



VOLUNTARY REMEDIATION PROGRAM STATUS REPORT NO. 6

**Former Automatic Sprinkler Site
162 East Meadowlake Parkway
Swainsboro, Emanuel County, Georgia
HSI Site No. 10268**

Submitted to:

Georgia Department of Natural Resources
Environmental Protection Division
Hazardous Site Response and Remediation Branch
Suite 1462, East Tower
2 Martin Luther King Jr. Drive, SE
Atlanta Georgia 30334

Submitted by:

**Scott Technologies, Inc.
9 Roszel Road
Princeton, New Jersey 08540**

Prepared by:

**AMEC Environment & Infrastructure, Inc.
1075 Big Shanty Road
Kennesaw, Georgia 30144**

February 2015

AMEC Project No. 6125-08-0149



February 23, 2015

Mr. David Brownlee
Georgia Environmental Protection Division
Response and Remediation Program
2 Martin Luther King Jr. Drive, Suite 1462 East Tower
Atlanta, Georgia 30334

Subject: **Voluntary Remediation Plan Status Report No. 6**
Former Automatic Sprinkler Site, Swainsboro, Georgia
HSI Site No. 10268
AMEC Project 6125080149

Dear Mr. Brownlee:

AMEC Environment & Infrastructure, Inc. is pleased to provide Georgia Environmental Protection Division with the attached Status Report No. 6 for Voluntary Remediation Program activities for the Former Automatic Sprinkler Site in Swainsboro, Emanuel County, Georgia (HSI Site No. 10268). The report covers the activities conducted between July 2014 and January 2015.

Should you have any questions, please contact us at (770) 421-3400.

Sincerely,

AMEC Environment & Infrastructure, Inc.

Tanya R. Kinnard, CHMM *dp* with permission
Senior Professional

Gregory J. Wrenn, P.E.
Associate/Project Manager

GJW:dp

Attachment: VRP Status Report No. 6

cc: Julia Ispentchian, Tyco International
Joseph Janeczek, Tyco International
Anita Bucci, Kongsberg Automotive
Jack Bareford, Swainsboro Emanuel County Joint Development Authority

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1.0 PE CERTIFICATION

"I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.

Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.

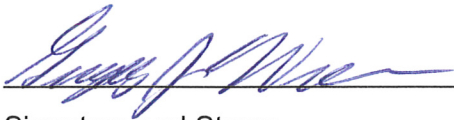
The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Gregory J. Wrenn/ Georgia P.E. #25565

Printed Name and GA PE Number

Feb. 23, 2015

Date



Signature and Stamp



2.0 INTRODUCTION AND BACKGROUND

This Voluntary Remediation Program Semi-Annual Status Report No. 6 (Status Report) was prepared in accordance with the Voluntary Remediation Program (VRP) for the Scott Technologies site, Hazardous Site Inventory (HSI) No. 10268. The Georgia Environmental Protection Division (EPD) letter, dated February 24, 2012, accepted the site into the VRP and requested submittal of semi-annual VRP status reports. This sixth Status Report covers the activities conducted subsequent to Semi-Annual Status Report No. 5 submitted to the EPD on August 19, 2014.

The site is located at 162 East Meadowlake Parkway, Swainsboro, Georgia. Figure 1 shows the site location. Figure 2 presents the site layout, existing monitoring well locations, and previous surface water sampling locations. This 6.91-acre property is part of a larger industrial development located southeast of the center of Swainsboro. East Meadowlake Parkway forms the northern boundary of the site. Approximately 47 acres of undeveloped land are located north of the site and East Meadowlake Parkway. A publicly owned wastewater treatment plant is located to the northwest. A manufacturing facility occupies property to the east. Space Place Road and another industrial facility (Space Place) are located to the south.

Before 1967, the property was agricultural or lightly wooded land. The property was initially developed by Automatic Sprinkler Corporation of America (ASCOA), a subsidiary of Figgie International, Inc. Figgie International changed its name to Scott Technologies, Inc. (STI). STI Properties, Inc. is an affiliate of Scott Technologies, Inc. and is responsible for their real estate operations. In 2001, Tyco Fire Protection Products acquired STI, but STI is the legal entity responsible for addressing the environmental issues related to operations of the former ASCOA site. The operation at 162 East Meadowlake Parkway reportedly began in 1967 and continued until approximately 1992. In 1994, the property ownership was transferred to the Swainsboro-Emanuel County Joint Development Authority. The Swainsboro-Emanuel County Joint Development Authority currently owns the property and leases the facility to Kongsberg Automotive. Kongsberg Automotive manufactures engine parts at the facility.

Early environmental investigations (1997 through 2000) were focused on metal (lead and zinc) impacts to soils. Soils with lead and zinc impacts were excavated and disposed of properly. Confirmation sampling indicated that the formerly metal-impacted areas complied with Type 3 Risk Reduction Standards (RRS). However, during the course of the investigations, volatile organic compounds (VOCs) were detected in the subsurface. The VOC impacts have been the primary focus of the recent environmental work at the site. A summary of applicable RRS is included as Table 1. The environmental history of the site is summarized as follows:

- The site was used for manufacturing fire control components from 1967 to 1992.
- The site was listed on the Georgia Hazardous Site Inventory (HSI) in June 1994.
- Figgie Properties conveyed the property to the Swainsboro-Emanuel County Joint Development Authority in November 1994.
- A Consent Order for assessment/remediation of the site under the Georgia Hazardous Site Response Act (HSRA) was executed between Georgia EPD and Figgie Properties in October 1997.
- Assessment and remediation activities were conducted between 1998 and 2002, including the removal of metal-impacted soil, and two short-term multi-phase extraction events, which

removed volatile organic compounds (VOCs) in soil vapor and groundwater from a small isolated "hot spot" around MW-8.

- A Corrective Action Plan (CAP) containing contaminant transport modeling and proposing to address VOC-impacted groundwater via monitored natural attenuation (MNA) was submitted to EPD in December 2002. BIOCHLOR (an EPA model for predicting potential chlorinated VOC concentrations over time and distance) was used to evaluate the fate and transport of VOCs in groundwater. The U.S. Environmental Protection Agency (EPA) MNA Screening Matrix screening score indicated "strong evidence for natural anaerobic biodegradation of chlorinated constituents."
- EPD approved MNA as a potentially appropriate corrective action in August 2003 and requested continued MNA monitoring to evaluate trends in contaminant concentrations.
- MNA demonstration monitoring was conducted between 2003 and 2010.
- In February 2011, based upon the predicted 74-year remedial period, the HSRA program requested evaluation of corrective action enhancements to reduce the clean-up time.
- In April 2011, STI submitted the VRP Application in order to enroll in the Georgia Voluntary Remediation Program. An EPD comment letter dated September 8, 2011 requesting additional information resulted in a VRP Application Addendum submitted by STI on November 14, 2011. EPD letters dated February 24, 2012 accepted STI into the VRP and put forth comments to be addressed during implementation of the VRP.
- VRP Status Report No. 1 and responses to EPD comments (February 24, 2012) were submitted to EPD on August 23, 2012.
- EPD issued comments on the VRP Status Report No. 1 in correspondence dated December 27, 2012.
- VRP Status Report No. 2 and responses to EPD comments (December 27, 2012) were submitted to EPD on February 20, 2013.
- EPD issued comments on VRP Status Report No. 2 in correspondence dated April 9, 2013.
- A 24-hour high vacuum extraction (HVE) event was conducted beginning on April 30, 2013 using MW-8 and MW-19 as extraction wells. Approximately 1,600 gallons of fluid were recovered during the HVE event. The extracted fluids were treated on-site using an air stripper and then transported to the Swainsboro publicly owned treatment works (POTW) for disposal following confirmation of treatment to acceptable levels.
- VRP Status Report No. 3, which addressed EPD comments dated April 9, 2013, was submitted to EPD on August 14, 2013.
- EPD issued comments on VRP Status Report No. 3 in correspondence dated September 13, 2013.
- VRP Status Report No. 4, which addressed EPD comments dated September 13, 2013, was submitted to EPD on February 20, 2014.
- A 24-hour HVE event was conducted beginning on July 8, 2014 using MW-8 and MW-19 as extraction wells. Approximately 1,250 gallons of fluid were recovered during the HVE event. The extracted fluids were treated on-site using activated carbon and then transported to the Swainsboro POTW for disposal following confirmation of treatment to acceptable levels.
- VRP Status Report No. 5, which addressed EPD comments dated May 23, 2014, was submitted to EPD on August 19, 2014.
- EPD issued comments on VRP Status Report No. 5 in correspondence dated December 4, 2014, which are addressed herein.

3.0 WORK PERFORMED DURING REPORTING PERIOD

The activities currently identified to be conducted at the STI site under the VRP are outlined in the VRP Application and VRP Application Addendum, dated April 29, 2011, and November 14, 2011, respectively, and the EPD VRP approval and comment letters dated February 24, 2012. A routine semi-annual groundwater and surface water sampling event was conducted at the site in December 2014. Additional voluntary remediation activities (not specified in the VRP Application or VRP Application Addendum), have included high vacuum extraction (HVE) events completed in May 2013 and July 2014 to address the area of higher VOC concentrations around monitoring wells MW-8 and MW-19. Additional sampling events of MW-8 and MW-19 were conducted in September and November 2014 to further evaluate the effectiveness of the July 2014 HVE event.

3.1 Financial Assurance Update

Documentation of financial assurance for implementation of the VRP at the site was submitted to EPD on May 30, 2012. The financial assurance mechanism is an irrevocable letter of credit for \$525,000, which is well in excess of the \$190,000 estimated cost to implement the VRP submitted in the VRP Application Addendum. The letter of credit automatically renews each year on March 25. The current estimated cost to implement the VRP is included as Table 2. The estimate contains a contingency cost allowance for conducting additional HVE events (that were not part of the approved VRP). The current estimated cost for continued VRP implementation is \$124,360. Based upon the current site data, the financial assurance appears sufficient for completion of the VRP implementation at the site.

3.2 Groundwater and Surface Water Sampling

Groundwater and surface water sampling was conducted on December 2-3, 2014. Prior to collecting groundwater samples, the depth to water was measured in the site monitoring wells. The depth to water measurements and corresponding groundwater elevations for this gauging event, as well as historical gauging data dating back to 2008, are summarized on Table 3. The December 2014 groundwater elevations in the shallow zone averaged approximately 0.37 foot lower in elevation than those measured during the June 2014 sampling event. The measured groundwater elevations in the wells screened in the deep zone averaged approximately 0.52 feet lower in elevation than those measured in June 2014. Shallow zone potentiometric surface maps for December 2014 and June 2014 are presented as Figures 3a and 3b, respectively. The shallow zone potentiometric surface maps continue to show groundwater flow generally to be northeast, which is consistent with historical data. Deep zone potentiometric surface maps for December 2014 and June 2014 are presented as Figures 4a and 4b, respectively. Groundwater flow in the deep zone is generally to the east, and is consistent with historical data.

Groundwater samples were collected from shallow zone monitoring wells MW-4, MW-5, MW-6, MW-7, MW-8, MW-9/9R, MW-11, MW-12, MW-15, MW-18, MW-19, MW-20, and MW-21. A groundwater sample was also collected from deep zone monitoring well MW-20D.

Low flow/low stress purging methodology employing a peristaltic pump was used to purge and sample the monitoring wells in general accordance with USEPA Region 4 Science and Ecosystem Support Division (SESD) Groundwater Sampling Procedure SESDPROC-301-R3 (March 2013).

The samples were collected using a peristaltic pump by means of the “soda-straw” method as described in SESD 4.3.1.2.7. The groundwater samples were analyzed for site-specific VOCs using USEPA Method 8260B. Appendix A contains copies of groundwater sampling logs.

The analytical results for the December 2014 groundwater sampling event, including the supplemental sampling of MW-8 and MW-19 in September and November 2014, are summarized on Table 4, along with historical analytical results. Constituent concentrations were similar to prior results, with generally stable or decreasing trends. Appendix B shows concentrations versus time trends for monitoring wells with consistent detections of VOCs at concentrations exceeding the RRS. Figure 5 shows the results of the December 2014 event and the interpreted extent of VOCs in groundwater. No VOCs were reported above their method detection limits in monitoring well MW-20D during the December 2014 sampling event, thus indicating vertical delineation. VOCs were not detected in off-site monitoring wells. The laboratory analytical report is provided in Appendix E.

The sampling results from MW-8 following the July 2014 HVE event showed increases in concentrations of TCE, 1,1-DCE, 1,1,1-TCA in comparison to before the HVE event. The concentration of cis-1,2-DCE showed an initial increase in September followed by a notable decrease in December. Vinyl chloride concentrations also exhibited a notable decrease in December 2014. In MW-19, the post-HVE event TCE and 1,1-DCE concentrations increased and fluctuating cis-1,2-DCE and vinyl chloride concentrations were observed.

Surface water samples SW-5 and SW-6 were collected from the unnamed tributary of Hughes Prong (which serves as the nearest discharge boundary for shallow groundwater) as well as the drainage ditch along the eastern property boundary. This unnamed tributary is approximately 530 feet down gradient of MW-8. Surface water samples SW-2 and SW-4 were collected from the drainage ditch downgradient of the culvert that flows beneath Meadowlake Parkway, but prior to the point where the ditch discharges to the unnamed tributary of Hughes Prong. The surface water sample locations are shown on Figure 6. It is thought that these locations are more representative of groundwater to surface water discharge than surface water samples collected from the low-lying area immediately east of the site, which does not have a clearly defined channel and is more likely a groundwater recharge area. The surface water samples were analyzed for site-specific VOCs using USEPA Method 8260B. The groundwater and surface water samples were packaged in ice and transported by AMEC personnel under chain-of-custody protocol to the laboratory, Analytical Environmental Services (AES) in Atlanta, Georgia. The laboratory analytical report is provided in Appendix E.

As shown on Table 5, all surface water sample results from the December 2014 sampling event were below the detection limits for all analyzed constituents. This is consistent with past results. The analytical results for surface water samples are summarized on Figure 6.

3.3 EPD Comment Letter (December 4, 2014)

The EPD’s comment letter, dated December 4, 2014, recommended that, in addition to the Uniform Environmental Covenant (UEC) planned for the STI site, a UEC be established for the adjacent property east of the site because of the potential for future groundwater impacts, unless additional

groundwater data can be provided to clearly demonstrate the containment of the groundwater plume within the confines of the STI site. While researching ownership of the adjacent property in local tax records, it was discovered that the immediately adjacent parcel to the east is actually a narrow strip of land owned by the company that also owns the parcel south of the STI site (see tax map in Appendix C). Therefore, if impacted groundwater is migrating in an easterly direction there could potentially be the need to establish an UEC on two parcels to the east. It is noted that the current and historic potentiometric surface maps indicate flow is more to the north than the east, and monitoring wells MW-9/9R and MW-11, which are located along the STI property boundary, have not shown VOC impacts above drinking water standards in 15 years of monitoring. Monitoring well MW-7, which is located immediately east of MW-19, has also not shown VOC impacts in three years of monitoring. While sharing EPD's concern regarding off-site migration to the east, at this time STI prefers to continue to focus on additional remediation of higher concentration VOCs impacts in the vicinity of MW-8 and MW-19 before approaching the property owners to the east regarding an UEC on their property, which may not be necessary.

4.0 GROUNDWATER MODELING UPDATE

The groundwater fate and transport BIOCHLOR model was updated as part of this Status Report to evaluate current contaminant concentrations in comparison to earlier model predictions. All other input parameters, other than the year, were held constant for the updated model output. The 2014 data is assumed to be 18 years since the release. The average of the 2014 sampling data, including duplicates, was used as the representative concentration for the well for comparison to model predictions. In the three primary monitoring wells used for model calibration (MW-8, MW-15, and MW-20), actual 2014 VOC concentrations continue to correlate reasonably well to the initial model predictions, thus indicating that the potential surface water receptor will not be impacted. The updated model results are presented in Appendix D.

