNDWATER S	SAMPLING VIA	BAILER				
Former Taylor Instrumen PROJECT 2012 Semi-Annual Samp						DATE 5/15	1/12
SITE ID BR-10		SITE TYPE	Monitor Well				'
SITE ACTIVITY START 174	3 END	JOB NUMBER	3031052006.2	2			
WATER LEVEL / PUMP SETTINGS	MEASUREMENT F		OTECTIVE		PROTECTIVE		
		FECTIVE CASING CAS	SING STICKUP OM GROUND)	FT	CASING / WELL DIFFERENCE	0.3	FT
INITIAL DEPTH 17.35	FT WELL DEPTH	47.0 FT AME	BIENT AIR	PPM	WELL DIAMETER	6	IN
FINAL DEPTH 17.41	SCREEN FT LENGTH	A I India	WELL UTH	PPM	WELL INTEGRITY: C	CAP YES N	O N/A
DRAWDOWN 0.04	DRAWDOWN FT VOLUME (ODUCT CKNESS	FT	CASI LOCK COLL	ED =	
((initial - final) x 0.16 {2-inch} or x 0.65 {	4-inch} or (1.5 (6-inch))						
PURGE 0.2 L/MIN	BEGIN PURGING	PURGI	ing [8	29	DTAL VOL. PURGED purge rate (L/min) x	2,2 GA duration (min) x 0	
PURGE DATA VOLUME PURGED	pH SpC (cond)	TURBIDITY DI		TEMPERATURE	REDOX POTENTIAL		
Time (L) (L) (T) (T) (T) (T) (T) (T) (T) (T) (T) (T	(units) (mS/cm) 2,08 0,539	(NTU) 60,4 3	- (mg/L)- 3· 19	1003 -	-119,3	17,41 c	omments
1805 2 5	7,59 0,493		2,48	14.23	-60.3	17.41	
1809 1 5	7,64 0,493		7,50	14,14	-716	7.41	
1814 1 5	7.68 0.492		0.35	14.08	-76.1	<u>17,41 </u>	
1819	7,72 0,492	9	2,30	13.87	-81,4	17,41	
1824 5	7,75 0,492 7,75 0,492		0,29 0,28	1391	-868 -90,1	17.41	
(029)	1.1) 01112	de de	2,40	1019	2071	77,11	·
EQUIPMENT DOCUMENTATION							
TYPE OF PUMP	TYPE OF TUBING		F PUMP MATERIA LYVINYL CHLORIE		TYPE OF BLADDEF	R MATERIAL (if ap	plicable)
X PERISTALTIC SUBMERSIBLE	TEFLON OR TEFLON X HIGH DENSITY POLY		AINLESS STEEL	_	TEFLON X OTHERNA_		
OTHER	OTHER		HER <u>NA</u>				_
PURGE OBSERVATIONS		NO	TES		**************************************	4 400	
Tubing Intake @ 20.4 1			Voc	F	Preservation HCL	Time Collected	1.
							_
							_
							:
P. M.							
SIGNATURE:		_		•			
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		&I, Inc.								
FIEL	AG G.	TA RECORD	- GROUN	DWATER SA	AMPLING V	IA BAILER			سيدا	11/20
PROJE		Former Taylor Instrur 2012 Semi-Annual Sa	ments ampling Event						DATE 5	116/12
	F	BR	- 1万		SITE TY	PE Monitor Well				
SITE ID		START 151	/ END 19	330	JOB NUME	2021052006	22			
	CTIVITY	OTAIN TOTA		MEASUREMENT PO					li con	
WATE	RLEVE	EL / PUMP SETTIN	r	TOP OF WELL I	RISER	PROTECTIVE CASING STICKUP (FROM GROUND)	FT	PROTECTIVE CASING / WEL DIFFERENCE	0,	35 FT
	_DEPTH WATER		6 FT	WELL DEPTH	72 FT	PID AMBIENT AIR	PPM	WELL DIAMETER	6	<u>IN</u>
	_ DEPTH	* / 1. /	7 7 1	SCREEN /	\sqrt{A} FT	PID WELL MOUTH	PPM	WELL INTEGRITY: CAS		NO N/A
	WDOWN		DF	AAWDOWN 5	16 GAL	PRODUCT THICKNESS	FT	LOC	KED 🔙	
((initi	ial - final)	x 0.16 (2-inch) or x 0						_		
	IRGE RATE	165/ U	MIN PURGI	NG 100	F	END PURGING	X175	OTAL VOL. PURGED (purge rate (L/min)	x duration (min	GAL n) x 0.26 gal/L)
PURC	GE DAT		,	SpC (cond)	TURBIDITY	DISSOLVED O2	TEMPERATURE	REDOX POTENTIAL	WATER	Comments
	me	(L)	(units)	(mS/cm)	(NTU) 3,2	(mg/L) 'フ, 20	17.90	(mV) 41,5	18.4>	Comments
	125	+c	8,47	0.165	3.4	0,47	15.86	-35.3	18.78	
	38	2	9.30	0,104	1.3	0.35	15.54	- 5.0	-	Sowed Own
	<u>500</u>	3,6	9.35	0.104	2.5	0.28	15.03	29.8	20.24	
	630	5	9.36	0.104	2.4	0.42	15,93	3018	20.45	slowed pump
	550	1.5	9.38	0.104	2.2	0.34	14.65	-33.7	21.45	56well pump
	724	6		0.104	1.7	0.32	15,30	-13,2	21.50	, 1
1	733	1 0 5		0.104	1,9	0.31	14.89	0.4	21,67	
	747	2,5	9.38	0.104	1.9	0,29	15.34	3,3	21.70	
1-1;	754	0,6		0.104	2.1	0.36	15,46	5,6	21.72	
	759	0.6	9.39	0.104	1.8	0,39	15.32	7,0	21.79	
	806		9.40	0.104	2.4	0.36	15,32	8,2	21.80	
	812	0.6	9,40	0.104	1,7	0.37	15,54	8,3	21.80	
-	1818	0,6	9110	Union	1.7					
FOL	IIPMEN	T DOCUMENTATION	ON					TYPE OF BLADE	AED MATERIA	(If applicable)
	TYPE OF		TYPE	OF TUBING	-	TYPE OF PUMP MATE			EN WATERUA	E (II approasis)
[X PER	ISTALTIC		EFLON OR TEFLON	_	POLYVINYL CHLO		TEFLON X OTHER N	IA.	
	SUB	MERSIBLE	х н	IGH DENSITY POLY		STAINLESS STEE	ĒL .	X OTHER N	Α	
	от⊦	IER	🗆 o	THER		X OTHER NA		· · · · · · · · · · · · · · · · · · ·		
- -	Tubing Inta	SERVATIONS				NOTES		Preservation HCL	Time Co	ollected 2
		CJO-turn up ouit 21.5 t udown stabal	Clay rito	to drawlo	wn well	voc		1100		
1 2/2	peri	+ 25 +	has cloud	Down and so	op if					
] .	to ab	1. 1. 1.	men sione a		* * maga					
'	draw	I down slaval	izes							
			,							l
		. Market Barbara Caralina	1		a-**				•	ļ
SIG	NATURE	- CAC	70	7						