5.0 CONCLUSIONS

The December 2014 groundwater flow direction is consistent with previous data. No VOC impacts were detected in the deeper zone, no surface water impacts were detected, and the shallow groundwater VOC plume appears to be generally degrading and shrinking. Down gradient monitoring wells MW-9R and MW-11 are non-detect for VOCs at the property line. Down gradient offsite monitoring wells MW-15 and MW-7 are non-detect for VOCs. The supplemental HVE event conducted in July 2014 recovered an estimated 181 pounds of chlorinated compounds, and continued monitoring will help to determine the effectiveness of the HVE events and ongoing MNA. The land surrounding the site is industrial or undeveloped and is supplied with public water. Therefore, no complete pathways for exposure to contaminants are present. Vapor intrusion modeling does not indicate that the VOCs in groundwater pose a risk to on-site structures. The data does not suggest that revisions to the conceptual site model are necessary.

The groundwater analytical data continues to support MNA as an appropriate corrective action for the site. The BIOCHLOR predictions do not indicate that contaminants will affect the nearest point of exposure (POE), the unnamed tributary of Hughes Prong. The previous BIOCHLOR predictions indicate an estimated cleanup timeframe of approximately 74 years before MNA will reduce on-site concentrations to drinking water levels. Contaminant concentrations exceeding drinking water levels appear confined to the former STI property. Therefore, a UEC will be executed for the property to prohibit the use of groundwater. It is anticipated that the UEC will be in place by the end of the 5-year VRP evaluation period. Additional HVE events, or other remediation enhancements, to reduce contaminant mass, to limit the potential for off-site contaminant migration, and to help accelerate the cleanup timeframe continue to be considered. The next routine groundwater sampling event will be conducted in the June 2015 timeframe with the next VRP status report scheduled for submittal by August 24, 2015. An updated milestone schedule for VRP implementation activities is included as Figure 7.

6.0 PROFESSIONAL HOURS SERVICES THIS PERIOD

AMEC Environment & Infrastructure, Inc. has provided 181.4 professional service hours for VRP implementation from July 11, 2014 through January 23, 2015. The registered professional engineer responsible for implementation of the VRP at this site is Mr. Gregory Wrenn. Mr. Wrenn has personally charged 20.5 labor hours to the project to direct and review the various aspects of implementation of the VRP during this reporting period. Table 6 shows a monthly summary of hours invoiced and a description of services for this reporting period.

TABLES

Table 1
Summary of Delineation Criteria and Cleanup Standards

Soil Constituents	Delineation Criteria	Type 3 Surface Soil Cleanup Value	Type 3 Subsurface Soil Cleanup Value	RRS Data Source
	mg/kg	mg/kg	mg/kg	
Arsenic	20	38	41	Type 3, Jan 2000 CAP
Barium	1000	1000	1000	Type 3, Jan 2000 CAP
Cadmium	2	39	39	Type 3, Jan 2000 CAP
Chromium	100	110	1200	Type 3, Jan 2000 CAP
Copper	100	1500	1500	Type 3, Jan 2000 CAP
Lead	75	400	400	{Revised per HSRA Rule Change}
Mercury	0.5	17	17	Type 3, Jan 2000 CAP
Nickel	50	420	420	Type 3, Jan 2000 CAP
Silver	2	10	10	Type 3, Jan 2000 CAP
Vanadium	100	100	100	Type 3, Jan 2000 CAP
Zinc	100	2800	2800	Type 3, Jan 2000 CAP
1,1,1-Trichloroethane	20	20	20	Type 3, VRP Appl Addendum, Appendix C
1,1,2,2-Tetrachloroethane	0.13	0.5	0.5	Type 3, VRP Appl Addendum, Appendix C
1,1,2-Trichloroethane	0.5	0.5	0.5	Type 3, VRP Appl Addendum, Appendix C
1,1-Dichloroethene	0.7	0.7	0.7	Type 3, VRP Appl Addendum, Appendix C
1,2-Dichloroethane	0.5	0.5	0.5	Type 3, VRP Appl Addendum, Appendix C
cis-1,2-Dichloroethene	7	7	7	Type 3, VRP Appl Addendum, Appendix C
Trichloroethene	0.5	0.5	0.5	Type 3, VRP Appl Addendum, Appendix C
Vinyl Chloride	0.2	0.2	0.2	Type 3, VRP Appl Addendum, Appendix C
Groundwater Constituents	mg/L	Groundwater Cleanup Value mg/L		
Cadmium	0.005	0.005		Type 3, Jan 2000 CAP
Chromium	0.1	0.1		Type 3, Jan 2000 CAP
Copper	1.3	1.3		Type 3, Jan 2000 CAP
Lead	0.015	0.015		Type 3, Jan 2000 CAP
Zinc	2	2		Type 3, Jan 2000 CAP
Mercury	0.002	0.002		Type 3, Jan 2000 CAP
1,1,1-Trichloroethane	0.2	13		Type 4, VRP Appl Addendum, Appendix C
1,1,2,2-Tetrachloroethane	0.001	0.005		Type 3 {Reporting Limit}, VRP Addendum, Appendix C
1,1,2-Trichloroethane	0.005	0.005		Type 3, VRP Appl Addendum, Appendix C
1,1-Dichloroethene	0.007	0.52		Type 4, VRP Appl Addendum, Appendix C
1,2-Dichloroethane	0.005	0.005		Type 3, VRP Appl Addendum, Appendix C
cis-1,2-Dichloroethene	0.07	0.2		Type 4, VRP Appl Addendum, Appendix C
Trichloroethene	0.005	0.0052		Type 4, VRP Appl Addendum, Appendix C
Vinyl Chloride	0.002	0.0033		Type 4, VRP Appl Addendum, Appendix C

mg/kg milligrams per kilogram
mg/L milligrams per liter

Revised by: LMS 7-26-12
Checked by: MKB 7-27-12

**TABLE 2
ESTIMATED COST FOR VRP IMPLEMENTATION
FORMER AUTOMATIC SPRINKLER, SWAINSBORO, GEORGIA**

Task #	Task Description	Quantity	Unit	Unit Cost	Total	Notes
1.0	Annual Sampling, Reporting, Inspections, & Maintenance					
	1.1 Semi-Annual Groundwater Sampling					
	Labor	2	event	\$3,000	\$6,000	Assumes 3 days/event, 2-man crew VOCs, hydrogen, methane, ethane ethene
	Laboratory Analytical	22	ea	\$280	\$6,160	
	Rental Equipment	2	event	\$800	\$1,600	
	Mobilization/Demobilization/Travel Expenses/Supplies	2	event	\$1,200	\$2,400	
	1.2 Semi-Annual Surface Water Sampling					
	Labor	2	event	\$500	\$1,000	Assumes 1 day/event, 2-man crew VOCs
	Laboratory Analytical	4	ea	\$80	\$320	
	Expenses/Supplies	2	ea	\$100	\$200	
	1.3 Reporting	2	ea	\$8,500	\$17,000	
	1.4 Other Costs (covenant, inspections, EPD comments/invoices)	1	ea	\$2,500	\$2,500	
	SUBTOTAL - Annual Costs				\$37,180	
2.0	Supplemental Hi-Vacuum Remediation Events	3	ea	\$15,000	\$45,000	
3.0	Post-Implementation Compliance Status Report	1	ea	\$20,000	\$20,000	
Year	Cost Description	Task 1	Task 2	Task 3	Yearly Cost	
2015	Annual Costs + HVR Event	\$37,180	\$15,000		\$52,180	
2016	Annual Costs + HVR Event	\$37,180	\$15,000		\$52,180	
2017	Annual Costs + CSR			\$20,000	\$20,000	
	TOTAL PROJECTED COST				\$124,360	

Prepared by: TRK 2/11/2015
Checked by: GJW 2/11/2015

The cost opinion is provided for budgetary purposes. Actual scope of work and costs may vary as additional information and formal cost estimates are obtained.

Table 3
Summary of Groundwater Elevations June 2008 Through December 2014

Well ID	TOC Elevation (FT MSL)	Groundwater Elevation		Depth to Water		Groundwater Elevation		Depth to Water		Groundwater Elevation		Depth to Water		Groundwater Elevation		Depth to Water		Groundwater Elevation		Depth to Water		Groundwater Elevation		Depth to Water	
		6/4/2008 (FT BTOC)	6/4/2008 (FT MSL)	4/14/2009 (FT BTOC)	4/14/2009 (FT MSL)	9/17/2009 (FT BTOC)	9/17/2009 (FT MSL)	11/30/2009 (FT BTOC)	11/30/2009 (FT MSL)	5/17/2010 (FT BTOC)	5/17/2010 (FT MSL)	11/18/2010 (FT BTOC)	11/18/2010 (FT MSL)	5/30/2012 (FT BTOC)	5/30/2012 (FT MSL)	12/13/2012 (FT BTOC)	12/13/2012 (FT MSL)	6/5/2013 (FT BTOC)	6/5/2013 (FT MSL)	12/3/2013 (FT BTOC)	12/3/2013 (FT MSL)	6/2/2014 (FT BTOC)	6/2/2014 (FT MSL)	12/1/2014 (FT BTOC)	12/1/2014 (FT MSL)
Shallow Aquifer																									
MW-1	292.71	NM	NM	6.49	286.22	10.68	282.03	9.62	283.09	9.21	283.50	11.56	281.15	NM	NM	12.63	280.08	9.74	282.97	10.58	282.13	8.82	283.89	9.61	283.10
MW-2	285.70	6.11	279.59	4.64	281.06	5.53	280.17	4.90	280.80	4.93	280.77	6.29	279.41	5.14	280.56	6.14	279.56	5.83	279.87	4.91	280.79	4.94	280.76	4.88	280.82
MW-3	281.17	3.30	277.87	1.86	279.31	2.70	278.47	2.35	278.82	2.31	278.86	3.58	277.59	2.31	278.86	3.03	278.14	2.98	278.19	2.70	278.47	2.51	278.66	2.98	278.19
MW-4	281.84	2.40	279.44	0.92	280.92	1.87	279.97	1.50	280.34	1.61	280.23	2.81	279.03	1.71	280.13	3.11	278.73	2.25	279.59	2.02	279.82	1.40	280.44	2.43	279.41
MW-5	286.71	6.57	280.14	4.00 ¹	282.71	6.22	280.49	6.29	280.42	6.18	280.53	7.86	278.85	*6.65	280.06	8.42	278.29	6.49	280.22	7.51	279.20	5.78	280.93	7.29	279.42
MW-6	281.00	4.51	276.49	2.52	278.48	4.34	276.66	3.85	277.15	3.68	277.32	5.04	275.96	4.40	276.60	5.32	275.68	4.16	276.84	4.72	276.28	3.59	277.41	4.69	276.31
MW-7	281.33	4.19	277.14	2.56	278.77	3.48	277.85	2.99	278.34	2.83	278.50	4.21	277.12	2.71	278.62	3.33	278.00	3.50	277.83	3.24	278.09	3.53	277.80	3.50	277.83
MW-8	281.28	3.69	277.59	1.82	279.46	3.24	278.04	2.73	278.55	2.64	278.64	3.96	277.32	2.13	279.15	3.20	278.08	3.36	277.92	3.05	278.23	3.06	278.22	3.21	278.07
MW-9R	278.31	3.70	274.61	1.74	276.57	3.41	274.90	3.00	275.31	2.25	276.06	4.40	273.91	2.51	275.80	3.16	275.15	3.00	275.31	3.48	274.83	2.70	275.61	3.14	275.17
MW-10	289.37	6.89	282.48	2.54	286.83	6.17	283.20	5.42	283.95	5.30	284.07	7.76	281.61	4.28	285.09	7.15	282.22	6.47	282.90	6.65	282.72	5.46	283.91	5.48	283.89
MW-11	281.77	4.50	277.27	3.11	278.66	4.06	277.71	3.58	278.19	3.39	278.38	4.75	277.02	3.27	278.50	3.93	277.84	4.10	277.67	3.79	277.98	3.95	277.82	4.11	277.66
MW-12	288.04	4.62	283.42	0.97	287.07	4.34	283.70	3.50	284.54	3.57	284.47	5.94	282.10	2.85	285.19	5.04	283.00	4.71	283.33	4.51	283.53	3.82	284.42	3.33	284.71
MW-15	280.22	6.87	273.35	6.04	274.18	6.63	273.59	6.36	273.86	6.30	273.92	7.12	273.10	6.47	273.75	7.05	273.17	6.59	273.63	6.72	273.50	6.31	273.91	6.19	274.03
MW-18	281.27	NI	NI	NI	NI	3.55	277.72	2.64	278.63	2.87	278.40	4.16	277.11	2.64	278.63	3.43	277.84	3.17	278.10	3.11	278.16	3.01	278.26	3.33	277.94
MW-19	281.80	NI	NI	NI	NI	4.13	277.67	3.23	278.57	3.00	278.80	2.81	278.99	*3.27	278.53	3.64	278.16	3.83	277.97	3.45	278.35	3.49	278.31	3.65	278.15
MW-20	282.99	NI	NI	NI	NI	5.15	277.84	4.77	278.22	4.53	278.46	5.78	277.21	4.45	278.54	5.24	277.75	5.18	277.81	5.08	277.91	5.04	277.95	5.25	277.74
MW-21	284.12	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	*4.96	279.16	5.44	278.68	5.46	278.66	4.96	279.16	4.86	279.26	5.26	278.86
Deep Aquifer																									
MW-1D	282.95	8.34	274.61	7.14	275.81	7.55	275.40	7.35	275.60	7.53	275.42	7.71	275.24	7.91	275.04	8.04	274.91	8.17	274.78	8.01	274.94	7.95	275.00	7.80	275.15
MW-2D	280.01	8.70	271.31	7.50	272.51	8.02	271.99	7.96	272.05	8.11	271.90	8.26	271.75	8.47	271.54	8.74	271.27	8.83	271.18	7.61	272.40	8.07	271.94	8.24	271.77
MW-16D	279.91	6.30	273.61	4.70	275.21	5.66	274.25	5.93	273.98	5.85	274.06	5.45	274.46	6.32	273.59	6.54	273.37	5.85	274.06	5.52	274.39	5.50	274.41	6.88	273.03
MW-20D	281.21	NI	NI	NI	NI	6.59	274.62	6.08	275.13	7.35	273.86	6.79	274.42	7.57	273.64	7.19	274.02	7.31	273.90	6.65	274.56	6.75	274.46	7.44	273.77

Notes:

BTOC: Below top of casing

FT MSL: Feet mean sea level

NM: not measured

NI = Not Installed

¹ Water level measurement collected on 4/15/2009

* Water level measurements collected on 5/31/2012

Prepared by: SAG 1/12/15
Checked by: TRK 1/15/2015

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location		MW-3														
Date Sampled	TYPE 3/4 RRS mg/L	Jul-98	Dec-00	Dec-03	May-04	Nov-04	May-05	Jun-06	Dec-06	May-07	Jun-08	Apr-09	Dec-09	Dec-09	May-10	Nov-10
VOCs (mg/L)		DUP-2														
Chloroethane	---	0.015	<0.010	0.0096	0.0034	0.0038	0.0028	0.0013	0.0011	0.0018	<0.001	0.0014	0.0011	<0.001	0.002	0.0009 J
1,1,2,2-Tetrachloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,1-Trichloroethane	13	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2-Trichloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Trichloroethylene	0.0052	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1-Dichloroethene	0.52	0.006	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1-Dichloroethane	---	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,2-Dichloroethene	0.2	ND	<0.005	<0.001	<0.001	<0.001	0.0014	<0.001	0.00091 J	<0.001	0.00094 J	<0.001	<0.001	<0.001	<0.001	<0.001
trans-1,2-Dichloroethene	---	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vinyl Chloride	0.0033	0.140	0.052	0.022	0.024	0.027	0.027	0.014	0.020	0.021	0.0173	0.0168	0.0094	0.0093	0.0172	0.0104
SVOCs (mg/L)																
1,4-Dioxane (p-Dioxane)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																
pH (std. Units)	---	NA	5.94	5.7	5.64	5.51	5.28	5.37	5.63	5.57	5.54	5.85	6.04	6.04	5.7	6.21
Specific Conductance (mS/cm)	---	NA	0.14	0.19	0.197	0.222	0.212	0.208	0.199	0.263	0.222	0.239	0.421	0.421	0.278	0.255
Temperature (deg. C)	---	NA	16.94	19.3	19.94	21.48	22.53	24.65	21.99	24.24	26.59	19.17	20.45	20.45	22.38	22.98
Dissolved Oxygen (mg/L)	---	NA	0.00	0.48	0.34	0.78	0.62	0.40	0.43	0.42	0.50	0.34	0.27	0.27	0.23	0.48
ORP (mV)	---	NA	-13.00	-17.6	-29.7	12.9	53.5	87.9	30.3	0.4	-35.3	-10.8	-60.1	-60.1	-7.2	-72.3
Turbidity (NTU)	---	NA	6.40	45	24.1	12.8	13.7	5	1.6	8.5	4.1	4	32.2	32.2	67.2	30.8
Iron II (mg/L)	---	NA	4.80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Natural Attenuation Parameters (mg/L)																
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	---	NA	13.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	---	NA	4.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	---	NA	<0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	---	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Alkalinity	---	NA	74.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Sulfide	---	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	---	NA	0.001	0.0012	0.00081	0.0014	0.0013	0.0012	0.00084	0.000890	0.001300	0.000450	0.000210	0.000660	0.0004 J	0.00039
Ethane	---	NA	<0.000005	0.000009	0.000014	0.000065	0.000130	0.000052	0.000033	0.000050	0.000180	0.000021	<0.00001	0.000140	0.000009 J	0.000018
Methane	---	NA	9.10	7.6	7.7	9.4	7.2	9.2	8.3	6.7	8.2	7.4	5.8	13.0	4.2 J	7.6
Hydrogen (nmol/L)	---	NA	<0.030	2.7	3.9	1.6	1.4	3.0	27.0	1.7	2.2	1.1	1.5	NA	2.0	1.2

Notes:

Bold concentrations exceed Risk Reduction Standards

NA - Data not available or not analyzed

ND - Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location		MW-4																			
Date Sampled	TYPE 3/4 RRS mg/L	Jul-98	Dec-00	Dec-03	May-04	Nov-04	May-05	Jun-06	Dec-06	May-07	Jun-08	Apr-09	Dec-09	May-10	Nov-10	May-12	Dec-12	Jun-13	Dec-13	Jun-14	Dec-14
VOCs (mg/L)																					
Chloroethane	---	0.029	0.022	0.040	0.0024	0.021	0.0045	0.003	0.0029	0.0034	0.0029	<0.001	0.0014	0.0016	0.0013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1,2,2-Tetrachloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	13	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethylene	0.0052	ND	<0.005	<0.001	<0.001	<0.001	0.0016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	0.52	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	---	0.018	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2-Dichloroethene	0.2	ND	<0.005	<0.001	<0.001	<0.001	0.0021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
trans-1,2-Dichloroethene	---	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	0.0033	0.300	0.093	0.058	0.018	0.045	0.037	0.031	0.040	0.042	0.034	0.0047	0.022	0.0288	0.0241	0.028	0.024	0.0031	0.036	0.02	0.028
SVOCs (mg/L)																					
1,4-Dioxane (p-Dioxane)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																					
pH (std. Units)	---	NA	6.37	6.24	6.12	6.16	6.13	6.18	6.18	6.12	5.54	6.73	6.65	5.89	5.97	6.18	6.16	6.3	6.19	5.72	6.01
Specific Conductance (mS/cm)	---	NA	0.21	0.33	0.183	0.376	0.452	0.437	0.391	0.474	0.422	0.237	0.402	0.401	0.349	0.447	0.416	0.156	0.463	0.478	0.406
Temperature (deg. C)	---	NA	17.91	18.22	21	20.3	24.86	25.03	20.35	23.66	25.95	18.54	21.78	24.8	23.35	25.46	18.26	23.47	21.94	26.81	21.91
Dissolved Oxygen (mg/L)	---	NA	0.00	0.24	0.12	0.76	0.57	0.32	0.39	1.19	0.53	1.23	0.28	0.27	0.80	0.30	0.96	1.52	3.78	0.73	0.31
ORP (mV)	---	NA	-32.00	-43.1	-110	-59.9	-49.5	-37.1	-214.8	-71.8	-36.2	-39.6	-82.9	-33.5	-325.1	-56.6	-18.4	-3.8	-63	-27.4	-66.8
Turbidity (NTU)	---	NA	5.40	12.5	8	10.0	0.0	4.5	6.5	2.3	2.2	6.0	16.2	-3.2	14.2	3.0	9.1	8.3	0.0	0.7	2.80
Iron II (mg/L)	---	NA	7.40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Natural Attenuation Parameters (mg/L)																					
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	---	NA	9.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	---	NA	4.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	---	NA	<0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	---	NA	4.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Alkalinity	---	NA	120.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Sulfide	---	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	---	NA	0.0026	0.0027	0.001	0.0019	0.0016	0.0019	0.0016	0.0014	0.0012	0.00012	0.00054	0.00074 J	0.00076	NA	<0.007	<0.007	<0.007	<0.007	<0.007
Ethane	---	NA	<0.000005	<0.000005	<0.000005	<0.000005	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.000004J	<0.00001	0.000004 J	0.000008 J	NA	<0.009	<0.009	<0.009	<0.009	<0.009
Methane	---	NA	8.10	8.3	5.6	5.0	7.4	9.5	7.9	9.7	11.0	0.68	5.9	7.9 J	4.5	NA	6.0	1.7	6.2	3.8	5.9
Hydrogen (nmol/L)	---	NA	0.16	2.6	2.7	1.2	7.7	3.8	2.0	2.7	4.8	3.0	25.0	2.6	2.7	NA	NA	NA	NA	NA	NA

Notes:

Bold concentrations exceed Risk Reduction Standards

NA - Data not available or not analyzed

ND - Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location		MW-5																			
Date Sampled	TYPE 3/4 RRS mg/L	Oct-98	Dec-00	Dec-03	May-04	Nov-04	May-05	Jun-06	Dec-06	May-07	Jun-08	Apr-09	Dec-09	May-10	Nov-10	May-12	Dec-12	Jun-13	Dec-13	Jun-14	Dec-14
VOCs (mg/L)																					
Chloroethane	---	ND	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1,2,2-Tetrachloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	13	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethylene	0.0052	ND	<0.005	<0.001	0.001	<0.001	0.0022	0.0011	0.0020	0.0011	0.0013	0.0012	0.0011	<0.001	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	0.52	0.008	0.015	0.015	0.013	0.011	0.011	0.0081	0.0098	0.0087	0.0074	0.0068	0.0071	0.0051	0.0045	0.0064	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	---	0.007	0.015	0.011	0.0096	0.0077	0.0075	0.0069	0.0065	0.0054	0.0053	0.0045	0.0046	0.0032	0.0028	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2-Dichloroethene	0.2	ND	<0.005	<0.001	<0.001	<0.001	0.0016	<0.001	0.0012	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
trans-1,2-Dichloroethene	---	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	0.0033	ND	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	0.00035 J	0.00033J	0.00026 J	<0.001	0.0003J	0.00088 J	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
SVOCs (mg/L)																					
1,4-Dioxane (p-Dioxane)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																					
pH (std. Units)	---	NA	4.84	4.95	4.99	4.67	4.75	5.08	4.90	4.80	4.95	5.00	4.93	4.72	4.88	4.57	4.95	4.56	5.01	4.72	4.38
Specific Conductance (mS/cm)	---	NA	0.03	0.03	0.033	0.036	0.033	0.035	0.037	0.08	0.036	0.03	0.071	0.044	0.036	0.042	0.15	0.079	0.037	0.037	0.045
Temperature (deg. C)	---	NA	18.50	18.83	21.65	22.97	20.25	21.96	20.87	20.22	21.54	18.4	21.61	19.17	22.69	21.23	19.86	19.98	21.28	21.2	20.94
Dissolved Oxygen (mg/L)	---	NA	0.00	0.51	0.32	0.19	0.38	0.28	0.28	0.29	0.52	0.23	0.51	0.17	0.33	0.96	2.83	0.59	3.99	0.57	0.41
ORP (mV)	---	NA	210.00	234.10	133.2	130.9	200.8	135.1	171.5	175.1	-77.9	180	195.6	207.6	213.5	205.2	180.4	81.7	233.4	161.5	267.2
Turbidity (NTU)	---	NA	0.00	39.50	1.4	0.0	0	3.5	4.1	5.2	1.8	0.0	0.0	4.0	3.0	5.7	7.9	1.8	8.6	1.2	7.41
Iron II (mg/L)	---	NA	0.80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Natural Attenuation Parameters (mg/L)																					
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	---	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	---	NA	3.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	---	NA	<0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	---	NA	1.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Alkalinity	---	NA	3.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Sulfide	---	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	---	NA	0.000016	0.000009	0.000011	0.000011	0.000009	0.000008 J	0.000006 J	0.000007J	0.000012	0.000006J	0.000065	0.000011 J	0.000007 J	NA	<0.007	<0.007	<0.007	<0.007	<0.007
Ethane	---	NA	<0.000005	<0.000005	0.000024	0.000061	0.000004	0.000002 J	0.000002 J	0.000005J	0.000006 J	0.000004J	0.000008J	0.000015 J	0.000002 J	NA	<0.009	<0.009	<0.009	<0.009	<0.009
Methane	---	NA	0.52	0.63	0.56	0.83	0.57	0.51	0.4	0.28	0.24	0.2	0.27	0.21 J	0.048	NA	0.059	0.053	0.078	0.054	0.09
Hydrogen (nmol/L)	---	NA	<0.030	1.2	1.7	1.6	2.3	7.2	11	4	15	7.7	11.0	8.8	3.9	NA	NA	NA	NA	NA	NA

Notes:

Bold concentrations exceed Risk Reduction Standards

NA - Data not available or not analyzed

ND - Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location	TYPE 3/4 RRS mg/L	MW-6															
		Oct-98	Dec-00	Dec-03	May-04	Nov-04	May-05	Jun-06	Dec-06	May-07	Jun-08	Apr-09	Sep-09	Dec-09	May-10	Nov-10	Nov-10
VOCs (mg/L)																	
Chloroethane	---	0.002	<0.010	0.014	0.0032	<0.001	0.0072	0.002	0.0016	0.0017	0.0013	<0.001	0.0017	0.001	<0.001	0.0012	0.0012
1,1,2,2-Tetrachloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,1-Trichloroethane	13	ND	<0.005	<0.001	<0.001	0.0016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2-Trichloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Trichloroethylene	0.0052	ND	<0.005	0.0036	<0.001	0.0079	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1-Dichloroethene	0.52	ND	<0.005	0.0022	<0.001	0.0048	0.0017	<0.001	<0.001	0.0010	<0.001	0.00060J	<0.001	<0.001	0.0014	<0.001	<0.001
1,1-Dichloroethane	---	ND	<0.005	0.0011	0.0018	0.0021	0.0036	0.0014	0.0020	0.0028	0.0023	0.0016	0.0015	0.0013	0.002	0.0015	0.0015
1,2-Dichloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,2-Dichloroethene	0.2	ND	<0.005	0.0018	<0.001	0.0045	0.0029	0.00090 J	0.0012	0.0014	0.0010	0.0015	0.0015	0.0012	0.0014	0.0016	0.0019
trans-1,2-Dichloroethene	---	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vinyl Chloride	0.0033	0.010	<0.010	0.010	0.0096	0.0092	0.0094	0.0055	0.0051	0.0065	0.0052	0.0035	0.0054	0.0035	0.0028	0.0043	0.0044
SVOCs (mg/L)																	
1,4-Dioxane (p-Dioxane)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0211	NA	NA	NA	NA	NA
Field Parameters																	
pH (std. Units)	---	NA	6.14	5.84	5.81	5.81	5.84	5.54	5.82	5.85	4.91	5.98	5.84	5.84	5.56	5.56	5.56
Specific Conductance (mS/cm)	---	NA	0.12	0.18	0.167	0.182	0.15	0.152	0.160	0.191	0.152	0.231	0.192	0.211	0.156	0.169	0.169
Temperature (deg. C)	---	NA	17.27	20.83	24.92	23.92	24.64	27.16	22.16	23.75	27.25	20.24	31.27	21.83	24.00	25.56	25.56
Dissolved Oxygen (mg/L)	---	NA	0.00	0.26	0.07	0.35	0.64	0.4	0.24	0.42	0.41	1.73	0.28	0.39	0.82	0.52	0.52
ORP (mV)	---	NA	-92.00	-11.6	-78.8	-22.0	-6.0	30.3	-216.5	-39.4	292.7	4.9	-12.7	-7.7	-1.6	-387.7	-387.7
Turbidity (NTU)	---	NA	0.00	7.3	2.4	5.6	4.9	3.5	4.5	2.2	0.7	3.5	6.1	8.0	11.5	11.5	11.5
Iron II (mg/L)	---	NA	4.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Natural Attenuation Parameters (mg/L)																	
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	---	NA	3.40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	---	NA	3.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	---	NA	<0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	---	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Alkalinity	---	NA	65.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Sulfide	---	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	---	NA	0.00014	0.00043	0.00016	0.00029	0.00013	0.0002	0.000066	0.000068	0.00011	0.000038	0.000092	0.000042	0.000053 J	0.000084	0.000084
Ethane	---	NA	<0.000005	<0.000005	<0.000005	0.000011	<0.00001	<0.000010	<0.00001	0.000006J	0.000009J	0.000006J	0.000003J	0.000002J	0.000006 J	0.000003 J	0.000003
Methane	---	NA	6.10	5.9	3.8	5.4	3.7	4.6	5.1	2.9	3.2	3.8	1.8	1.2	2.8 J	3.4	3.4
Hydrogen (nmol/L)	---	NA	1.20	2.2	2.4	4.1	3.3	3.8	1.7	3.2	2.8	0.71	330	18	5.2	2.6	2.6

Notes:

Bold concentrations exceed Risk Reduction Standards

NA - Data not available or not analyzed

ND - Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location	TYPE 3/4 RRS mg/L	MW-6 continued						MW-7					
		May-12	Dec-12	Jun-13	Dec-13	Jun-14	Dec-14	May-12	Dec-12	Jun-13	Dec-13	Jun-14	Dec-14
VOCs (mg/L)													
Chloroethane	---	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1,2,2-Tetrachloroethane	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	13	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethylene	0.0052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	0.52	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	---	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethane	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2-Dichloroethene	0.2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
trans-1,2-Dichloroethene	---	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	0.0033	0.0036	0.003	<0.002	<0.002	<0.002	0.0042	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
SVOCs (mg/L)													
1,4-Dioxane (p-Dioxane)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters													
pH (std. Units)	---	5.78	5.85	5.70	5.90	4.93	5.40	5.06	5.18	5.05	5.28	4.67	4.61
Specific Conductance (mS/cm)	---	0.169	0.188	0.195	0.157	0.146	0.142	0.057	0.082	0.170	0.196	0.157	0.086
Temperature (deg. C)	---	28.05	21.69	25.53	23.19	27.11	23.85	20.63	16.08	18.95	17.20	20.83	17.76
Dissolved Oxygen (mg/L)	---	0.21	0.93	0.48	0.21	0.28	0.22	0.24	0.68	0.58	0.23	0.32	2.25
ORP (mV)	---	-6.6	-8.7	-83.6	-33.2	-23.8	-101.8	131.9	224.2	-37.0	52.4	4.9	260.40
Turbidity (NTU)	---	4.6	7.3	2.1	9.2	8.47	8.63	60.8	161.4	7.3	455.9	7.6	10.20
Iron II (mg/L)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Natural Attenuation Parameters (mg/L)													
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Alkalinity	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Sulfide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	---	NA	<0.007	<0.007	<0.007	<0.007	<0.007	NA	<0.007	<0.007	<0.007	<0.007	<0.007
Ethane	---	NA	<0.009	<0.009	<0.009	<0.009	<0.009	NA	<0.009	<0.009	<0.009	<0.009	<0.009
Methane	---	NA	3.4	2.2	3.5	1.8	2.1	NA	0.17	0.94	0.95	1.3	0.006
Hydrogen (nmol/L)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Bold Concentrations exceed Risk Reduction Standards