GW_Sample_Form

MEC E&I, Inc.						
IELD DATA RECORD - GROU	INDWATER SAM	IPLING VIA	BAILER		:	S/16/12
Former Taylor Instruments 3OJECT 2012 Semi-Annual Sampling Even	<u> </u>				D	DATE 7797.
TEID QARB-01		SITE TYPE	Monitor Well			
1900	1904	JOB NUMBER	3031052006.2	2		
ATER LEVEL / PUMP SETTINGS	MEASUREMENT POINT	Г			PROTEOTIVE	-
ATER LEVEL / POWF SETTINGS	TOP OF WELL RIS TOP OF PROTECT OTHER	ER PF	ROTECTIVE ASING STICKUP ROM GROUND)	Commence of the Paris	PROTECTIVE CASING / WELL DIFFERENCE	FT
ITIAL DEPTH TO WATER FT	WELL DEPTH	FT AM	D MBIENT AIR	PPM	WELL DIAMETER	YES NO N/A
FINAL DEPTH FT	SCREEN LENGTH		D WELL OUTH	РРМ	WELL INTEGRITY: C. CASII LOCKI	AP
DRAWDOWN	DRAWDOWN VOLUME		RODUCT HICKNESS	FT	COLL	
	BEGIN RGING	PUR	END		OTAL VOL. PURGED (purge rate (L/min) x	GAL duration (min) x 0.26 gal/L)
URGE DATA VOLUME PURGED PH Time (L) (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O ₂ (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL Comments
collected using	unused tabin	ig and	DI water	From TOP	5	
8		0				
	White the state of	Net Company and Company				
		The state of the s				
				The same of the sa		
					No. of the last of	
EQUIPMENT DOCUMENTATION	nanta sun majanga na ikan-panananga na manasa ya majaha a 1902 na majahahahahahahan pananan maja	Contrators and Contra	RE OF PUMP MATE	PIAT	TYPE OF BLADDE	ER MATERIAL (if applicable)
1 TIPE OF TOME	<u>'PE OF TUBING</u>		POLYVINYL CHLC	Activated Activated special section of the second section of the section of the second section of the sectio	TEFLON	taken jara andre andre aktivente i tellegende til kritis film i film i forstå film i til standen er e
X PERISTALTIC	TEFLON OR TEFLON-LI		STAINLESS STEE	The state of the s	X OTHER NA	of Eddler and the Society And
SUBMERSIBLE	OTHER		OTHER <u>NA</u>		The same of the sa	
PURGE OBSERVATIONS Tubing Intake @			NOTES VOC		Preservation HCL	Time Collected
SIGNATURE: Law Un	Carl					
Oldivi Toller					<u> </u>	

MEC E&I, Inc. ELD DATA RECORD - GROU Former Taylor Instruments 2012 Semi-Annual Sampling Even		A BAILER	DATE 5/16/12
EID QAFBOI	SITE TYP	PE Monitor Well	
E ACTIVITY START 1053 END	1057 JOB NUMBE	ER 3031052006.22	
ATER LEVEL / PUMP SETTINGS TIAL DEPTH FT INAL DEPTH FT OWATER FT ORAWDOWN FT ((Initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or	OTHER WELL DEPTH SCREEN LENGTH DRAWDOWN VOLUME GAL or x 1.5 (6-inch))	PROTECTIVE CASING STICKUP (FROM GROUND) PID AMBIENT AIR PID WELL MOUTH PRODUCT THICKNESS FT	PROTECTIVE CASING / WELL DIFFERENCE WELL DIAMETER WELL INTEGRITY: CAP CASING LOCKED COLLAR OTAL VOL.
PURGE RATE L/MIN PU	BEGIN P		PURGED GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)
URGE DATA VOLUME PURGED PH Time (L) (units)	SpC (cond) TURBIDITY (mS/cm) (NTU)	DISSOLVED O ₂ TEMPERATURE (mg/L) (°C)	REDOX POTENTIAL WATER LEVEL Comments
collected from To	OPS OI water		
EQUIPMENT DOCUMENTATION TYPE OF PUMP	To be the bound of the same of	TYPE OF PUMP MATERIAL POLYVINYL CHLORIDE	TYPE OF BLADDER MATERIAL (if applicable)
X PERISTALTIC	TEFLON OR TEFLON LINED X HIGH DENSITY POLYETHYLENE	STAINLESS STEEL	X OTHER NA
SUBMERSIBLE.	OTHER	X OTHER NA	The state of the s
PURGE OBSERVATIONS Tubing Intake @		NOTES	Preservation Time Collected
SIGNATURE:	W.		

LD DATA RECORD - GROL Former Taylor Instruments 2012 Semi-Annual Sampling Even						DATE 5	15/12
D QATBOI		SITE TYPE	Monitor Well				
ACTIVITY START END		JOB NUMBEF	3031052006.22	2			
FER LEVEL / PUMP SETTINGS	MEASUREMENT PO	RISER P	ROTECTIVE ASING STICKUP FROM GROUND)	FT	PROTECTIVE CASING / WELL DIFFERENCE	And the Late of th	Attainment FT
AL DEPTH	WELL DEPTH		ID MBIENT AIR	PPM	WELL DIAMETER		N
O WATER FT	SCREEN	F	PID WELL	PPM	WELL INTEGRITY: (YES	NO N/A
TO WATER FT	DRAWDOWN .		PRODUCT		CAS LOC	ING	
RAWDOWN	VOLUME		THICKNESS	FT	COL	LAH	
nitial - final) x 0.16 (2-inch) or x 0.65 (4-inch) o PURGE RATE L/MIN PU	BEGIN ~	PUI	END RGING	- Andrewson Company and A	OTAL VOL. PURGED (purge rate (L/min)	x duration (mi	GAL n) x 0.26 gal/L)
RGE DATA VOLUME PURGED pH Time (L) (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O ₂ (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAI	WATER LEVEL	Comments
	IDED 1	VOA VI	AL				
L-NV YNOV.		VO.1. V					
		 					
QUIPMENT DOCUMENTATION TYPE OF PUMP	YPE OF TUBING		PE OF PUMP MATE		TYPE OF BLADI		
X PERISTALTIC	TEFLONORTEFLO		POLYVINYL CHLC		TEFLON X OTHER	VA	The state of the s
	HIGH DENSITY POL		OTHER NA		and the second		
OTHER			NOTES		Preservation	Time C	collected
Tubing Intake @			voc		HCL		
(A)							



AMEC E&I, Inc.				
FIELD DATA RECORD - GROUNDWA	TER SAMPLING VIA BAI	LER		
Former Taylor Instruments PROJECT 2012 Semi-Annual Sampling Event]		ľλ	TE 10/30/12
SITE ID OB-04	SITE TYPE M	onitor Well	7	12 (10/20//
SITE ACTIVITY START 1630 END 1750	1	031052006.22		i.
TOP (MENT POINT OF WELL RISER PROTECTIVE CASING CASING S	TICKUP	PROTECTIVE CASING/WELL	
INITIAL DEPTH 1.85 FT WELL DEF	TI.	ROUND) F	I] DIFFERENCE [0,3 FT
	10:49 FT AMBIENT		DIAMETER	2 IN
TO WATER 5, Ψ') FT LENGTH	5 FT PID WELL	PPM	WELL INTEGRITY: CAP CASING	XES NO N/A
DRAWDOWN 3.62 FT DRAWDOWN VOLUME	GAL THICKNES		LOCKED COLLAR	冬二 🖺
((Initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch);	7400			
RATE //// L/MIN PURGING	1633 END PURGING	1742	TOTAL VOL. PURGED (purge rate (L/min) x dura	tion (min) x 0.26 gal/L)
PURGE DATA VOLUME PURGED PH SpC (c		'ED O₂ TEMPERATURE	REDOX POTENTIAL WA	ATER
Time (L) (units) (ms/ 1635 & 7.40 0.91			-178.1 3.0	Ob clear/blacks lake
1656 2 7.29 0.90	5 8,6 1.00	2 16.42	-282.2 45	12/00/1 / 12/00/21
1713 2 7.23 0.92 1722 1 7.19 0.93	8 6.4 1,53			22
1732 7.16 0.93				38 45
1737 0.6 7.15 0.93			-3023 54	
1742 0.6 7.13 0.93	2 7.8 1.81	16.21	-307.0 5.4	
	-			
EQUIPMENT DOCUMENTATION TYPE OF PUMP TYPE OF TUBING	TYPE OF PUMF		TYPE OF BLADDER MAT	ERIAL (If applicable)
X PERISTALTIC TEFLON OR TE SUBMERSIBLE X HIGH DENSITY	FLON LINED POLYVINY POLYETHYLENE STAINLESS	CHLORIDE [TEFLON	
OTHER OTHER	X OTHER	L	X OTHER <u>NA</u>	
PURGE OBSERVATIONS Tubing Intake @	NOTES		1 2	me Collected
		VOC (modified list):	HCL <u>}</u>	<u> </u>
				·
1ATZ				
IGNATURE:				