NA- Data not available or not analyzed

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location	TYPE 3/4 RRS mg/L	MW-8														
		Oct-98	Jul-00	Dec-00	Apr-01	Dec-03	Dec-03 Dup	May-04	May-04 Dup	Nov-04	May-05	May-05 Dup	Jun-06	Jun-06 Dup	Dec-06	Dec-06 Dup
VOCs (mg/L)																
Chloroethane	---	0.041	<1	<0.1	0.046	0.38	0.37	<0.05	<0.05	0.04	<0.1	0.03	<0.050	0.025 J	<0.020	0.02
1,1,2,2-Tetrachloroethane	0.005	0.001	<0.5	<0.05	<0.002	<0.050	<0.05	<0.05	<0.05	<0.025	<0.1	<0.001	<0.050	<0.025	<0.02	<0.02
1,1,1-Trichloroethane	13	53	6.2	0.67	2.5	1.3	1.3	0.75	0.95	2.0	1.9	1.9	2.2	1.7	0.55	0.65
1,1,2-Trichloroethane	0.005	0.052	<0.5	<0.05	<0.002	<0.050	<0.05	<0.05	<0.05	<0.025	<0.1	0.0019	<0.050	<0.025	<0.020	<0.020
Trichloroethylene	0.0052	140	14	1	4	2.4	2.4	1.6	1.8	3.3	4.6	4.7	5.3	4.4	0.71	0.8
1,1-Dichloroethene	0.52	45	8.7	0.9	2.3	2.4	2.2	1.2	1.3	3.6	3.3	3.5	4.9	3.2	2.1	2.3
1,1-Dichloroethane	---	0.94	<0.5	0.13	0.17	0.28	0.27	0.17	0.2	0.19	0.23	0.24	0.28	0.23	0.18	0.19
1,2-Dichloroethane	0.005	0.03	<0.5	<0.05	<0.002	<0.050	<0.05	<0.05	<0.050	<0.025	<0.1	<0.001	<0.050	<0.025	<0.020	<0.020
cis-1,2-Dichloroethene	0.2	4.5	4.5	1.1	1.4	2.3	2.1	2.1	2.3	3.6	2.7	3	4.2	3.4	3.4	3.7
trans-1,2-Dichloroethene	---	ND	<0.5	<0.05	NA	<0.050	<0.05	<0.05	<0.05	<0.025	<0.1	0.01	<0.050	<0.025	<0.020	<0.020
Vinyl Chloride	0.0033	0.93	1.6	0.99	0.37	1.8	1.8	0.73	0.85	0.73	1.1	1.2	1.4	0.89	0.81	0.78
SVOCs (mg/L)																
1,4-Dioxane (p-Dioxane)	---	NA	NA	NA	NA	NA		NA		NA	NA		NA		NA	
Field Parameters																
pH (std. Units)	---	NA	NA	6.04	5.23	6.09	NA	5.81	NA	6.14	5.88	5.88	5.75	5.75	5.86	5.86
Specific Conductance (mS/cm)	---	NA	NA	0.17	0.14	0.48	NA	0.33	NA	0.524	0.384	0.384	0.419	0.419	0.403	0.403
Temperature (deg. C)	---	NA	NA	17.02	NA	18.53	NA	20.95	NA	20.71	19.16	19.16	21.15	21.15	19.27	19.27
Dissolved Oxygen (mg/L)	---	NA	NA	0.00	NA	0.24	NA	0.33	NA	0.65	0.93	0.93	0.46	0.46	0.33	0.33
ORP (mV)	---	NA	NA	-49.00	NA	-47.4	NA	-70	NA	-82.2	-19.1	-19.1	-12.1	-12.1	-45.2	-45.2
Turbidity (NTU)	---	NA	NA	10.50	NA	6.7	NA	0.5	NA	5.6	4.9	4.9	3.9	3.9	1.7	1.7
Iron II (mg/L)	---	NA	NA	3.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Natural Attenuation Parameters (mg/L)																
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	26	NA	NA	NA	NA	NA
Total Organic Carbon	---	NA	NA	13.00	NA	NA	NA	NA	NA	NA	9.6	NA	NA	NA	NA	NA
Chloride	---	NA	NA	21.00	NA	NA	NA	NA	NA	NA	37	NA	NA	NA	NA	NA
Nitrate	---	NA	NA	<0.05	NA	NA	NA	NA	NA	NA	<0.10	NA	NA	NA	NA	NA
Sulfate	---	NA	NA	1.90	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA
Total Alkalinity	---	NA	NA	59.00	NA	NA	NA	NA	NA	NA	76	NA	NA	NA	NA	NA
Total Sulfide	---	NA	NA	0.16	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	200	NA	NA	NA	NA	NA
Ethene	---	NA	NA	0.23	NA	0.32	NS	0.11	0.12	0.053	0.054	NA	0.13	0.13	0.051	0.064
Ethane	---	NA	NA	0.00	NA	0.00022	NS	0.00072	0.0013	0.0014	0.0012	NA	0.0038	0.0037	0.0018	0.003
Methane	---	NA	NA	7.70	NA	7.3	NS	7.7	11	4.1	8	NA	12	12	4.3	7.1
Hydrogen (nmol/L)	---	NA	NA	<0.03	NA	2	NS	1.6	NA	2.0	1.2	NA	0.87	NA	18	NA

Notes:

Bold concentrations exceed Risk Reduction Standards

NA - Data not available or not analyzed

ND - Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location		MW-8 continued																			
Date Sampled	TYPE 3/4 RRS mg/L	May-07	May-07 DUP	Jun-08	Jun-08 Dup	Oct-08	Oct-08 Dup	Apr-09	Apr-09 DUP	Sep-09	Sep-09 DUP	Dec-09	May-10	DUP-1	Nov-10	Nov-10 DUP-1	May-12	Dec-12	Dec-12 DUP-1	Jun-13	Jun-13 DUP-1
VOCs (mg/L)																					
Chloroethane	---	<0.020	<0.020	<0.1	<0.05	<0.025	<0.025	<0.005	<0.005	0.0595	0.0556	<0.01	0.0134	<0.025	0.0905	0.0632	<0.01	0.025	0.026	<0.010	<0.010
1,1,2,2-Tetrachloroethane	0.005	<0.02	<0.02	<0.1	<0.05	<0.025	<0.025	<0.005	<0.005	<0.04	<0.025	<0.01	<0.01	<0.025	<0.02	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	13	0.74	0.87	5.55	5.27	0.217	0.194	0.32	0.32	1.1	0.802	0.296	1.1	0.96	1.65	1.36	0.740	2.5	2.6	0.470	0.520
1,1,2-Trichloroethane	0.005	<0.02	<0.02	<0.1	<0.05	<0.025	<0.025	<0.005	<0.005	<0.0400	<0.0250	<0.01	<0.01	<0.025	<0.02	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethylene	0.0052	1.3	1.6	11.9	11.1	0.532	0.529	0.577	0.594	1.54	1.05	0.396	1.87	1.68	3.56	2.99	1.5	4.6	4.8	0.73	0.82
1,1-Dichloroethene	0.52	1.7	1.9	8.34	7.86	0.567	0.541	0.611	0.587	3.17	2.26	1.17	1.99	1.75	4.19	3.21	2.2	6.2	6.5	1.9	1.9
1,1-Dichloroethane	---	0.15	0.18	0.43	0.428	0.0797	0.0834	0.0442	0.0472	0.397	0.38	0.0789	0.128	0.127	0.252	0.247	0.170	0.250	0.250	0.110	0.110
1,2-Dichloroethane	0.005	<0.020	<0.020	<0.100	<0.05	<0.025	<0.025	<0.005	<0.005	<0.0400	<0.0250	<0.01	<0.01	<0.025	<0.02	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2-Dichloroethene	0.2	1.9	2.2	5.86	5.66	0.875	0.815	0.808	0.783	4.19	3.36	1.82	2.02	1.87	4.1	3.54	2.7	7.0	7.1	2.1	2.0
trans-1,2-Dichloroethene	---	<0.020	<0.020	<0.100	<0.05	<0.025	<0.025	0.0051	0.0064	<0.0400	<0.0250	<0.01	<0.01	<0.025	<0.02	<0.02	<0.005	8.6	9.1	<0.005	<0.005
Vinyl Chloride	0.0033	0.69	0.67	1.32	1.22	0.421	0.372	0.219	0.23	2.4	2.09	0.589	0.902	0.802	1.89	1.56	0.47	2.1	2.2	0.86	0.82
SVOCs (mg/L)																					
1,4-Dioxane (p-Dioxane)	---	NA		NA		NA		<0.0200	<0.0200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																					
pH (std. Units)	---	5.76	5.76	5.72	5.72	NA	NA	6.41	NA	5.87	5.87	6.40	5.94	5.94	5.67	5.67	6.02	6.05	6.05	5.41	5.41
Specific Conductance (mS/cm)	---	0.371	0.371	0.489	0.489	NA	NA	0.29	NA	0.482	0.482	0.442	0.400	0.40	0.404	0.404	0.499	0.669	0.669	0.288	0.288
Temperature (deg. C)	---	19.54	19.54	24.25	24.25	NA	NA	17.77	NA	24.82	24.82	19.80	20.16	20.16	21.70	21.70	23.12	17.50	17.50	20.19	20.19
Dissolved Oxygen (mg/L)	---	0.88	0.88	0.61	0.61	NA	NA	0.3	NA	0.08	0.08	0.31	0.22	0.22	0.48	0.48	0.85	2.22	2.22	0.53	0.53
ORP (mV)	---	-8.5	-8.5	-131.4	-131.4	NA	NA	7.4	NA	-14.6	-14.6	-100.7	8.0	8.0	-428.8	-428.8	4.5	-52.6	-52.6	-32.8	-32.8
Turbidity (NTU)	---	4.5	4.5	4	4	NA	NA	0.1	NA	5.3	5.3	4.6	20.1	20.1	0	0	10.1	7.4	7.4	2.7	2.7
Iron II (mg/L)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Natural Attenuation Parameters (mg/L)																					
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Alkalinity	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Sulfide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	---	0.046	0.063	0.062	0.057	NA	NA	0.0021	0.0045	0.074	0.08	0.016	0.023 J	0.048	0.078	0.078	NA	0.067	0.067	0.01	0.014
Ethane	---	0.0021	0.0042	0.0025	0.0024	NA	NA	0.00013	0.00032	0.0018	0.0019	0.00093	0.00077 J	0.003	0.00072	0.00072	NA	<0.009	<0.009	<0.009	<0.009
Methane	---	7.7	9.6	8.2	11	NA	NA	0.42	1.2	4.1	4.4	2.4	3.0 J	12.0	1.7	1.7	NA	6.4	6.4	7.9	8
Hydrogen (nmol/L)	---	1.2	NA	7.3	NA	NA	NA	2.8	0.0019	56	61	1.5	2.1	NA	0.92	0.92	NA	NA	NA	NA	NA

Notes:

Bold concentrations exceed Risk Reduction Standards

NA - Data not available or not analyzed

ND - Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location	TYPE 3/4 RRS mg/L	MW-8 continued								MW-9/9R														
		Dec-13	Dec-13 Dup-1	Jun-14	Jun-14 Dup-1	Sep-14	Nov-14	Dec-14	Dec-14 DUP-1	Oct-98	Dec-00	May-04	Nov-04	May-05	Jun-06	Dec-06	May-07	Jun-08	Apr-09	Sep-09	Dec-09	May-10	Nov-10	
VOCs (mg/L)																								
Chloroethane	---	0.067	0.078	0.016	0.016	0.013	NA	<0.010	<0.010	ND	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,1-Trichloroethane	13	0.74	0.79	0.49	0.55	3.90	1.20	4.60	4.80	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2-Trichloroethane	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Trichloroethylene	0.0052	1.5	1.6	1.5	1.7	8.6	1.9	9.7	9.6	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1-Dichloroethene	0.52	2.1	2.2	1.1	1.2	5.3	3.2	4.3	4.3	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1-Dichloroethane	---	0.28	0.28	0.12	0.12	0.17	0.18	0.034	0.042	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,2-Dichloroethene	0.2	2.2	2.2	1.5	1.5	3.4	2.8	0.370	0.400	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
trans-1,2-Dichloroethene	---	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vinyl Chloride	0.0033	2.6	2.6	0.90	0.99	0.78	0.89	0.100	0.160	0.003	<0.010	<0.001	0.0021	0.0013	0.00067 J	0.00056 J	0.00066J	0.0014	<0.001	<0.001	0.00068J	<0.001	<0.001	<0.001
SVOCs (mg/L)																								
1,4-Dioxane (p-Dioxane)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0208	NA	NA	NA	NA	NA
Field Parameters																								
pH (std. Units)	---	6.01	NA	5.76	NA	5.64	NA	6.12	NA	NA	6.51	6.33	6.34	6.26	6.26	6.39	6.29	6.21	6.52	6.56	6.52	6.44	6.04	6.04
Specific Conductance (mS/cm)	---	0.311	NA	0.320	NA	0.27	NA	0.407	NA	NA	0.24	0.328	0.459	0.484	0.413	0.384	0.396	0.415	0.306	0.294	0.351	0.186	0.227	0.227
Temperature (deg. C)	---	19.98	NA	21.93	NA	25.22	NA	18.72	NA	NA	15.77	24.44	20.82	23.91	25.2	18.71	21.52	23.54	18.35	27.1	19.88	23.55	22.06	
Dissolved Oxygen (mg/L)	---	3.89	NA	0.87	NA	1.37	NA	0.44	NA	NA	0	3.85	0.22	4.07	0.41	0.37	0.34	0.41	2.85	0.21	1.12	4.8	0.86	
ORP (mV)	---	-21.7	NA	-65.4	NA	-3.6	NA	-25.5	NA	NA	-62	31	-53.9	-113.1	-12.5	-52.9	-86.2	-128.6	34.6	28.6	-31.4	110	202.1	
Turbidity (NTU)	---	5.3	NA	3.84	NA	5.76	NA	5.10	NA	NA	0.7	0	3.8	1.1	0	3.8	0.3	0	10.6	0.3	2	9.7	4.6	
Iron II (mg/L)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Geochemical Natural Attenuation Parameters (mg/L)																								
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Alkalinity	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Sulfide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	---	0.049	NA	0.024	0.023	<0.007	NA	<0.007	<0.007	NA	0	0.000053	0.00033	0.00018	0.00023	0.00017	0.000078	0.00014	0.000009J	0.000002J	0.000042	0.000025 J	0.000041	
Ethane	---	<0.0090	NA	<0.009	<0.009	0.02	NA	<0.009	<0.009	NA	<0.000005	0.0000054	0.000032	0.00001	0.000008 J	0.000006 J	0.000008J	0.000019	<0.00001	0.000027	0.000002J	<0.00001	0.000004 J	
Methane	---	6.8	NA	4.8	4	6.5	NA	0.440	0.410	NA	2	0.48	2.5	1	1.5	0.74	1.1	2	0.087	0.062	0.094	0.0081 J	0.21	
Hydrogen (nmol/L)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.38	4501	0.71	1.1	1.5	2.1	3.7	1.4	0.65	210	28	14	0.8	

Notes:

Bold concentrations exceed Risk Reduction Standards

1) The 450 nmol/L of Hydrogen result is anomalously high. Laboratory re-checked their calculation and confirmed this result. However, because this data point is a potential outlier, it will not be considered a valid data point for MW-9R in May 2004.