AMEC	E&I, Inc.									7
FIELD D	ATA RECOR	ruments		SAMPLING	VIA BAILER			Г	10/20/10	
SITE ID	OB-0				Monitor We		7	DATE _		İ
SITE ACTIVITY		773	1625		I TYPE		<u> </u>			
	EL / PUMP SETTI		MEASUREMENT	JOB NU	JWBER	70,22				4
			TOP OF WEL	L RISER TECTIVE CASING	PROTECTIVE CASING STICKUP (FROM GROUND)		PROTECTIVE CASING / WE T DIFFERENCE	ELL	0.4 FT	
INITIAL DEPTH TO WATER) FT	WELL DEPTH	16.45 FT	PID AMBIENT AIR	PPI	WELL M DIAMETER	e	₹ _{IN}	
FINAL DEPTH TO WATER		FT	SCREEN LENGTH	10 FT	PID WELL MOUTH	PPI	WELL M INTEGRITY:	CAR YE	S NO N/A	
DRAWDOWN	2.16	5 FT	DRAWDOWN VOLUME	124	PRODUCT		CA LO	SING S	S NO N/A	
((initial - final)	x 0.16 (2-inch) or x (0.27 GAL	THICKNESS	FT	CO	LLAR		
PURGE RATE	.125 L	BE /MIN PURC	EGIN BING 151	14	END 16	20	TOTAL VOL. PURGED (purge rate (L/min)	1,6 x duration (n	GAL nin) x 0.26 gal/L)	
PURGE DATA	VOLUME PURGED		SpC (cond)	TURBIDITY	DISSOLVED O2	TEMPERATURE	REDOX POTENTIA	L WATER	I	
1519	€c	(units) 6.92	(mS/cm) 0.%40	(NTU) 6. 8	(mg/L) 3.80	(%)	(mV) -54.9	3.35°	Comments	di +:
1534	a	6,98	0.823	58	0.67	17.06	-133.7	4.25	dear/stight	- 7.
1549	2	7.08	0.822	4,5	0.63	17.14	-1686	461	Cour	1
1558		7.11	0.824	3.9	0,65	15,21	-183.4	4.72		
1610	1.5	7.12	0.829	3.4	0.72	17.27	-200.6	4.80]
1620	0,6	7,12	0.833	3.2 2.6	0.73	17,21	-206.4	4.81		4
10.0	010	77.80	0 1877	ωζ, υ	0.71	17.20	-209,3	4.81		-
				7						1
							4			
										-
. ,								7		┨
TYPE OF PL X PERIST SUBME OTHER	ALTIC RSIBLE	TYPE O	DE TUBING FLON OR TEFLON L BH DENSITY POLYE HER	INED THYLENE	YPE OF PUMP MATER POLYVINYL CHLOR STAINLESS STEEL OTHER NA	RIDE	TYPE OF BLADDE TEFLON X OTHER NA	R MATERIAL	(if applicable)	
PURGE OBSEI Tubing Intake @	RVATIONS				NOTES					1
rabing make &					VOC.(modil	fled list)	Preservation HCL	Time Colle 1622		
								-		
*1	/		//	and developed a second of the						
ÍGNATURE:				_						

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AMEC E&I, Inc.						
FIELD DATA RECORD - GROUNDWAT	ER SAMDLING	VIA DAII ED	+ -			
Former Taylor Instruments	LH SAWFLING	VIA DAILER			-	
PROJECT 2012 Semi-Annual Sampling Event					DATE	10/31/12
SITE ID 08-08	SITE	TYPE Monitor We	ell			
SITE ACTIVITY START 1625 END	JOB NUM	MBER 303105200	06.22			
WATER LEVEL / PUMP SETTINGS MEASUREM	ENT POINT					
TOP OF OTHER	WELL RISER PROTECTIVE CASING	PROTECTIVE CASING STICKUP (FROM GROUND)		PROTECTIVE CASING / WE DIFFERENCE		0,35 FT
TO WATER 480 FT WELL DEPT	253 FT	PID AMBIENT AIR	PPN	WELL DIAMETER	-	2 _{IN}
FINAL DEPTH 5.95 FT SCREEN LENGTH	lO FT	PID WELL MOUTH	PPM	WELL INTEGRITY:	CAP YES	
DRAWDOWN LIJ5 FT DRAWDOWN VOLUME	0.18 GAL	PRODUCT THICKNESS	and the second second	CA LO	SING SKED	
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))	3712	171101111200	<u> </u>		1,09	🔀
PURGE ALOO L/MIN PURGING	632	END)	727	FOTAL VOL. PURGED (purge rate (L/min)	0.H	GAL
PURGE DATA				(purge rate (Dillill)	x duration (m	iin) x 0.26 gai/L)
VOLUME PURGED pH SpC (cond (L) (units) (mS/cm		DISSOLVED O ₂ (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL	L WATER LEVEL	Comments
	5 10.6	1.88	15.67	-137.2	5.45	dowed ours
1658 2 7.30 0.75 1713 1.5 7.30 0.759	10.9	0.57	16:10	-146.2	5,87	strong odor
1720 0.6 7.24 0.761	8.9	0.46	16.07	-148,6 -148,8	5.95 5.95	, , , , , , , , , , , , , , , , , , ,
1727 0.6 7.23 0.765		0.45	16.06	-148,9	595	<u> </u>
					7. ()	
N N	-					
					 	
				···		
EQUIPMENT DOCUMENTATION						
TYPE OF PUMP TYPE OF TUBING	TY	<u>PE OF PUMP MATERI</u>	۱۵۱	TYPE OF BLADDEF	O AKATEDIAI	//f
X PERISTALTIC TEFLON OR TEFL		POLYVINYL CHLOR		TEFLON	NAI ENIAL	(ii applicable)
SUBMERSIBLE X HIGH DENSITY PO		STAINLESS STEEL	Ē	X OTHER NA		
OTHEROTHER	X	OTHER NA				Ĭ
PURGE OBSERVATIONS Tubing Intake @	j	NOTES				
·	[VOC (modifi		reservation HCL	Time Collect	oted
IGNATURE:						
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AMEC E&I, Inc.
FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER
PROJECT Former Taylor Instruments 2012 Semi-Annual Sampling Event
SITE ID SITE TYPE Monitor Well
SITE ACTIVITY START 1053 END 1218 JOB NUMBER 3031052006.22
WATER LEVEL / PUMP SETTINGS MEASUREMENT POINT TOP OF WELL RISER PROTECTIVE PROTECTIVE CASING STICKUP CASING / WELL OTHER (FROM GROUND) OTHER (FROM GROUND) OTHER (FROM GROUND)
INITIAL DEPTH 173 FT WELL DEPTH 173 FT PID WELL
FINAL DEPTH 9.93 SCREEN 5 PID WELL WELL YES NO N/A
DRAWDOWN CASING CASING
2,25 FT VOLUME 0,52 GAL PHODUCT COLLAR CO
PURGE RATE 0.1-0.15 L/MIN PURGING 1059 END 1211 TOTAL VOL. PURGED 1.53 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)
PURGE DATA VOLUME PURGED pH SpC (cond) TURBIDITY DISSOLVED O ₂ TEMPERATURE REDOX POTENTIAL WATER
Time (L) (units) (mS/cm) (NTU) (mg/L) (°C) (mV) LEVEL Comments 103 & 7,74 0,83'7 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 0.0 7.11 0.762 0.1 0.48 15.33 -128.8 9.93
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 OTHER NA OTHER NA
PURGE OBSERVATIONS Tubing Intake @ 14.8
Preservation Time Collected VOC (modified list) HCL 1215
IGNATURE:

AMEC-E&I, Inc.								
FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER								
PROJECT Pormer Taylor Instruments 2012 Semi-Annual Sampling Event								
SITE ID TW-09 SITE TYPE Monitor Well								
SITE ACTIVITY START 0931 END 1015 JOB NUMBER 3031052006.22								
WATER LEVEL / PUMP SETTINGS MEASUREMENT POINT								
TOP OF WELL RISER PROTECTIVE PROTECTIVE	3 _{FT}							
INITIAL DEPTH TO WATER 8.75 FT WELL DEPTH 17.70 FT AMBIENT AIR PPM DIAMETER 2	IN							
FINAL DEPTH 895 SCREEN 5 PID WELL WELL YES	NO N/A							
CASING CASING								
DHAWDOWN O.QO FT DRAWDOWN VOLUME O.O3 GAL PRODUCT THICKNESS FT LOCKED COLLAR COLLAR								
PURGE BEGIN BEGIN FAIR	 1							
RATE O. DIMIN PURGING 0939 END 1010 TOTAL VOL. PURGED 0,62 (purge rate (L/min) x duration (min)	GAL x 0.26 gal/L)							
PURGE DATA VOLUME PURGED pH SpC (cond) TURBIDITY DISSOLVED O2 TEMPERATURE REDOX POTENTIAL WATER								
Time (L) (units) (mS/cm) (NTU) (mg/L) (°C) (mV) LEVEL	Comments							
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	111							
1010 1 6.86 0.700 1.0 0.65 15.95 -108.4 8.95								
EQUIPMENT DOCUMENTATION TYPE OF PUMP MATERIAL TYPE OF BLADDER MATERIAL (if	P. II.							
TYPE OF TUBING TYPE OF PUMP MATERIAL TYPE OF BLADDER MATERIAL (IF TEFLON OR TEFLON LINED POLYVINYL CHLORIDE TEFLON	аррпсавіе)							
SUBMERSIBLE X HIGH DENSITY POLYETHYLENE STAINLESS STEEL X OTHER NA								
OTHER X OTHER NA	.,							
PURGE OBSERVATIONS Tubing Intake @								
Preservation Time Collecter VOC (modified list) HCL 1012	i i							
								
IGNATURE:								
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	AMEC	E&I, Inc.			·					
	FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER									
	LIELD L	DATA RECOR	RD - GROU	INDWATER	SAMPLIN	G VIÀ BAILER				
	Former Taylor Instruments PROJECT 2012 Semi-Annual Sampling Event								DATE /	0/31/12
	SITE ID	TW	-17		SIT	E TYPE Monitor V	Vell		5/112	<u> </u>
	SITE ACTIVIT	TY START 13!	O 10/31	1507	JOB 1	NUMBER 30310520	006.22			
	WATER LEV	VEL / PUMP SETT	INGS	MEASUREMENT	POINT					
				TOP OF WELL TOP OF PRO OTHER	L RISER TECTIVE CASIN	PROTECTIVE NG CASING STICKU (FROM GROUND	2,4 (W F	PROTECTIVE CASING / WILL DIFFERENCE		ルフリ スラ _{FT}
	INITIAL DEPT TO WATE		ク _{FT}	WELL DEPTH	17.45 F	PID AMBIENT AIR	PP	WELL M DIAMETER	2	IN
	FINAL DEPT TO WATE		5 FT	SCREEN LENGTH	5 F	PID WELL T	PPN	WELL INTEGRITY:	YES CAP	NO N/A
	DRAWDOW	N 4.3	B FT D	RAWDOWN VOLUME	0.7 GA	PRODUCT L THICKNESS	· FT	C.F LO	ASING S CKED S	
	((Initial - fina	l) x 0.16 {2-inch} or x	0.65 {4-inch} or x	1.5 (6-inch) 10/3			504		DLLAR 🔀	
	PURGE RATE	.111 /001	/MIN PURG	GIN 135		END		TOTAL VOL.	2.1	
			ZIVIIN PUNG		1330	PURGING	53	PURGED (purge rate (L/min		GAL n) x 0.26 gal/L)
	PURGE DAT	A VOLUME PURGED) pH	SpC (cond)	TURBIDIT					
دسا	Time	(L)	(units)	(mS/cm)	(NTU)	(mg/L)	TEMPERATURE (°C)	REDOX POTENTIA (mV)	LEVEL	Comments
\$\hat{X}	1409	<u>E</u>	7.12	1,518	47,2	8,29	14.79	-131.6	6,94	
	1427	2	6,76	1,527	27.1	0,75	14.88	-134.4	9.75	
	1446	2	6,75	1.513	18.5	0,52	14.73	-130.3	12.29	
	1504	~2	6.79	1.516	1154.1	0,62	14.59	-120.7	14,45	
	end ou		A	ill collect	 	tomorrow	14.90	- 115.1	17.01	-dry
Carried Street, Street	11/1/12	WL=	6.22	in correct	Sample	ONOMOLO				
	1330	€C	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	
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ŀ										
ŀ					*					
ļ	FOUIPMENT	DOCUMENTATION	\							
	TYPE OF P			F TUBING		TYPE OF PUMP MATE	RIAL	TYPE OF BLADDE	B MATERIAL 7	if applicable)
ļ	X PERIS	TALTIC	TEF	LON OR TEFLON L	INED	POLYVINYL CHLC		TEFLON	·	ii applicable)
		ERSIBLE		H DENSITY POLYE		STAINLESS STEE	L [X OTHER NA		
ŀ		3	<u></u> OTH	IER		X OTHER NA				
[PURGE OBSE Tubing Intake @					NOTES		Drees		
	Depurp slow as possible					VOC (mo	dified list)	Preservation HCL	Time Collect	
	m pi	any succe as	possiue							
		-1886-					•			
			T							
s	GNATURE:	La			_					
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AMEC E&I, Inc.			
FIELD DATA RECORD - GR	OUNDWATER SAMPLIN	NG VIA BAILER	
Former Taylor Instruments PROJECT 2012 Semi-Annual Sampling Ev	/ent		DATE 11/1/12
T.1.20	SIN .	Months MAL	DATE [17.7/2]
		ITE TYPE Monitor Well	
SITE ACTIVITY START 1142 EN	ID 1315 JOB	NUMBER 3031052006,22	
WATER LEVEL / PUMP SETTINGS	MEASUREMENT POINT TOP OF WELL RISER TOP OF PROTECTIVE CAS		PROTECTIVE CASING/WELL
INITIAL DEPTH 10.91 FT	WELL DEPTH 17,22		T DIFFERENCE 0.27 FT
CIMAL DEPTH	1		
TO WATER ////////////////////////////////////	1	PID WELL FT MOUTH PP	WELL YES NO N/A INTEGRITY: CAP CASING LOCKED COLLAR
DRAWDOWN 0.25 FT	DRAWDOWN 0.04 G.	PRODUCT	CASING LOCKED
((initial - final) x 0.16 {2-inch} or x 0.65 {4-inch}	VOLUME 0,07 G, or x 1.5 {6-inch})	AL THICKNESS FT	COLLAR X
BURGE		END LOD L	TOTAL VOL.
	DRGING 156	PURGING 1301	PURGED Q.9 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)
PURGE DATA VOLUME PURGED pH	SpC (cond) TURBIDI	TY DISSOLVED O2 TEMPERATURE	REDOX POTENTIAL WATER
Time (L) (units) (200 Cc 7,50	(mS/cm) (NTU) 0.583 3.1	(mg/L) (°C)	(mV) LEVEL Comments
1227 2 733		3.32 12.95 2.04 13.33	7.1 11.12
1240 1 7.33		1.77 12.88	15.7 11,23 slowed pum,
1249 0.6 7.33	3 0.650 1.7		20.5 11.18
1301 0.6 7.32	2 0.661 2.1	1,62 13.04	16.7 11.18
			1.10
QUIPMENT DOCUMENTATION			<u> </u>
	<u>OF TUBING</u>	TYPE OF PUMP MATERIAL	TYPE OF BLADDER MATERIAL (if applicable)
	TEFLON OR TEFLON LINED HIGH DENSITY POLYETHYLENE	POLYVINYL CHLORIDE	TEFLON
= =	OTHER	STAINLESS STEEL X OTHER NA	X OTHER <u>NA</u>
URGE OBSERVATIONS		NOTES	
Tubing Intake @ 14.ワ5			Preservation Time Collected
		VOC (modified list)	HCL <u>1305</u>
/* //	- 2		
GNATURE:	7/3		
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AME	CE&I, Inc.]
FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER										
PROJECT	Former Taylor Instr 2012 Semi-Annual							DATE 11	11/12	
SITE ID	W	5		SITE T	YPE Monitor We	ell		V	-	
SITE ACTIV	VITY STARTOBO	25 END (293/	JOB NUM	MBER 303105200	6.22				
WATER L	EVEL / PUMP SETTII	NGS	MEASUREMENT I TOP OF WEL TOP OF PRO OTHER		PROTECTIVE CASING STICKUP (FROM GROUND)	F	PROTECTIVE CASING / WEI DIFFERENCE	1 00	ラ FT	
INITIAL DEI TO WAT		FT	WELL DEPTH	21,8 FT	PID AMBIENT AIR	Name of the Owner	WELL	2		
FINAL DEF	PTH 171%		SCREEN	5 5	PID WELL	PPM] DIAMETER] WELL	YES	NO N/A	
TO WAT	, L		RAWDOWN /		MOUTH PRODUCT	PPM	CAS	SING 🔀		
	wn 2.5) nal) x 0.16 (2-inch) or x 0	FT	VOLUME	1459 GAL	THICKNESS	FT		KED X	二天	
PURGE RATE	ine la 1		GIN 08	34	END C	1922	FOTAL VOL. PURGED (purge rate (L/min)	x duration (min)	GAL x 0.26 gal/()	
PURGE D	ATA VOLUME PURGED	l nu	L 620/2004)	1 TURNING	I DIOCOLVED O	1			X 0.20 ga, 2)	
Time	(L)	(units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O ₂ (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	LEVEL	Comments	
0836 0852		6.78	0.939	4.6	0.97	13,92	-75.1		Transcolor black flak	0
0900	1 2	6.88	0.961	1.4	0.73	15.09	-131.4		turned pury	down
0916		6.88 6.88	0,977	1.6	0.73	14.83	-131.4	17,20		
Ulas	~ <i>U.O</i>	0.00	01405	10/	0075	17.76	-12017	7.15		