NA-Data not available or not analyzed

ND- Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location	TYPE 3/4 RRS mg/L	MW-9/9R continued						MW-10								
		Date Sampled	May-12	Dec-12	Jun-13	Dec-13	Jun-14	Dec-14	Oct-98	Dec-00	Dec-03	May-04	Dec-04	May-05	Jun-06	Jun-13
VOCs (mg/L)																
Chloroethane	---	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	ND	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.010	NA
1,1,2,2-Tetrachloroethane	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.001	<0.002	<0.001	<0.001	<0.001	<0.005	NA
1,1,1-Trichloroethane	13	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	<0.005	<0.001	<0.003	<0.001	<0.001	<0.001	<0.005	NA
1,1,2-Trichloroethane	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.001	<0.004	<0.001	<0.001	<0.001	<0.005	NA
Trichloroethylene	0.0052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.002	<0.005	<0.001	<0.005	<0.001	0.001	0.00057 J	<0.005	NA
1,1-Dichloroethene	0.52	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	<0.005	0.0017	0.0014	<0.001	<0.001	0.00099 J	<0.005	NA
1,1-Dichloroethane	---	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.003	<0.005	0.0023	0.0024	0.0012	0.0015	0.0015	<0.005	NA
1,2-Dichloroethane	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	NA
cis-1,2-Dichloroethene	0.2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	NA
trans-1,2-Dichloroethene	---	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	NA
Vinyl Chloride	0.0033	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	ND	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	NA
SVOCs (mg/L)																
1,4-Dioxane (p-Dioxane)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																
pH (std. Units)	---	6.33	6.37	6.37	6.33	6.05	5.93	NA	4.98	5.37	5.22	5.20	4.74	4.44	5.07	3.38
Specific Conductance (mS/cm)	---	0.323	0.216	0.337	0.402	0.316	0.609	NA	0.04	0.05	0.038	0.048	0.039	0.038	0.051	0.053
Temperature (deg. C)	---	24.91	18.99	21.54	20.49	26.07	20.44	NA	14.36	16.48	19.22	18.05	19.63	19.02	17.11	19.78
Dissolved Oxygen (mg/L)	---	0.82	3.31	1.49	0.24	0.37	0.42	NA	0.00	0.38	0.33	0.21	0.48	0.58	0.55	0.49
ORP (mV)	---	30.5	46.0	-27.4	-25.0	-27.8	-90.5	NA	-35.00	2.8	61.2	5.9	103.0	36.2	119.7	38.5
Turbidity (NTU)	---	4.12	8.3	9.6	9.2	8.07	8.63	NA	0.20	0.7	3.5	2.0	0.0	2.3	101.6	7.77
Iron II (mg/L)	---	NA	NA	NA	NA	NA	NA	NA	2.80	NA	NA	NA	NA	NA	NA	NA
Geochemical Natural Attenuation Parameters (mg/L)																
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7	NA	NA	NA
Total Organic Carbon	---	NA	NA	NA	NA	NA	NA	NA	2.40	NA	NA	NA	1.2	NA	NA	NA
Chloride	---	NA	NA	NA	NA	NA	NA	NA	2.80	NA	NA	NA	2.5	NA	NA	NA
Nitrate	---	NA	NA	NA	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.10	NA	NA	NA
Sulfate	---	NA	NA	NA	NA	NA	NA	NA	4.10	NA	NA	NA	<1.0	NA	NA	NA
Total Alkalinity	---	NA	NA	NA	NA	NA	NA	NA	11.00	NA	NA	NA	7.5	NA	NA	NA
Total Sulfide	---	NA	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	NA	<0.10	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	60	NA	NA	NA
Ethene	---	NA	<0.007	<0.007	<0.007	<0.007	<0.007	NA	<0.000005	<0.000005	0.000004 J	<0.000005	<0.00001	<0.00001	NA	NA
Ethane	---	NA	<0.009	<0.009	<0.009	<0.009	<0.009	NA	<0.000005	<0.000005	0.000021 J	0.000018	0.000005	0.000002 J	NA	NA
Methane	---	NA	0.084	0.24	1.8	0.2	0.10	NA	0.08	0.3	0.16	0.18	0.15	0.22	NA	NA
Hydrogen (nmol/L)	---	NA	NA	NA	NA	NA	NA	NA	0.28	1.1	1.8	0.63	1.2	24	NA	NA

Notes:

Bold concentrations exceed Risk Reduction Standards

NA- Data not available or not analyzed

ND- Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location		MW-11																			
Date Sampled	TYPE 3/4 RRS mg/L	Oct-98	Dec-00	Dec-03	May-04	Dec-04	May-05	Jun-06	Dec-06	May-07	Jun-08	Apr-09	Dec-09	May-10	Nov-10	May-12	Dec-12	Jun-13	Dec-13	Jun-14	Dec-14
VOCs (mg/L)																					
Chloroethane	---	ND	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1,2,2-Tetrachloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	13	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethylene	0.0052	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	0.52	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0016	<0.001	0.0016	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	---	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2-Dichloroethene	0.2	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00083 J	0.0026	<0.001	0.0028	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
trans-1,2-Dichloroethene	---	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	0.0033	ND	<0.010	<0.001	<0.001	<0.001	<0.001	0.00036 J	<0.001	<0.001	<0.001	0.00095J	0.00031J	0.0025	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
SVOCs (mg/L)																					
1,4-Dioxane (p-Dioxane)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0200	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																					
pH (std. Units)	---	NA	5.18	5.54	5.51	5.41	5.44	4.28	5.16	5.2	4.2	5.62	5.51	5.17	5.21	5.09	4.93	4.85	5.52	5.33	4.69
Specific Conductance (mS/cm)	---	NA	0.43	0.06	0.06	0.06	0.058	0.111	0.044	0.047	0.1	0.038	0.038	0.06	0.059	0.047	0.185	0.101	0.056	0.061	0.112
Temperature (deg. C)	---	NA	8.47	10.95	21.2	14.54	18.48	20.2	11.85	18.55	20.49	15.61	14.14	20.18	17.22	22.36	14.32	20.97	14.82	21.37	16.39
Dissolved Oxygen (mg/L)	---	NA	0.00	0.27	0.36	0.19	0.45	0.39	0.29	0.33	0.53	0.19	0.20	0.13	0.40	1.10	3.15	0.94	4.75	0.65	0.67
ORP (mV)	---	NA	137.00	141.7	90.1	85.9	72.1	290.6	-221.7	200.6	462.2	92.5	143.3	115.2	156.0	190.1	264.6	58.7	155.9	136.1	279.1
Turbidity (NTU)	---	NA	4.50	10.3	10.8	2.5	5.8	8.6	5.5	5.4	1.5	3.7	29.5	9.1	8.8	9.04	9.8	3.1	3.9	6.51	11.9
Iron II (mg/L)	---	NA	2.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Natural Attenuation Parameters (mg/L)																					
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	---	NA	6.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	---	NA	4.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	---	NA	<0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	---	NA	1.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Alkalinity	---	NA	9.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Sulfide	---	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	---	NA	0.00040	0.000092	0.000025	0.00019	0.00012	0.00017	0.000008 J	0.000032	0.000015	0.00021	0.000042	0.00075 J	0.000042	NA	<0.007	<0.007	<0.007	<0.007	<0.007
Ethane	---	NA	<0.000005	<0.000005	<0.000005	0.000018	<0.00001	0.000003 J	<0.00001	<0.00001	0.000002 J	0.000003J	<0.00001	0.000008 J	0.000004 J	NA	<0.009	<0.009	<0.009	<0.009	<0.009
Methane	---	NA	0.07	0.16	0.15	0.30	0.38	0.14	0.084	0.450	0.100	0.34	0.037	0.430 J	0.0064	NA	0.004	0.052	0.11	0.74	0.007
Hydrogen (nmol/L)	---	NA	<0.030	0.94	1.3	1.4	1.1	4.4	1.4	1.2	1.3	19	6.9	1.7	1.1	NA	NA	NA	NA	NA	NA

Notes:

Bold concentrations exceed Risk Reduction Standards

NA - Data not available or not analyzed

ND - Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location	TYPE 3/4 RRS mg/L	MW-12															
		Oct-98	Dec-00	May-04	Dec-04	May-05	Jun-06	Apr-09	Dec-09	May-10	Nov-10	May-12	Dec-12	Jun-13	Dec-13	Jun-14	Dec-14
VOCs (mg/L)																	
Chloroethane	---	ND	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1,2,2-Tetrachloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	13	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethylene	0.0052	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	0.52	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	---	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethane	0.005	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2-Dichloroethene	0.2	ND	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
trans-1,2-Dichloroethene	---	NA	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	0.0033	ND	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
SVOCs (mg/L)																	
1,4-Dioxane (p-Dioxane)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																	
pH (std. Units)	---	NA	4.97	4.98	5.07	4.94	4.97	5.15	5.47	5.09	5.05	4.79	5.45	4.73	5.23	2.93	4.75
Specific Conductance (mS/cm)	---	NA	0.02	0.027	0.03	0.028	0.026	0.033	0.029	0.032	0.026	0.031	0.029	0.57	0.026	0.041	0.036
Temperature (deg. C)	---	NA	15.32	19.62	18.38	19.31	21.4	17.26	17.66	18.48	19.9	20.94	15.27	19.33	19.19	20.11	18.67
Dissolved Oxygen (mg/L)	---	NA	2.80	2.46	4.20	2.23	3.06	3.05	3.47	1.41	5.40	1.39	6.89	1.91	1.42	0.90	3.59
ORP (mV)	---	NA	280.00	160	269.0	275.5	325.6	144.1	246.9	283.9	-175.3	307.4	215.3	237.0	75.9	53.4	33.7
Turbidity (NTU)	---	NA	1.20	2.5	10.2	10	11.7	7.7	7.5	14.3	82.9	41.9	80.8	8.6	8.4	4.5	5.04
Iron II (mg/L)	---	NA	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Natural Attenuation Parameters (mg/L)																	
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	---	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	---	NA	2.40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	---	NA	<0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	---	NA	1.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Alkalinity	---	NA	2.40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Sulfide	---	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	---	NA	0.00003	0.0000085	0.0000081	<0.00001	<0.00001	NA	NA	NA	NA	NA	<0.007	<0.007	<0.007	<0.007	<0.007
Ethane	---	NA	<0.000005	<0.000005	<0.000005	<0.00001	<0.00001	NA	NA	NA	NA	NA	<0.009	<0.009	<0.009	<0.009	<0.009
Methane	---	NA	0.01	0.0034	0.0059	0.0022	0.000086	NA	NA	NA	NA	NA	<0.004	<0.004	<0.004	<0.004	<0.004
Hydrogen (nmol/L)	---	NA	<0.030	NA	0.58	1.5	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Bold concentrations exceed Risk Reduction Standards

NA - Data not available or not analyzed

ND - Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location	TYPE 3/4 RRS mg/L	MW-15															
		Jun-99	Dec-00	Jun-06	Dec-06	May-07	Jun-08	Apr-09	Dec-09	May-10	Nov-10	May-12	Dec-12	Jun-13	Dec-13	Jun-14	Dec-14
VOCs (mg/L)																	
Chloroethane	---	NA	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1,2,2-Tetrachloroethane	0.005	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	13	ND	<0.0050	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane	0.005	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethylene	0.0052	ND	<0.0050	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	0.52	NA	<0.0050	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	---	NA	<0.0050	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethane	0.005	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2-Dichloroethene	0.2	ND	<0.0050	<0.001	<0.001	0.0011	0.0011	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
trans-1,2-Dichloroethene	---	ND	<0.0050	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	0.0033	ND	<0.01	0.0012	0.0022	0.0014	0.0012	0.00045J	<0.001	0.0015	0.0015	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
SVOCs (mg/L)																	
1,4-Dioxane (p-Dioxane)	---	NA	NA	NA	NA	NA	NA	<0.0211	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																	
pH (std. Units)	---	NA	6.47	5.92	6.06	6.06	5.25	5.96	5.80	6.07	5.81	5.45	5.97	6.07	5.96	5.84	5.10
Specific Conductance (mS/cm)	---	NA	0.23	0.251	0.243	0.375	0.193	0.109	0.072	0.243	0.197	0.047	0.198	0.219	0.11	0.136	0.074
Temperature (deg. C)	---	NA	17.29	26.5	20.68	22.36	24.42	19.2	17.94	21.82	23.77	25.66	19.8	21.32	21.78	24.38	21.64
Dissolved Oxygen (mg/L)	---	NA	0.00	0.35	0.28	0.4	0.35	1.22	0.74	0.19	0.42	0.44	0.70	0.39	0.42	0.38	0.49
ORP (mV)	---	NA	-62.0	4.8	-262.9	-48.7	33.6	45.8	28.3	-33.9	-319.2	61.9	-20.8	-41.5	20.7	-41.7	-95.6
Turbidity (NTU)	---	NA	1.0	0	0.9	0	0.2	9.7	2.7	4.8	1.8	2.68	8.0	4.3	7.1	3.8	2.00
Iron II (mg/L)	---	NA	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Natural Attenuation Parameters (mg/L)																	
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	---	NA	9.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	---	NA	3.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	---	NA	<0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	---	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Alkalinity	---	NA	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Sulfide	---	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	---	NA	0.0002	0.000088	0.000033	0.00009	0.000049	0.000004J	0.000004J	0.000053 J	0.000024	NA	<0.007	<0.007	<0.007	<0.007	<0.007
Ethane	---	NA	0.00011	0.00002	0.000046	0.000095	0.000028	0.000014	<0.00001	0.000055 J	0.000006 J	NA	<0.009	<0.009	<0.009	<0.009	<0.009
Methane	---	NA	9.4	8.8	8.5	8.6	6.2	2.4	0.54	7.7 J	1.9	NA	7.5	6.9	5.3	3.5	0.58
Hydrogen (nmol/L)	---	NA	2	2.5	3	3.1	69	0.62	11.0	2.2	1.8	NA	NA	NA	NA	NA	NA

Notes:

Bold concentrations exceed Risk Reduction Standards

NA - Data not available or not analyzed

ND - Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location	TYPE 3/4 RRS mg/L	MW-16D						MW-18									
		May-07	Jun-08	Apr-09	Dec-09	May-10	Nov-10	Sep-09	Dec-09	May-10	Nov-10	May-12	Dec-12	Jun-13	Dec-13	Jun-14	Dec-14
VOCs (mg/L)																	
Chloroethane	---	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0011	0.0012	<0.001	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1,2,2-Tetrachloroethane	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethylene	0.0052	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	0.52	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0025	0.0022	0.0019	0.0019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	---	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00085J	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethane	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2-Dichloroethene	0.2	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0021	0.0019	0.0013	0.0020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
trans-1,2-Dichloroethene	---	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	0.0033	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0051	0.0038	0.0035	0.0038	0.0033	0.0028	0.0032	0.0038	0.0029	0.003
SVOCs (mg/L)																	
1,4-Dioxane (p-Dioxane)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																	
pH (std. Units)	---	11.1	9.79	12.09	11.51	11.48	12.67	5.32	5.76	5.70	5.63	5.72	5.91	5.58	5.72	5.61	5.51
Specific Conductance (mS/cm)	---	0.444	0.294	4.56	0.705	1.58	1.581	0.173	0.221	0.361	0.276	0.355	0.354	0.291	0.241	0.239	0.28
Temperature (deg. C)	---	20.73	21.83	19.82	18.18	20.54	16.99	28.05	20.6	23.25	23.11	24.61	20.48	23.55	21.47	24.74	21.9
Dissolved Oxygen (mg/L)	---	0.71	0.75	4.64	5.95	5.89	5.47	0.28	0.29	0.45	0.63	1.2	0.78	0.5	0.12	0.72	0.25
ORP (mV)	---	138.9	272.3	-55.9	-59.2	120.4	6.5	138.9	-30.8	12.5	-313.2	6.9	0.4	-39.1	8.6	-36.6	-21.4
Turbidity (NTU)	---	12	5.8	6.2	18.9	2.6	12.6	9.7	10.1	21.4	6.9	7.49	7.1	4.4	8.2	2.23	2.23
Iron II (mg/L)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Natural Attenuation Parameters (mg/L)																	
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Alkalinity	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Sulfide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	---	NA	NA	NA	NA	NA	NA	0.00066	0.00045	0.00065 J	0.00028	NA	<0.007	<0.007	<0.007	<0.007	<0.007
Ethane	---	NA	NA	NA	NA	NA	NA	0.00033	0.0015	0.00099 J	0.00063	NA	<0.009	<0.009	<0.009	<0.009	<0.009
Methane	---	NA	NA	NA	NA	NA	NA	3.7	3.8	2.5 J	3.8	NA	6.8	7.2	6.9	4.1	7.1
Hydrogen (nmol/L)	---	NA	NA	NA	NA	NA	NA	27	5.8	0.98	7.2	NA	NA	NA	NA	NA	NA

Notes:

Bold concentrations exceed Risk Reduction Standards

NA - Data not available or not analyzed

ND - Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location	TYPE 3/4 RRS mg/L	MW-19												MW-20											
		Sep-09	Dec-09	May-10	DUP-2	Nov-10	May-12	Dec-12	Jun-13	Dec-13	Jun-14	Sep-14	Nov-14	Dec-14	Sep-09	Dec-09	Dec-09	May-10	Nov-10	May-12	Dec-12	Jun-13	Dec-13	Jun-14	Dec-14
VOCs (mg/L)		DUP-1																							
Chloroethane	---	0.659	0.314	0.735	0.727	0.344	0.31	0.28	1.3	0.340	0.270	0.022	NA	0.180	<0.001	<0.001	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1,2,2-Tetrachloroethane	0.005	<0.005	<0.005	<0.020	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	13	<0.005	<0.005	0.0501	0.0486	<0.005	<0.005	<0.005	0.033	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane	0.005	<0.005	<0.005	<0.020	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethylene	0.0052	<0.005	<0.005	0.0172 J	0.0171 J	0.0961	0.550	0.20	0.14	0.280	0.450	4.10	4.20	1.10	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	0.52	0.0118	0.0044 J	0.123	0.123	0.0682	0.500	0.12	0.45	0.200	0.270	2.00	2.90	0.59	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	---	0.0381	0.0129	0.264	0.258	0.0212	0.050	0.018	0.21	0.012	0.044	0.018	0.035	0.046	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethane	0.005	0.0019J	<0.005	<0.020	<0.020	.0011 J	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2-Dichloroethene	0.2	0.0243	0.007	0.196	0.186	0.0543	0.4	0.11	0.65	0.087	0.220	0.250	0.740	0.180	0.0016	0.0032	0.0031	0.0027	0.0020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
trans-1,2-Dichloroethene	---	<0.005	<0.005	<0.020	<0.020	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.05	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	0.0033	0.502	0.113	2.02	2.01	0.198	0.83	0.33	2.9	0.300	0.420	0.120	0.370	0.240	0.0102	0.0115	0.0116	0.0083	0.0067	0.0068	0.0051	<0.002	0.0046	0.0048	0.0037
SVOCs (mg/L)		NA																							
1,4-Dioxane (p-Dioxane)	---	NA																							
Field Parameters																									
pH (std. Units)	---	5.85	6.19	5.66	5.66	6.27	5.55	5.87	5.85	6.3	5.73	5.36	NA	4.77	5.67	5.87	5.87	4.93	5.62	5.66	5.95	5.62	5.76	5.77	5.81
Specific Conductance (mS/cm)	---	0.408	0.413	0.477	0.477	0.374	0.315	0.364	0.434	0.397	0.338	0.176	NA	0.141	0.306	0.311	0.311	0.326	0.313	0.294	0.459	0.369	0.274	0.328	0.305
Temperature (deg. C)	---	23.76	17.84	18.52	18.52	18.54	20.36	16.78	17.61	18.42	20.72	26	NA	19.65	24.03	18.94	18.94	19.8	20.8	22.50	18.65	20.28	20.38	24.10	16.87
Dissolved Oxygen (mg/L)	---	0.26	0.26	0.27	0.27	0.44	1.3	0.70	0.37	4.06	0.35	0.43	NA	0.29	0.37	0.35	0.35	0.29	0.48	0.83	2.15	0.53	0.09	1.38	0.5
ORP (mV)	---	-36.6	-49.2	-14.0	-14.0	-12.1	36.4	-22.8	-28.4	-38.8	16.6	130.3	NA	-61.3	7.5	-23.3	-23.3	44.1	64.9	6.1	-58.9	-42.5	-23.4	-17.3	6.7
Turbidity (NTU)	---	6.3	9.7	10.0	10.0	23.0	33.0	9.3	33.6	8.6	3.2	45	NA	7.43	9.5	14.1	14.1	3.9	9.8	3.85	12.6	2.9	16.7	1.27	10.1
Iron II (mg/L)	---	NA																							
Geochemical Natural Attenuation Parameters (mg/L)																									
Iron II	---	NA																							
Total Organic Carbon	---	NA																							
Chloride	---	NA																							
Nitrate	---	NA																							
Sulfate	---	NA																							
Total Alkalinity	---	NA																							
Total Sulfide	---	NA																							
Carbon Dioxide	---	NA																							
Ethene	---	0.78	0.37	0.99 J	1.4	0.77	NA	0.47	0.37	0.38	0.26	0.028	NA	0.065	0.0022	0.0019	0.0054	0.00081 J	0.00048	NA	<0.007	<0.007	<0.007	<0.007	<0.007
Ethane	---	0.022	0.014	0.049 J	0.1	0.029	NA	0.081	0.063	0.041	0.037	<0.009	NA	0.01	0.00082	0.0005	0.0021	0.00019 J	0.00014	NA	<0.009	<0.009	<0.009	<0.009	<0.009
Methane	---	3.7	1.4	6.9 J	15	5.8	NA	7.0	5.3	5.4	4.8	0.9	NA	1.2	7.3	4.4	13	7.2 J	5	NA	5.8	8.9	6.1	5.4	3.2
Hydrogen (nmol/L)	---	11	26	0.97	NA	1.5	NA	NA	NA	NA	NA	NA	NA	NA	5.4	1.1	NA	0.93	1.5	NA	NA	NA	NA	NA	NA

Notes:

Bold concentrations exceed Risk Reduction Standards

NA - Data not available or not analyzed

ND - Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 4: Summary of VOCs, Field Measurements, and MNA Parameters (1998-2014)

Sample Location	TYPE 3/4 RRS mg/L	MW-20D										MW-21					
		Date Sampled	Sep-09	Dec-09	May-10	Nov-10	May-12	Dec-12	Jun-13	Dec-13	Jun-14	Dec-14	May-12	Dec-12	Jun-13	Dec-13	Jun-14
VOCs (mg/L)																	
Chloroethane	---	<0.001	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1,2,2-Tetrachloroethane	0.005	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	13	0.0053	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane	0.005	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethylene	0.0052	0.012	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	0.52	0.0191	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	---	0.00099 J	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethane	0.005	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2-Dichloroethene	0.2	0.0152	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
trans-1,2-Dichloroethene	---	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	0.0033	0.0071	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0075	0.005	0.0071	0.0082	0.006	<0.002
SVOCs (mg/L)																	
1,4-Dioxane (p-Dioxane)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																	
pH (std. Units)	---	6.14	5.80	4.95	4.36	4.38	4.84	4.43	5.12	4.55	4.44	5.93	6.05	5.95	6.42	5.04	5.95
Specific Conductance (mS/cm)	---	0.145	0.084	0.053	0.043	0.050	0.153	0.093	0.051	0.048	0.062	0.398	0.472	0.476	0.462	0.424	0.342
Temperature (deg. C)	---	23.21	19.25	21.2	20.83	22.27	19.69	20.98	21.04	23.57	18.52	20.98	17.32	18.03	17.64	21.62	18.39
Dissolved Oxygen (mg/L)	---	1.79	2.08	2.09	0.41	1.01	2.11	0.76	5.27	1.9	0.79	1.79	0.71	2.46	4.18	0.32	0.42
ORP (mV)	---	40.2	181.5	262.6	-305.3	266.7	241.8	143.9	4.04	229.3	230.1	-20.6	-34.5	-50.2	-27	-6.7	-88.8
Turbidity (NTU)	---	364.3	73.8	5.6	200.1	9.40	19.7	9.7	9.0	9.5	7.09	25.8	7.7	2.2	9	6.37	9.90
Iron II (mg/L)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Geochemical Natural Attenuation Parameters (mg/L)																	
Iron II	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Alkalinity	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Sulfide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	---	NA	NA	NA	NA	NA	<0.007	<0.007	<0.007	<0.007	<0.007	NA	<0.007	<0.007	<0.007	<0.007	<0.007
Ethane	---	NA	NA	NA	NA	NA	<0.009	<0.009	<0.009	<0.009	<0.009	NA	<0.009	<0.009	<0.009	<0.009	<0.009
Methane	---	NA	NA	NA	NA	NA	<0.004	<0.004	<0.004	<0.004	<0.004	NA	7.1	7.5	8.4	3.4	2.3
Hydrogen (nmol/L)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Prepared by: TRK 1/9/2015

Checked by: SAG 1/12/15

Notes:

Bold concentrations exceed Risk Reduction Standards

NA - Data not available or not analyzed

ND - Non Detect

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the detection limit or if the concentration reported is estimated due to other QC reasons.

Table 5
Summary of Surface Water Analytical Results

Sample Location	SW-1		SW-2							SW-3		SW-4			
	4/13/2009	4/13/2009	5/17/2010	5/30/2012	12/13/2012	6/6/2013	12/5/2013	6/5/2014	12/3/2014	4/13/2009	5/17/2010	5/30/2012	12/13/2012	6/6/2013	12/5/2013
VOCs (mg/L)															
Chloroethane	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.001	<0.010	<0.010	<0.010	<0.010
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
Trichloroethylene	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	<0.001	<0.001	0.0006 ^J	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethane	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
<i>cis</i> -1,2-Dichloroethene	0.00096 ^J	<0.001	0.00098 ^J	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
<i>trans</i> -1,2-Dichloroethene	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	0.00044 ^J	0.00048 ^J	0.00042 ^J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002

Notes:

J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the method detection limit. Concentration reported is estimated
NA = not analyzed

Table 5
Summary of Surface Water Analytical Results

Sample Location	SW-4 (continued)		SW-5						SW-6						
	Date Sampled	6/5/2014	12/3/2014	5/30/2012	12/13/2012	6/6/2013	12/5/2013	6/5/2014	12/3/2014	5/30/2012	12/13/2012	6/6/2013	12/5/2013	6/5/2014	12/3/2014
VOCs (mg/L)															
Chloroethane	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1,2,2-Tetrachloroethane	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethylene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethane	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<i>cis</i> -1,2-Dichloroethene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<i>trans</i> -1,2-Dichloroethene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Prepared by: SAG 1/12/15
Checked by: TRK 1/20/15

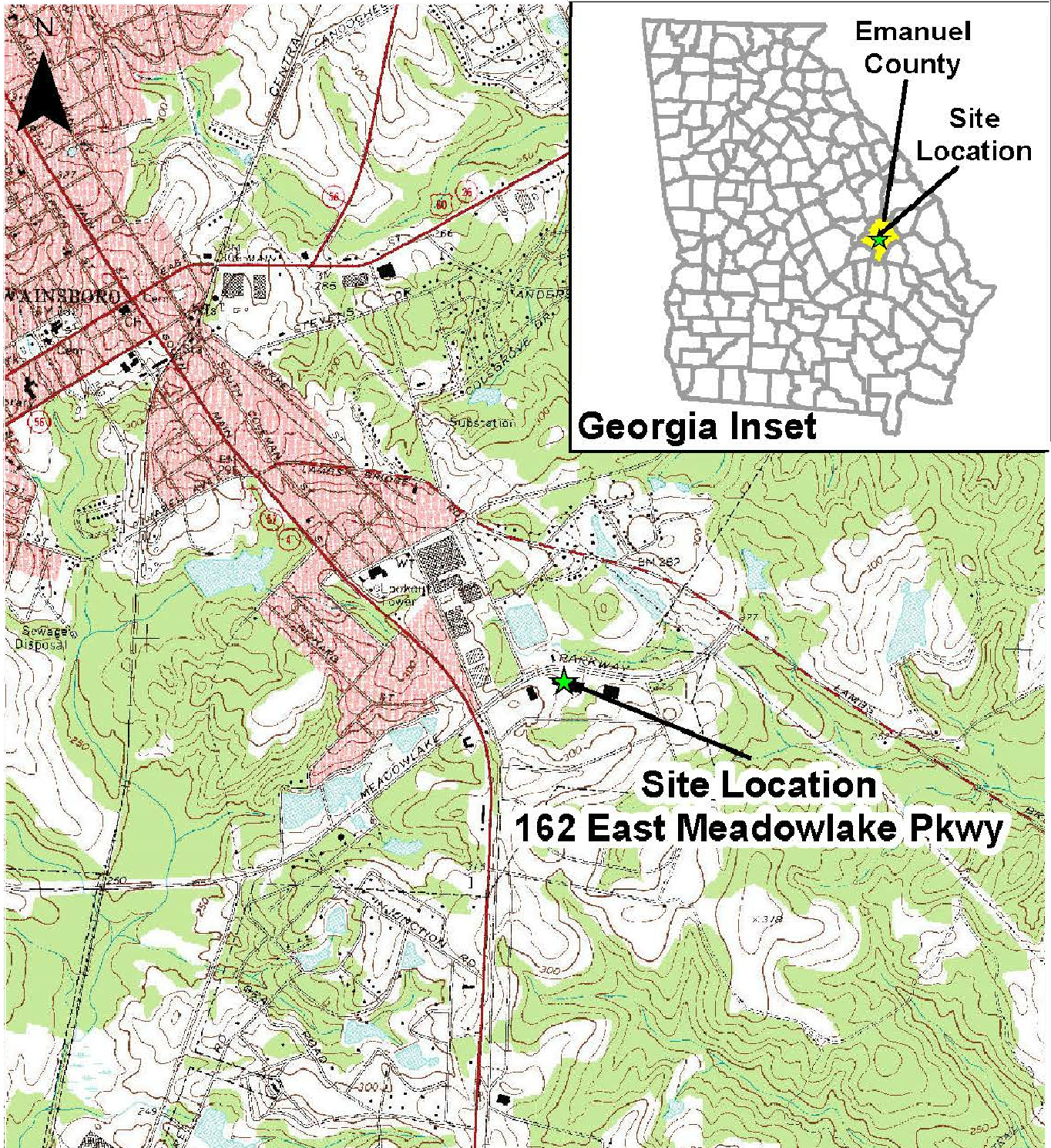
Notes:
J - Qualification flags were placed on values that were below the laboratory reporting limit but greater than the method detection limit. Concentration reported is estimated
NA = not analyzed

TABLE 6: SUMMARY OF HOURS INVOICED AND DESCRIPTION OF SERVICES

	Hours Invoiced	Billing Period	Invoice #	Description of Services
Gregory J. Wrenn, P.E.	9	7/12/2014- 8/22/2014	H081001389	Finalize and Submit VRP Progress Report No. 5
Total Project Hours for Billing Period	45.5		8/28/2014	Subcontractor, field expenses, laboratory analysis, and fluid disposal from July HVE event
Gregory J. Wrenn, P.E.	2.5	8/23/2014-9/19/2014	H081001522	Plan/coordinate and conduct interim sampling event
Total Project Hours for Billing Period	19.8		9/29/2014	
Gregory J. Wrenn, P.E.	1.0	9/20/2014-10/17/2014	H081001594	Data management/evaluation and field expenses from interim sampling event
Total Project Hours for Billing Period	2.3		10/27/2014	
Gregory J. Wrenn, P.E.	6	10/18/2014-12/12/2014	H081001700	Coordinate/conduct 2nd interim sampling event
Total Project Hours for Billing Period	83.8		12/18/2014	Review EPD comment letter Coordinate/conduct routine semi-annual sampling event
Gregory J. Wrenn, P.E.	2	12/13/2014-1/23/2015	H081001787	Preparation of draft VRP Progress Report No. 6
Total Project Hours for Billing Period	30		1/30/2015	Laboratory analysis for groundwater/surface water sampling event Field expenses/equipment for groundwater/surface water sampling event
Total Hours for PE Gregory J. Wrenn				
	20.5			
Total Project Hours				
	181.4			