							:			
-										

EQUIPMEN TYPE O	IT DOCUMENTATION		DF TUBING	TY	/PE OF PUMP MATER	ΝΔΙ	TYPE OF BLADDER	O MATERIAL (IF	applicable)	
X PEF	RISTALTIC		FLON OR TEFLON		POLYVINYL CHLOR		TEFLON	TIMATELIAE (II	аррисаые)	
	BMERSIBLE		GH DENSITY POLYE	_	STAINLESS STEEL	.	X OTHER NA			
PURGE OF	SERVATIONS		PILITY		NOTES					
Tubing Inta	ke @ 1903				3		Preservation HGL	Time Collecte	d	
					X VOC DI	up (w-5)		0924		
SIGNATURE	: The) [] (E)	/	····						
		-								

AMEC E&I, Inc.						
FIELD DATA RECORD - GROUNDWA	TER SAMPLING \	/IA BAILER				
Former Taylor Instruments PROJECT 2012 Semi-Annual Sampling Event					DATE	10/31/12
SITE ID BR-01	SITE TY	Monitor Well				
SITE ACTIVITY START 1507 END	JOB NUM	2001050000	22			
		DEN	7.1			
TOP	OF WELL RISER OF PROTECTIVE CASING	PROTECTIVE: CASING STICKUP (FROM GROUND)	2.3 FT	PROTECTIVE CASING / WEL DIFFERENCE	т	/A _{FT}
INITIAL DEPTH 12.65 FT WELL DE	38.6 FT	PID AMBIENT AIR	PPM	WELL DIAMETER		4 _{IN}
FINAL DEPTH 3,12 SCREEN TO WATER LENGTH	NA FT	PID WELL MOUTH	PPM	WELL INTEGRITY:	CAB YES	NO N/A
DRAWDOWN 047 DRAWDOWN	0.21	PRODUCT	Frivi		SING ⋝	
((Initial - final) x 0.16 {2-inch} qr-x 0.65 {4-inch} or x 1.5 {6-inch}		THICKNESS	FT	COL	LAR 🚬	
PURGE BEGIN	1510	END 161	<i>rQ</i>	OTAL VOL,	130	
RATE <i>Oil</i> L/MIN PURGING	1910 P	URGING LOT	•	PURGED (purge rate (L/min) :	1,38 duration (m	GAL in) x 0.26 gal/L)
PURGE DATA VOLUME PURGED pH SpC (c	ond) TURBIDITY	DISSOLVED O2	TEMPERATURE	DEDOV DOTENTAL	LWATER	1
Time (L) (units) (mS	(NTU)	(mg/L)	(°C)	REDOX POTENTIAL (mV)	LEVEL	Comments
1513 C 8118 0.2 1527 2 9.54 0,15	8 - 6 (1)	9.09	13,90	-2145	12.86	
1537 1 9.60 0.10		3.56	10.68	-186,1	13.12	slow pump
1547 1 9.69 0.1		2.30		-180.7	13.12	
1557 1 9.76 0.10	58 46	1.60	13,44	-176.3	13.12	
1607 1 9.82 0.16		1.23	13.30	-161,0	13.12	
1613 0.6 9.86 0.1		1.13		- 170.5	13,12	
1619 0.6 9.88 0.1	56 4,1	1.02	13,25	-173,1	13,12	

EQUIPMENT DOCUMENTATION TYPE OF PUMP TYPE OF TUBING	TYI	PE OF PUMP MATERIA		YPE OF BLADDEF	MATERIAL	(if applicable)
X PERISTALTIC TEFLON OR T		POLYVINYL CHLORIE		TEFLON		(ii applicable)
SUBMERSIBLE X HIGH DENSIT	/ POLYETHYLENE	STAINLESS STEEL		X OTHER <u>NA</u>		
OTHER OTHER	X	OTHER <u>NA</u>				
PURGE OBSERVATIONS Tubing Intake @ 15.65		NOTES				
Tubility Illiane & 19, 20		VOC (modifie		reservation HCL	Time Colle	ected
					-	
					, n	
SIGNATURE:						

AMEC E&I, Inc.									
FIELD DATA RECORD - GROUND	OWATER SAMPLING V	IA BAILER							
Former Taylor Instruments PROJECT 2012 Semi-Annual Sampling Event			DATE 11	11/12					
SITE ID BR-02	SITE TYP	Monitor Well	المحادث المحادث	7 1 1 0					
	42 JOB NUMB	000105000000]						
WATER LEVEL / PUMP SETTINGS ME	EASUREMENT POINT		1						
		PROTECTIVE CASING STICKUP (FROM GROUND) FT	PROTECTIVE CASING / WELL DIFFERENCE	45 _{FT}					
INITIAL DEPTH 21,83 FT WE	ELL DEPTH 440 FT	PID AMBIENT AIR PPM	WELL 4	F IN					
	REEN NGTH FT	PID WELL MOUTH PPM	WELL YES	NO N/A					
		PRODUCT THICKNESS FT	CASING LOCKED COLLAR						
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5	(6-inch))		***************************************	****					
PURGE LOO LMIN PURGING		END JRGING 1135	TOTAL VOL. PURGED (purge rate (L/min) x duration (mir	GAL n) x 0.26 gal/L)					
PURGE DATA VOLUME PURGED pH	SpC (cond) TURBIDITY	DISSOLVED O2 TEMPERATURE	REDOX POTENTIAL WATER						
1028 (L) (units)	(mS/cm) (NTU) 0.480 4.8	(mg/L) (°C) 3.58 14.03	(mV) LEVEL -132.9 22.0	Comments					
1051 2 7.64	0.470 13	0.93 14.15	-148,8 22.11	slowed pum					
1106 7.65	0.454 1.8	0,63 13,80	-149.9 22.15						
	0,472 1,3 0,472 3.8	0.68 13.62 0.63 13.66	-151.6 22.16						
1125 0,0 2,00	0.0	0109 17.00	101.6 22.10						

	UBING TYP ON OR TEFLON LINED DENSITY POLYETHYLENE	PE OF PUMP MATERIAL POLYVINYL CHLORIDE STAINLESS STEEL	TYPE OF BLADDER MATERIAL (TEFLON OTHER NA	(if applicable)					
		OTHER NA	<u> </u>						
PURGE OBSERVATIONS Tubing Intake @ 24 CW		NOTES VOC (modified list)	Preservation Time Collect						
SIGNATURE:									

AMEC E&I, Inc.	
FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER	
PROJECT Former Taylor Instruments 2012 Semi-Annual Sampling Event	٦
SITE ID BR-03 SITE TYPE Monitor Well	
SITE ACTIVITY START 1218 END JOB NUMBER 3031052006.22	
WATER LEVEL / PUMP SETTINGS MEASUREMENT POINT TOP OF WELL RISER PROTECTIVE PROTECTIVE CASING STICKUP OTHER (FROM GROUND) TOP OF PROTECTIVE CASING STICKUP OTHER (FROM GROUND) TOP OF PROTECTIVE CASING STICKUP OTHER (FROM GROUND)	
INITIAL DEPTH 753 WELL DEPTH 1/6 PID WELL	
FINAL DEDTU	I/A
TOWATER DID FT LENGTH NH FT MOUTH PPM INTEGRITY: CAP	I/A —
DRAWDOWN 1.3 FT DRAWDOWN VOLUME 0.845 GAL THICKNESS FT COLLAR ((initial - final) x 0.16 (2-inch) or (0.65 (4-inch)) x 1.5 (6-inch))	_ _ _
PURGE RATE 0,115 L/MIN PURGING 1221 END PURGING 1328 TOTAL VOL. PURGED (purge rate (L/min) x duration (min) x 0.26 gal/L	١
PURGE DATA	
Time	s
1242 2 8.68 0,508 31.7 0.45 15,65 -196.2 8.49 downed	DUM
1255 1.5 8.72 0.509 30.6 0.36 15.8) -216.2 8.77	
1323 1 8.76 0.505 28.0 0.38 1553 1701 983	
1328 0.6 8.78 0.506 27.0 0.37 15,50 -179,3 8.83	
EQUIPMENT DOCUMENTATION	
TYPE OF PUMP TYPE OF PUMP TYPE OF PUMP MATERIAL TYPE OF BLADDER MATERIAL (if applicable) X PERISTALTIC TEFLON OR TEFLON LINED POLYVINYL CHLORIDE TEFLON STAINLESS STEEL X OTHER NA OTHER NA	
PURGE OBSERVATIONS Tubing Intake @ 10.5 NOTES Preservation Time Collected 1330	
GIGNATURE: MATTER AND A STATE OF THE STATE O	

AMEC_E&I, Inc.							
FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER							
PROJECT Former Taylor Instruments 2012 Semi-Annual Sampling Event DATE	7						
SITE ID BR-04 SITE TYPE Monitor Well	4						
SITE ACTIVITY START 835 END JOB NUMBER 3031052006.22							
WATER LEVEL / PUMP SETTINGS MEASUREMENT POINT TOP OF WELL RISER PROTECTIVE PROTECTIVE TOP OF PROTECTIVE CASING STICKUP CASING / WELL OTHER (FROM GROUND) TOP OF PROTECTIVE CASING (FROM GROUND) OTHER FIT DIFFERENCE OTHER							
INITIAL DEPTH 1/1/2 PID WELL 1/4							
FINAL DEPTH SOREEN SORE							
	-						
DRAWDOWN O-O2 FT VOLUME O(initial - final) x 0.16 (2-inch) or x 0.65 (4-inch)) DRAWDOWN O-O3 FT VOLUME O-O13 GAL PRODUCT THICKNESS FT COLLAR CASING CASING THICKNESS FT COLLAR	- -						
PURGE PEGIN FINA							
PURGE RATE 15 L/MIN PURGING 085) END PURGING 0952 TOTAL VOL. PURGED 1.83 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)							
PURGE DATA VOLUME PURGED pH SpC (cond) TURBIDITY DISSOLVED O₂ TEMPERATURE REDOX POTENTIAL WATER							
Time (L) (units) (mS/cm) (NTU) (mg/L) (°C) (mV) LEVEL Comments (NTU) (T) (T) (T) (T) (T) (T) (T) (T) (T) (T							
0914 2 8.21 0.100 6.9 0.66 15.47 -171.9 17.36	_						
0928 2 9.52 0.101 7.3 0.48 15.27 -202.7 17.36							
0019 0 0 9 69 0 100 500 100 100 100 17.00	\dashv						
0952 0.6 8,71 0.102 7.4 0.39 14.98 -1657 17.36	_						
	\neg						
	1						
	-7						
EQUIPMENT DOCUMENTATION TYPE OF PUMP 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	ł						
OTHER OTHER X OTHER _NA							
PURGE OBSERVATIONS Tubing Intake & 20.3							
Preservation Time Collected VOC (modified list) HCL 0755	İ						
00 00 000							
BRO4MSD							
DKOU O							
IGNATURE:							