Prepared by: TRK 2/4/2015
Checked by: GJW 2/4/15

FIGURES



Source: USGS 7.5 Minute Topographic Quadrangle, Swainsboro Quac



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162 E. MEADOWLAKE PKWY
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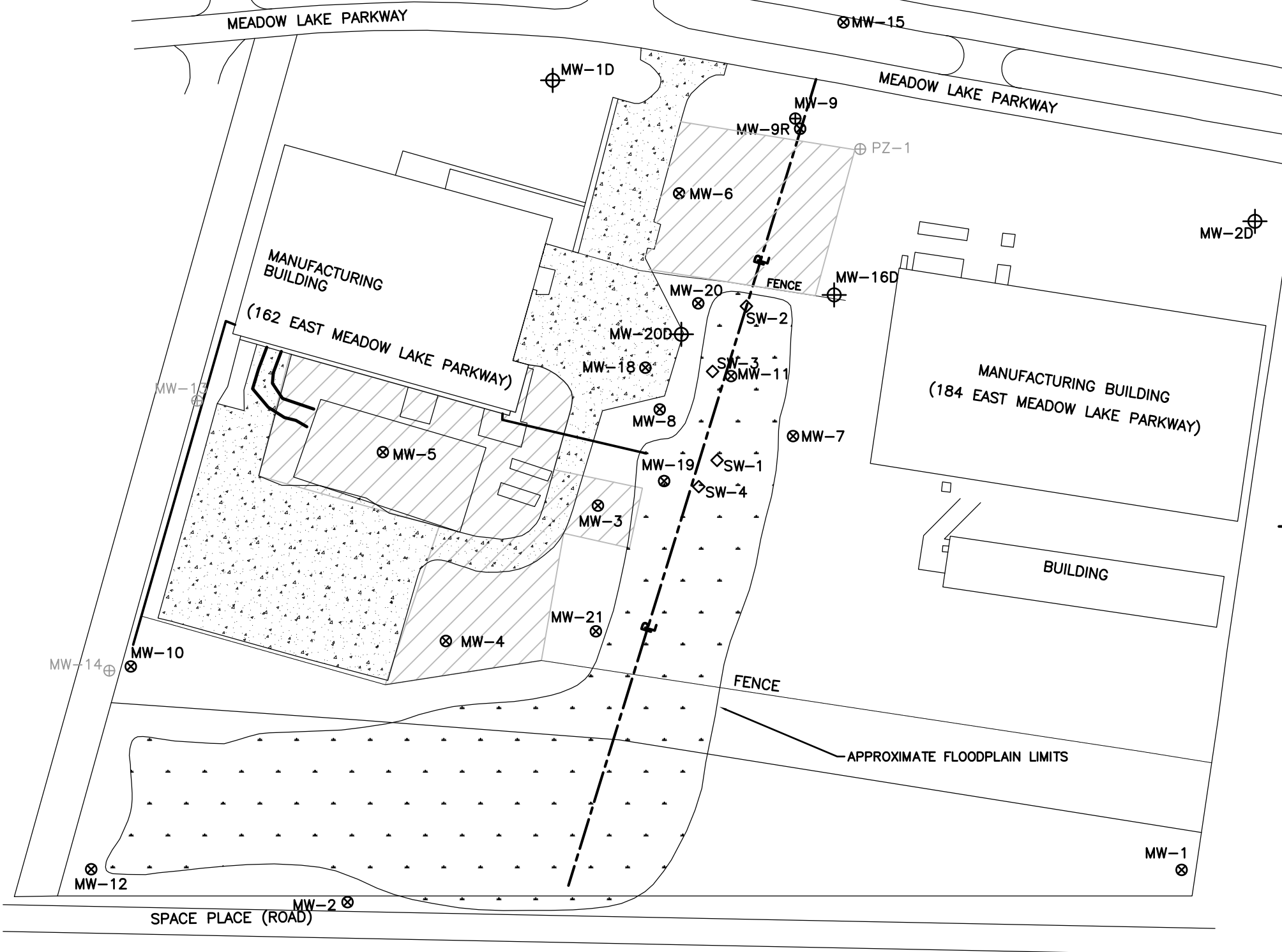


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SITE LOCATION MAP

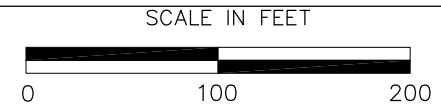
JOB NO. 6125-08-0149 FIGURE 1

PREPARED BY/DATE
CHECKED BY/DATE



LEGEND

	SURFACE WATER MONITORING LOCATION
	SHALLOW MONITORING WELL
	DEEP MONITORING WELL
	ABANDONED WELL
	PAVED SURFACE
	FLOODPLAIN
	RECENTLY CONSTRUCTED PARKING AREA (PAVED) AND BUILDINGS
	PROPERTY LINE



SOURCE: BASE MAP EMCON, 12/98 AND 6/99. GIS, AND ESRI WEBMAP SERVICE.

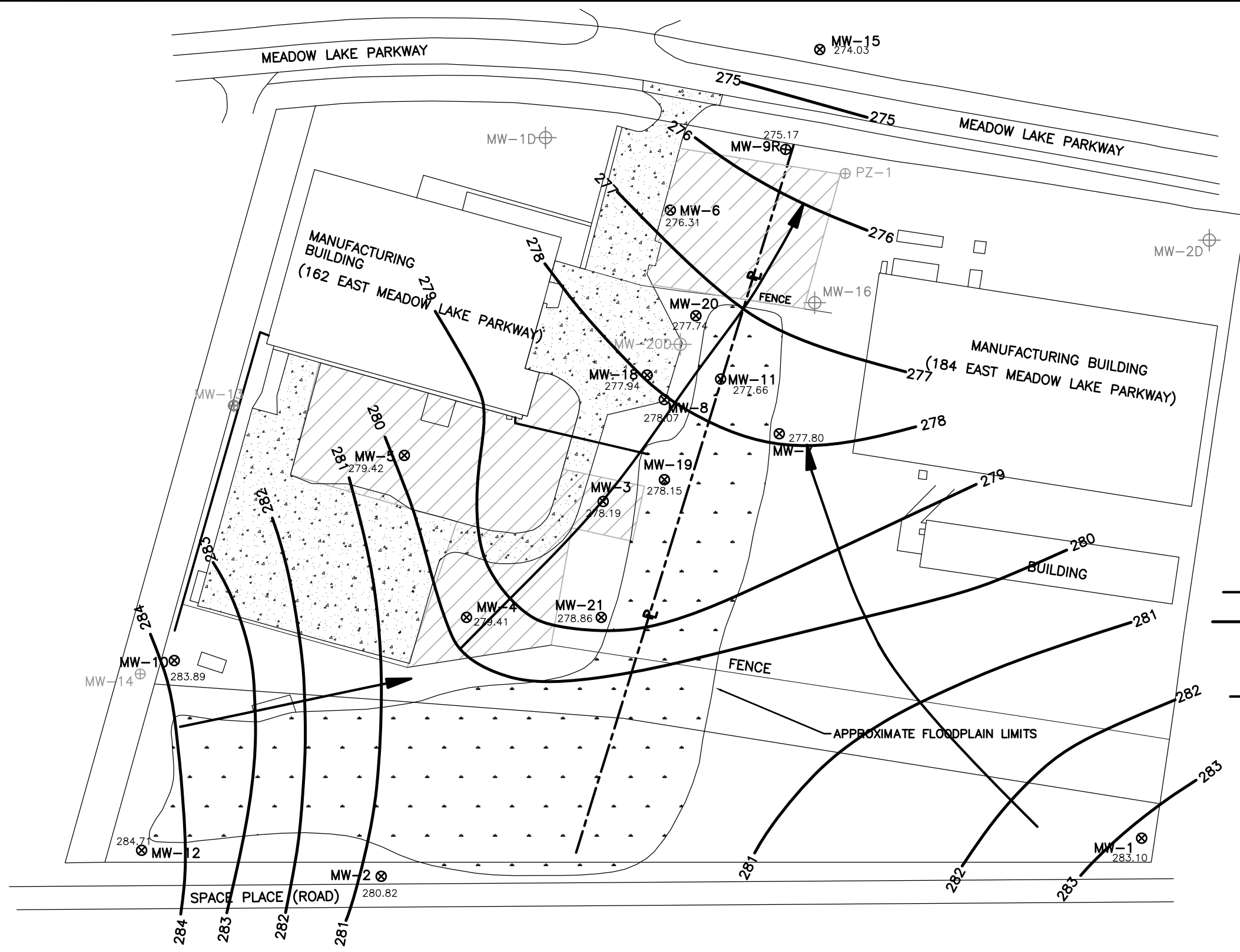
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AMEC Environment & Infrastructure, Inc.
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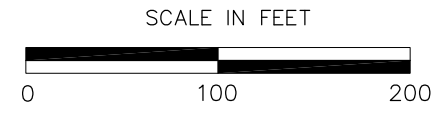
FIGURE 2
SITE LAYOUT MAP

JOB NO. 6125-08-0149

PREPARED BY/DATE MHA 6/22/2012
CHECKED BY/DATE RPR 6/26/2012



- LEGEND**
- ⊗ SHALLOW MONITORING WELL
 - ⊕ DEEP MONITORING WELL
 - ⊕ ABANDONED WELL
 - [Pattern] PAVED SURFACE
 - [Pattern] FLOODPLAIN
 - [Pattern] RECENTLY CONSTRUCTED PARKING AREA (PAVED) AND BUILDINGS
 - PROPERTY LINE
 - 282 POTENTIOMETRIC CONTOUR (FT MSL)
 - 283.10 GROUNDWATER SURFACE ELEVATION (FT MSL)
 - NM NOT MEASURED
 - ➔ DIRECTION OF GROUNDWATER FLOW



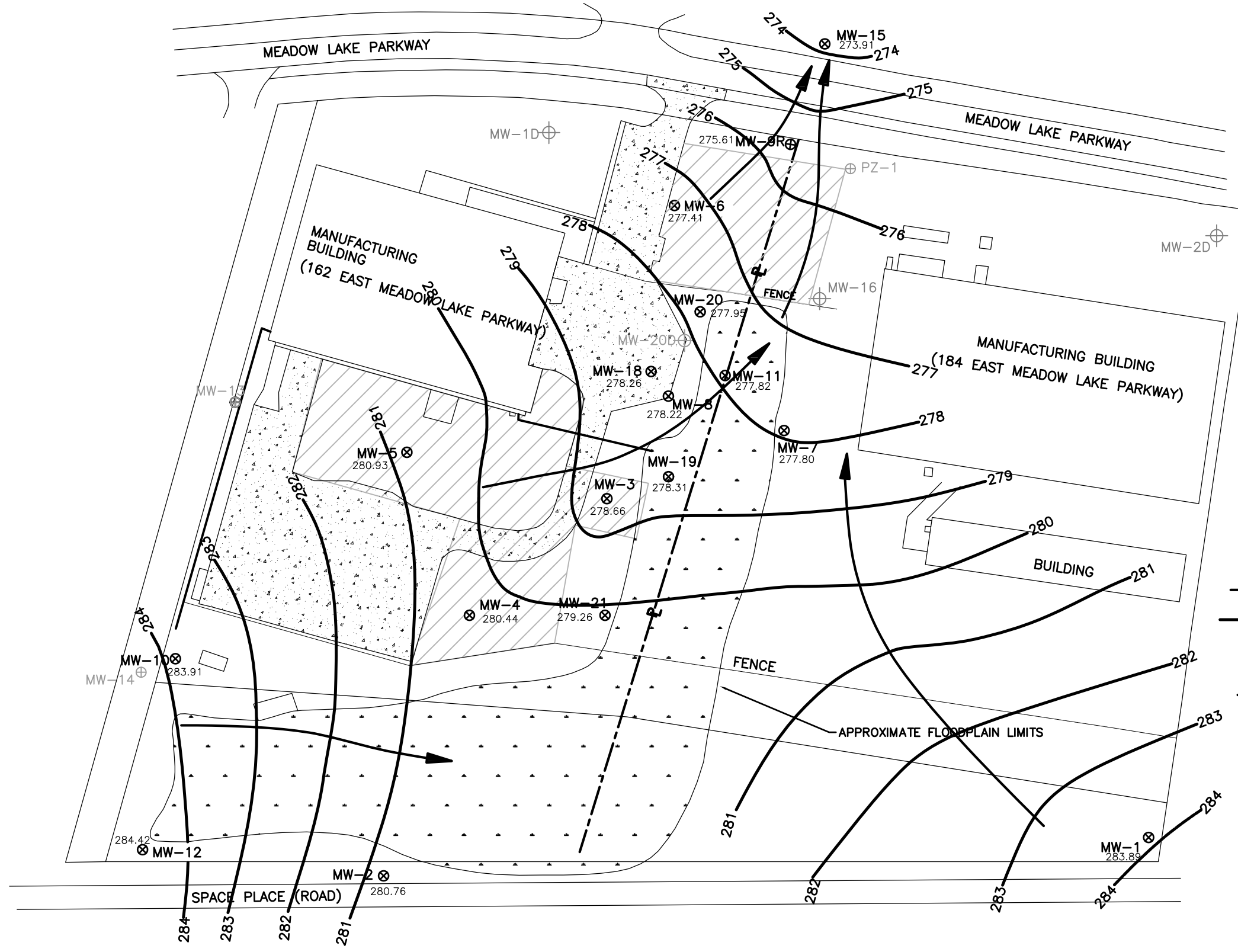
SOURCE: BASE MAP EMCON, 12/98 AND 6/99

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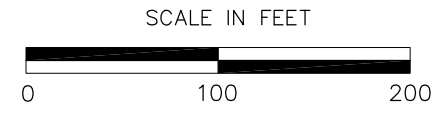
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FIGURE 3a
 SHALLOW ZONE
 POTENTIOMETRIC SURFACE MAP
 DECEMBER 2014
 JOB NO. 6125-08-0149

PREPARED BY/DATE TRK 1/20/2015
 CHECKED BY/DATE TRK 1/27/2015



- LEGEND**
- ⊗ SHALLOW MONITORING WELL
 - ⊕ DEEP MONITORING WELL
 - ⊕ ABANDONED WELL
 - [Stippled pattern] PAVED SURFACE
 - [Dashed pattern] FLOODPLAIN
 - [Diagonal hatching] RECENTLY CONSTRUCTED PARKING AREA (PAVED) AND BUILDINGS
 - PROPERTY LINE
 - 282 POTENTIOMETRIC CONTOUR (FT MSL)
 - 277.37 GROUNDWATER SURFACE ELEVATION (FT MSL)
 - NM NOT MEASURED
 - ➔ DIRECTION OF GROUNDWATER FLOW



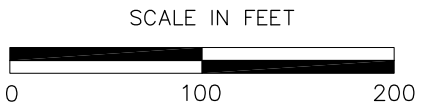
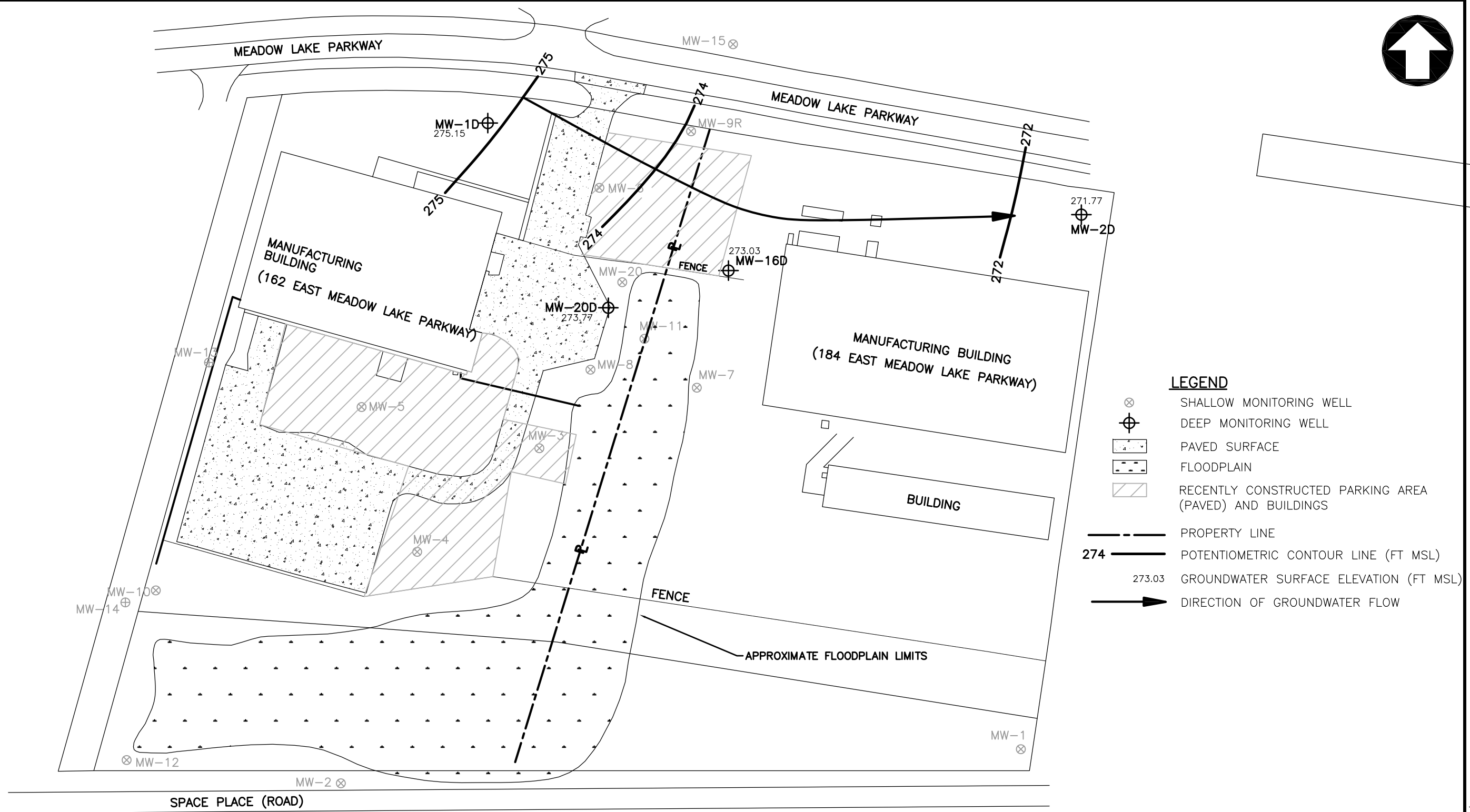
SOURCE: BASE MAP EMCON, 12/98 AND 6/99