AMEC E&I, Inc.									
FIELD DATA RECORD - GROUNDWATER SAMPLING VIA BAILER									
Former Taylor Instruments PROJECT 2012 Semi-Annual Sampling Event	7		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 MEASURE	EMENT POINT			<u> </u>					
	OF PROTECTIVE CASING CA	ROTECTIVE ASING STICKUP ROM GROUND) FT	PROTECTIVE CASING / WELL DIFFERENCE	0.3 FT					
INITIAL DEPTH 16.95 FT WELL DE		D MBIENT AIR PPM	WELL DIAMETER	6 IN					
FINAL DEPTH 16.93 FT SCREEN LENGTH	1 6/1	D WELL PPM		YES NO N/A					
DRAWDOWN 0.02 FT VOLUM		RODUCT HICKNESS FT	CASING LOCKED COLLAR	Z = Z Z = Z					
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch									
PURGE 125 L/MIN PURGING	1012 PUR		TOTAL VOL. PURGED (purge rate (L/min) x duratio	GAL					
PURGE DATA VOLUME PURGED pH SpC (DISSOLVED O₂ TEMPERATURE	REDOX POTENTIAL WAT	·					
Time (L) (units) (ms) (ms) (9.08 0.10)	3 46,9	(mg/L) (°C) 7,95 14,95	(mV) LEVE						
1028 1.5 9.41 0.0		5.95 15.19	+11.0 16.9	3					
1036 1 9.45 0,0		5.69 15.03	15.1 16.9						
1044 9,47 0,0	99 19,5	5,58 15.27	8.6 16.9	(3)					
EQUIPMENT DOCUMENTATION TYPE OF PUMP: TYPE OF TUBING	a <u>TYPE</u>	OF PUMP MATERIAL	TYPE OF BLADDER MATE	RIAL (if applicable)					
		POLYVINYL CHLORIDE	TEFLON						
	1	STAINLESS STEEL	X OTHER NA						
		OTHER NA							
PURGE OBSERVATIONS Tubing Intake @ 1795	N	OTES	1	ne Collected					
	1	VOC (modified list)	HCL						
(all the									
SIGNATURE:	The second secon								

AMEC E&I, Inc.				,		
 FIELD DATA RECORD - GROUNDWAT	FR SAMPLING VI	Δ RΔII FR				
Former Taylor Instruments		A DAILLI			1 1	. /. // -
PROJECT 2012 Semi-Annual Sampling Event		· · · · · · · · · · · · · · · · · · ·		1	DATE 1	1/1/12
SITE ID PR-15	SITE TYPE	Monitor Well				
SITE ACTIVITY START 1415 END	JOB NUMBE	R 3031052006	.22			
	MENT POINT	,,,,,				
	F PROTECTIVE CASING C	PROTECTIVE CASING STICKUP FROM GROUND)	FT	PROTECTIVE CASING / WEI DIFFERENCE	L 0	,35 _{FT}
INITIAL DEPTH 18.05 FT WELL DEP		PID AMBIENT AIR	PPM	WELL DIAMETER	6	, IN
FINAL DEPTH 21.43 SCREEN LENGTH	1 1 1 mg	PID WELL MOUTH	PPM		CAP YES	NO N/A
DRAWDOWN 3,38 FT DRAWDOWN VOLUME		PRODUCŤ THICKNESS	FT	LOC	CAP SING SKED LAR	
((Initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))						
PURGE OI LIMIN PURGING	1420 PUF	END [7	204	OTAL VOL.	~8	GAL
vanes				(purge rate (L/min)	x duration (mi	in) x 0.26 gal/L)
PURGE DATA VOLUME PURGED PH SpC (or 1)		DISSOLVED O ₂	TEMPERATURE	REDOX POTENTIAL	WATER	0
Time (L) (units) (mS/c) 1423 & 9.73 0.09		(mg/L) 5,68	13,04	-164B	18.19	Comments
1444 2 11.04 0.07		3.71	13,77	- 85,4	18.50	
1511 3 11.26 0.08		3.58	14.88	-78.3	19.0	stoned pump
1558 6 11.36 0.08		472	15.34	-66.4	20.1	turned purpul
1620 6 11.34 0.08	A 1	5.16	15.92	-613	21,00	turn pump dexil
1636 2 11.32 0.08		4.96	15.20	-58.3	21.21	
1646 Q 11,29 0.08 1654 0.6 11,30 0.07	F-9	4,53	15.41	-59.9 -58.9	21.46	
1654 0.6 11.30 0.07 1704 0.6 11.28 0.07	19 <u>3.0</u> フ 2.フ	4.59 4.55	12.93	-55.9	21.46	
1704 0.6 11.20 0.07	/ 2./	-4,0,5	10017	- 2004	21173	
			<u> </u>			
EQUIPMENT DOCUMENTATION IYPE OF PUMP TYPE OF TUBING	TYPE	OF PUMP MATER	IAL	TYPE OF BLADDE	R MATERIAL	. (if applicable)
X PERISTALTIC TEFLON OR TI	EFLON LINED	POLYVINYL CHLOF	RIDE	TEFLON		
SUBMERSIBLE X HIGH DENSITY	POLYETHYLENE :	STAINLESS STEEL		X OTHER <u>NA</u>		
OTHER OTHER	X	OTHER <u>NA</u>				
PURGE OBSERVATIONS Tubing Intake	1	NOTES		Preservation	Time Colls	ected
the state of the	An In	VOC (modi	fied list)	HCL	1206	
& per historical events will draw	A down	\Box				
& per historical events will draw to ~ 21.5' and then slow pump	aown					
1 100						
SIGNATURE:						

AME	2 E8	kl, Inc.									
			D - CBOI	INDWATE:	R SAMPLING	C VIA	DAILED				
					n SAWFLIIN	G VIA	DAILEN				
PROJECT	Former Taylor Instruments PROJECT 2012 Semi-Annual Sampling Event								_	DATE	Approximation of the same of t
SITE ID	QA	TB-01			SIT	E TYPE	Monitor W	/ell			
SITE ACTIV	VITY	START	- END	galaction (description)	JOB N	NUMBER	30310520	06.22]		
WATER L	EVEL/	PUMP SETTIN	vgs	MEASUREMEN							
					VELL RISER PROTECTIVE CASIN	NG CA	ROTECTIVE ASING STICKUR ROM GROUND		PROTECTIVE CASING/WEL DIFFERENCE		NA FT
INITIAL DE TO WA		NA	FT	WELL DEPTH	NA FI	PII AN	D MBIENT AIR	NA PPM	WELL DIAMETER	1	NA IN
FINAL DE		NA	FT	SCREEN LENGTH	NA F		D WELL	NA PPN	WELL INTEGRITY: 0	YES	NO N/A
DRAWDO				RAWDOWN		_	RODUCT [TYCK TITY	CAS LÓC	ING	
((initial - fi	inal) x 0.	NA 16 (2-inch) or x 0	FT 0.65 {4-inch} or x	VOLUME (1.5 {6-inch})	NA GA	L) TH	IICKNESS	NA FT	COLI	LAR	
PURGE				EGIN			END		TOTAL VOL.		
RATE	L	NA L/	<u>MIN</u> PURG	ing [NA	PURG	ing	NA	PURGED (purge rate (L/min) >	NA x duration (m	GAL] in) x 0.26 gal/L)
PURGE D		LUME PURGED	рН	SpC (cond)) TURBIDIT	ΥΙΙ	DISSOLVED O ₂	TEMPERATURE	REDOX POTENTIAL		I
Time		(L)	(units) LAB PROV	(mS/cm)	(NTU)		(mg/L)	(°C)	(mV)	LEVEL	Comments
			LAB PROV								
			<u> </u>	<u> </u>							
				<u> </u>							
									!	····	·
FOLUPME	NT DO	CUMENTATION	N.							L	
TYPE C		TIC	TYPE C	<u>OF TUBING</u> EFLON OR TEFLO GH DENSITY PC		PC	OF PUMP MATE DLYVINYL CHLO TAINLESS STEE	ORIDE	TYPE OF BLADDER TEFLON OTHER NA		, (If applicable)
ОТ	HER		07	THER		0	THER <u>NA</u>				
PURGE OI		ATIONS				NC	DTES		Preservation	Time Coll	ected
_							X VOC (m	odified list)	HCL		
					•						
							<u></u>			- , ,	
					•		Q				
			7		and the second s						
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				DUNDWAT	ER SAMI	PLING V	IA BAILER	?					
PROJECT		ormer Taylor II	nstruments ual Sampling Ev	rent]					DATE 10	131/12		
SITE ID		AFB-01]	SITE TYP	PE Monitor	Well		<u></u>			
SITE ACTIV		_	3°50 EN	10 135 5]	JOB NUMB	ER 3031052	2006.22]				
WATER LEVEL / PUMP SETTINGS MEASUREMI TOP OF TOP OF					MENT POINT OF WELL RISER OF PROTECTIVE	E CASING	PROTECTIVE CASING STICKU (FROM GROUN	PROTECTIVE CASING/WELI DIFFERENCE	CASING / WELL				
INITIAL DEPTH TO WATER NA FT		WELL DEP	тн	NA: FT	PID AMBIENT AIR	D) NA F] WELL	N/					
FINAL DEI TO WA	FINAL DEPTH		IA FT	SCREEN LENGTH	NA	FT	PID WELL MOUTH	NA PPN	WELL NA PPM INTEGRITY:		YES NO N/A		
		DRAWDOWN			PRODUCT THICKNESS	NA FT	CASING						
((Initial - fi	inal) x (or x 1.5 (6-inch))		GAL	THORNESS	I INA I'II	OOL	-AII			
PURGE RATE		NA	L/MIN PU	BEGIN URGING	NA	PL	END JRGING	NA	TOTAL VOL. PURGED (purge rate (L/min) >	NA duration (mir	GAL n) x 0.26 gal/L)		
PURGE D		OLUME PURG	GED pH (units)	SpC (co (mS/c		JRBIDITY (NTU)	DISSOLVED (D ₂ TEMPERATURE (°C)	REDOX POTENTIAL (mV)	WATER LEVEL	Comments		
	$\overline{}$	 	Collected fr	rom DI water									
		~~~											
								**************************************					
	-												
							-						
	-												
TYPE C  X PE	F PUN	LTIC SIBLE		PE OF TUBING TEFLON OR TE HIGH DENSITY OTHER	/ POLYETHYLE	ENE	PE OF PUMP MA POLYVINYL CH STAINLESS STI OTHER <u>NA</u>	ILORIDE	TYPE OF BLADDER TEFLON X OTHER NA				
PURGE OI		VATIONS					NOTES VOC.	(modified list)	Preservation HCL	Time Colle			
SIGNATURE	≣:	W	)	16	? 								

AME	C E	&I, Inc.							1040				and the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of the same temperature of th
l													
FIELD	DA	TA RECOR	D - GROU	NDWAT	ER SA	MPLING	G VI	A BAILE	:R				
PROJECT		Former Taylor Instru 2012 Semi-Annual S	uments Sampling Event									DATE (	0/3/10
SITE ID	ITE ID QARB-01					SITE	E TYPE	Monit			r		
SITE ACTIV	VITY	START 17	tO END	1745		JOB N	UMBE	R 30310	052006	5,22			
WATER L	EVE	L / PUMP SETTIN	IGS	MEASUREM									
				TOP OF	PROTEC	TIVE CASIN	G C	PROTECTIVE CASING STIC FROM GROU	CKUP	NA F	PROTECTIVE CASING / WEL DIFFERENCE		IA FT
INITIAL DEPTH WELL DEPTH TO WATER NA FT NA		NA FT		PID AMBIENT AIF		NA PPM	WELL DIAMETER		JA IN				
FINAL DEPTH NA FT		FT	SCREEN LENGTH		NA FI	PID WELL NA PP				WELL YES NO N/A M INTEGRITY: CAP			
DRAWDO				-  RAWDOWN		~~~	 ] F	PRODUCT			CAS LOC	SING	
((initial - f	inal) x	NA : 0.16 {2-inch} or x 0	FT   FT   0.65 (4-inch) or >	VOLUME[ : 1.5 {6-inch})	NA	GAL	<u>-</u> ] '	HICKNESS	I	NA FT	COL	LAH	
PURGE RATE		NA L/	BE MIN PURC	EGIN EING	NA		PUF	END RGING		NA	TOTAL VOL.	NA	GAL
						4.15		****		4 1/	(purge rate (L/min)	x duration (m	in) x 0.26 gal/L)
PURGE D		OLUME PURGED	pH (units)	SpC (cor		TURBIDIT\	Y	DISSOLVEI	002	TEMPERATURE (°C)	REDOX POTENTIAL	WATER LEVEL	Comments
	Use	ed Peristaltic pump	and clean tubing	to collect san	nple from [	OI water							
										·····			
							_			,			
			***										,
							-						
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	$\dashv$												
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## 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

					Screer	Interval	Survey Coordinates			Well Material	Completion			
Well ID	Date Installed	Well Purpose/Type	Well Location	Boring Depth	Well Depth	Тор	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	Χ		
BR-02	09/02/97	Monitor	Perimeter	44.0	44.0	NA	NA	750541.81	1149964.51	532.39	Stainless / Open	Χ		
BR-03	09/02/97	Monitor	Perimeter	40.1	40.1	NA	NA	750552.93	1149641.68	536.32	Stainless / Open			Х
BR-04	09/03/97	Monitor	South Source	44.2	44.2	NA	NA	750322.96	1149422.13	532.68	Stainless / Open	Х		
BR-10	07/28/00	Monitor	South Source	47.0	47.0	NA	NA	750426.90	1149411.76	532.29	Iron / Open	Х		
BR-15	07/26/00	Monitor	North Source	72.0	72.0	NA	NA	750293.39	1149980.43	531.69	Iron / Open	Х		
OB-04	09/05/97	Monitor	South Source	17.5	17.5	2.5	17.5	750329.65	1149422.19	532.80	PVC	Х		
OB-06	07/19/00	Monitor	South Source	17.0	17.0	6.8	16.8	750421.89	1149461.50	532.60	PVC	Х		
OB-08	07/28/00	Monitor	North Source	25.5	25.3	15.3	25.1	750279.00	1149957.45	531.64	PVC	Х		
TW-04	03/15/96	Monitor	Perimeter	17.5	17.3	12.3	17.3	750552.18	1149648.54	536.34	PVC			Х
TW-09	03/30/96	Monitor	Perimeter	16.0	16.0	11.0	16.0	750542.22	1149971.84	532.30	PVC	Х		
TW-17	03/13/96	Monitor	Perimeter	15.0	15.0	10.0	15.0	750373.39	1150088.34	531.86	PVC			Х
TW-20	03/13/96	Monitor	Perimeter	15.0	15.0	10.0	15.0	750547.88	1150118.75	532.42	PVC			Х
W-5	09/15/82	Monitor	Perimeter	24.0	20.5	15.5	20.5	750248.88	1150056.27	531.52	PVC	Х		

Prepared by/Date: KJD 12/15/10

Checked by/Date: CRW 1/18/11