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FIGURE 3b
SHALLOW ZONE
POTENTIOMETRIC SURFACE MAP
JUNE 2014
JOB NO. 6125-08-0149

PREPARED BY/DATE
TRK 1/20/2015
CHECKED BY/DATE
TRK 1/27/2015



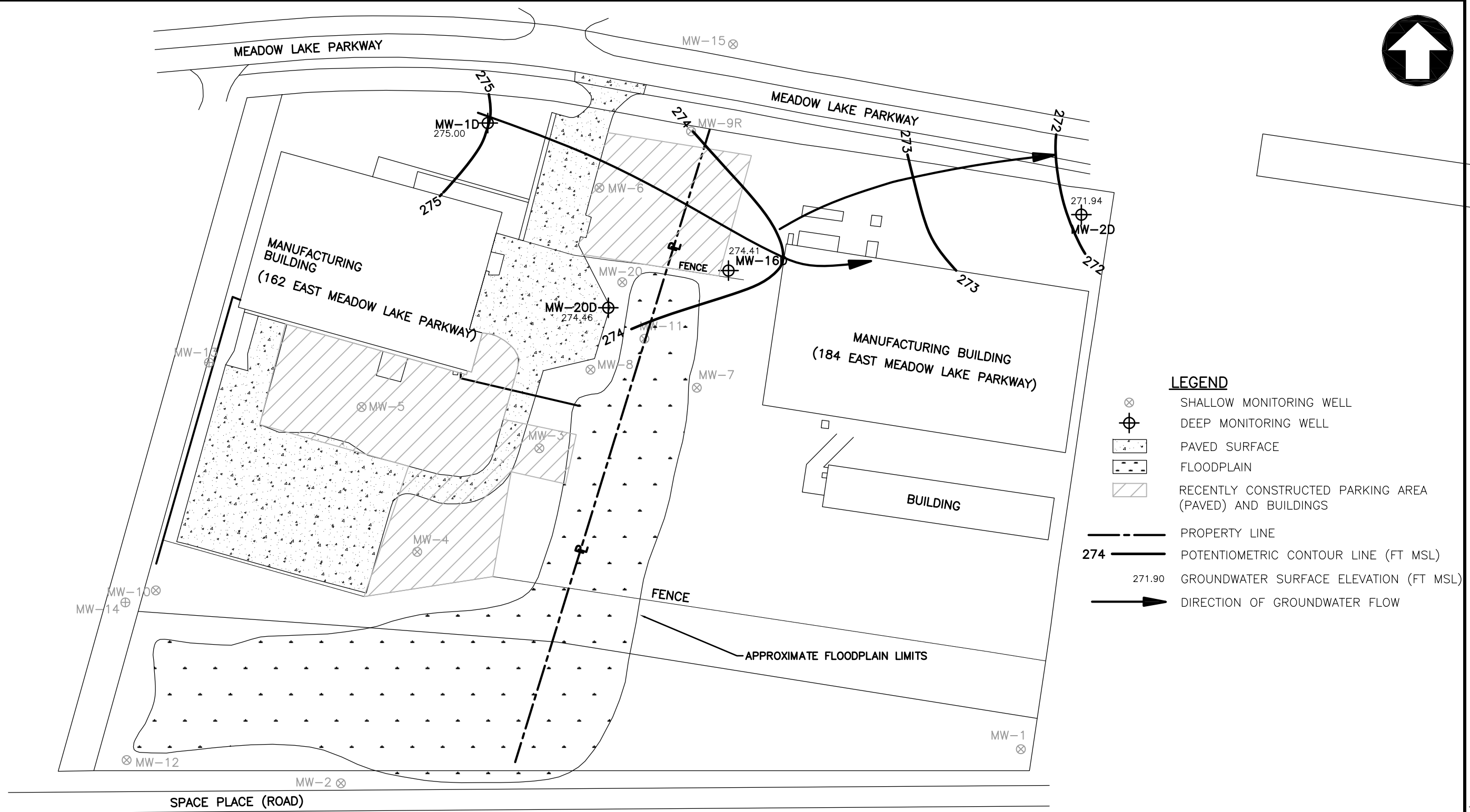
SOURCE: EMCON, 12/98 AND 6/99

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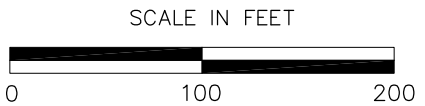
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FIGURE 4a
 DEEP ZONE
 POTENTIOMETRIC SURFACE MAP
 DECEMBER 2014
 JOB NO. 6125-08-0149

PREPARED BY/DATE
 TRK 1/20/2015
 CHECKED BY/DATE
 TRK 1/27/2015



- LEGEND**
- SHALLOW MONITORING WELL
 - DEEP MONITORING WELL
 - PAVED SURFACE
 - FLOODPLAIN
 - RECENTLY CONSTRUCTED PARKING AREA (PAVED) AND BUILDINGS
 - PROPERTY LINE
 - 274 POTENTIOMETRIC CONTOUR LINE (FT MSL)
 - 271.90 GROUNDWATER SURFACE ELEVATION (FT MSL)
 - DIRECTION OF GROUNDWATER FLOW



SOURCE: EMCON, 12/98 AND 6/99

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FIGURE 4b
 DEEP ZONE
 POTENTIOMETRIC SURFACE MAP
 JUNE 2014

JOB NO. 6125-08-0149

PREPARED BY/DATE: TRK 1/20/2015
 CHECKED BY/DATE: TRK 1/27/2015



MW-18		Dec-14		MW-20D		Dec-14		MW-20		Dec-14		MW-15		Dec-14		MW-9R		Dec-14		MW-6		Dec-14	
CE	<0.010			CE	<0.010			CE	<0.010			CE	<0.010			CE	<0.010			CE	<0.010		
1,1,2,2-TCA	<0.005			1,1,2,2-TCA	<0.005			1,1,2,2-TCA	<0.005			1,1,2,2-TCA	<0.005			1,1,2,2-TCA	<0.005			1,1,2,2-TCA	<0.005		
1,1,1-TCA	<0.005			1,1,1-TCA	<0.005			1,1,1-TCA	<0.005			1,1,1-TCA	<0.005			1,1,1-TCA	<0.005			1,1,1-TCA	<0.005		
1,1,2-TCA	<0.005			1,1,2-TCA	<0.005			1,1,2-TCA	<0.005			1,1,2-TCA	<0.005			1,1,2-TCA	<0.005			1,1,2-TCA	<0.005		
TCE	<0.005			TCE	<0.005			TCE	<0.005			TCE	<0.005			TCE	<0.005			TCE	<0.005		
1,1-DCE	<0.005			1,1-DCE	<0.005			1,1-DCE	<0.005			1,1-DCE	<0.005			1,1-DCE	<0.005			1,1-DCE	<0.005		
1,1-DCA	<0.005			1,1-DCA	<0.005			1,1-DCA	<0.005			1,1-DCA	<0.005			1,1-DCA	<0.005			1,1-DCA	<0.005		
1,2-DCA	<0.005			1,2-DCA	<0.005			1,2-DCA	<0.005			1,2-DCA	<0.005			1,2-DCA	<0.005			1,2-DCA	<0.005		
cis-1,2-DCE	<0.005			cis-1,2-DCE	<0.005			cis-1,2-DCE	<0.005			cis-1,2-DCE	<0.005			cis-1,2-DCE	<0.005			cis-1,2-DCE	<0.005		
trans-1,2-DCE	<0.005			trans-1,2-DCE	<0.005			trans-1,2-DCE	<0.005			trans-1,2-DCE	<0.005			trans-1,2-DCE	<0.005			trans-1,2-DCE	<0.005		
VC	0.003			VC	<0.002			VC	0.0037			VC	<0.002			VC	<0.002			VC	<0.002		

MW-8 / DUP-1		Dec-14	
CE	<0.010	<0.010	<0.010
1,1,2,2-TCA	<0.005	<0.005	<0.005
1,1,1-TCA	4.60	4.80	4.80
1,1,2-TCA	<0.005	<0.005	<0.005
TCE	9.7	9.6	9.6
1,1-DCE	4.3	4.3	4.3
1,1-DCA	0.03	0.04	0.04
1,2-DCA	<0.005	<0.005	<0.005
cis-1,2-DCE	0.4	0.4	0.4
trans-1,2-DCE	<0.005	<0.005	<0.005
VC	0.10	0.16	0.16

MW-19		Dec-14	
CE		0.180	0.180
1,1,2,2-TCA		<0.005	<0.005
1,1,1-TCA		<0.005	<0.005
1,1,2-TCA		<0.005	<0.005
TCE		1.100	1.100
1,1-DCE		0.590	0.590
1,1-DCA		0.046	0.046
1,2-DCA		<0.005	<0.005
cis-1,2-DCE		0.180	0.180
trans-1,2-DCE		<0.005	<0.005
VC		0.240	0.240

MW-5		Dec-14	
CE		<0.010	<0.010
1,1,2,2-TCA		<0.005	<0.005
1,1,1-TCA		<0.005	<0.005
1,1,2-TCA		<0.005	<0.005
TCE		<0.005	<0.005
1,1-DCE		<0.005	<0.005
1,1-DCA		<0.005	<0.005
1,2-DCA		<0.005	<0.005
cis-1,2-DCE		<0.005	<0.005
trans-1,2-DCE		<0.005	<0.005
VC		<0.002	<0.002

MW-12		Dec-14	
CE		<0.010	<0.010
1,1,2,2-TCA		<0.005	<0.005
1,1,1-TCA		<0.005	<0.005
1,1,2-TCA		<0.005	<0.005
TCE		<0.005	<0.005
1,1-DCE		<0.005	<0.005
1,1-DCA		<0.005	<0.005
1,2-DCA		<0.005	<0.005
cis-1,2-DCE		<0.005	<0.005
trans-1,2-DCE		<0.005	<0.005
VC		<0.002	<0.002

MW-4		Dec-14	
CE		<0.010	<0.010
1,1,2,2-TCA		<0.005	<0.005
1,1,1-TCA		<0.005	<0.005
1,1,2-TCA		<0.005	<0.005
TCE		<0.005	<0.005
1,1-DCE		<0.005	<0.005
1,1-DCA		<0.005	<0.005
1,2-DCA		<0.005	<0.005
cis-1,2-DCE		<0.005	<0.005
trans-1,2-DCE		<0.005	<0.005
VC		0.028	0.028

MW-21		Dec-14	
CE		<0.010	<0.010
1,1,2,2-TCA		<0.005	<0.005
1,1,1-TCA		<0.005	<0.005
1,1,2-TCA		<0.005	<0.005
TCE		<0.005	<0.005
1,1-DCE		<0.005	<0.005
1,1-DCA		<0.005	<0.005
1,2-DCA		<0.005	<0.005
cis-1,2-DCE		<0.005	<0.005
trans-1,2-DCE		<0.005	<0.005
VC		<0.002	<0.002

MW-11		Dec-14	
CE		<0.010	<0.010
1,1,2,2-TCA		<0.005	<0.005
1,1,1-TCA		<0.005	<0.005
1,1,2-TCA		<0.005	<0.005
TCE		<0.005	<0.005
1,1-DCE		<0.005	<0.005
1,1-DCA		<0.005	<0.005
1,2-DCA		<0.005	<0.005
cis-1,2-DCE		<0.005	<0.005
trans-1,2-DCE		<0.005	<0.005
VC		<0.002	<0.002

MW-7		Dec-14	
CE		<0.010	<0.010
1,1,2,2-TCA		<0.005	<0.005
1,1,1-TCA		<0.005	<0.005
1,1,2-TCA		<0.005	<0.005
TCE		<0.005	<0.005
1,1-DCE		<0.005	<0.005
1,1-DCA		<0.005	<0.005
1,2-DCA		<0.005	<0.005
cis-1,2-DCE		<0.005	<0.005
trans-1,2-DCE		<0.005	<0.005
VC		<0.002	<0.002

LEGEND

- ⊗ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ▨ PAVED SURFACE
- ▧ FLOODPLAIN
- ▩ VOC PLUME ABOVE RISK REDUCTION STANDARDS FOR VC (0.0033 mg/L) IN SHALLOW AQUIFER
- ▨ RECENTLY CONSTRUCTED PARKING AREA (PAVED) AND BUILDINGS
- PROPERTY LINE
- PPM PARTS PER MILLION
- VOC VOLATILE ORGANIC COMPOUNDS
- 1,1,1-TCA 1,1,1-TRICHLOROETHANE (ppm)
- TCE TRICHLOROETHENE (ppm)
- CIS-1,2-DCE CIS-1,2-DICHLOROETHENE (ppm)
- 1,1-DCE 1,1-DICHLOROETHENE (ppm)
- VC VINYL CHLORIDE (ppm)
- CE CHLOROETHANE (ppm)
- 1,1,1,2-TCA 1,1,1,2-TETRACHLOROETHANE
- 1,1,2-TCA 1,1,2-TETRACHLOROETHANE
- 1,1,-DCA 1,1 - DICHLOROETHANE

SCALE IN FEET



SOURCE: BASE MAP EMCON, 12/98 AND 6/99. NEW SURVEYED POINTS, MW-3, 4, 5, 18, 19, 20 AND 20D, SEPTEMBER 22, 2009.

STI PROPERTIES, INC.
162 EAST MEADOWLAKE PKWY
SWAINSBORO, GEORGIA



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1075 BIG SHANTY ROAD, NW, SUITE 100
KENNESAW, GEORGIA 30144 (770) 421-3400

FIGURE 5
VOC CONCENTRATIONS IN GROUNDWATER
DECEMBER 2014

JOB NO. 6125-08-0149

PREPARED BY/DATE TRK 2/4/2015
CHECKED BY/DATE TRK 2/4/2015

SW-6	Dec-14	SW-2	Dec-14	SW-5	Dec-14	SW-4	Dec-14
CE	<0.010	CE	<0.010	CE	<0.010	CE	<0.010
1,1,2,2-TCA	<0.005	1,1,2,2-TCA	<0.005	1,1,2,2-TCA	<0.005	1,1,2,2-TCA	<0.005
1,1,1-TCA	<0.005	1,1,1-TCA	<0.005	1,1,1-TCA	<0.005	1,1,1-TCA	<0.005
1,1,2-TCA	<0.005	1,1,2-TCA	<0.005	1,1,2-TCA	<0.005	1,1,2-TCA	<0.005
TCE	<0.005	TCE	<0.005	TCE	<0.005	TCE	<0.005
1,1-DCE	<0.005	1,1-DCE	<0.005	1,1-DCE	<0.005	1,1-DCE	<0.005
1,1-DCA	<0.005	1,1-DCA	<0.005	1,1-DCA	<0.005	1,1-DCA	<0.005
1,2-DCA	<0.005	1,2-DCA	<0.005	1,2-DCA	<0.005	1,2-DCA	<0.005
cis-1,2-DCE	<0.005	cis-1,2-DCE	<0.005	cis-1,2-DCE	<0.005	cis-1,2-DCE	<0.005
trans-1,2-DCE	<0.005	trans-1,2-DCE	<0.005	trans-1,2-DCE	<0.005	trans-1,2-DCE	<0.005
VC	<0.002	VC	<0.002	VC	<0.002	VC	<0.002



LEGEND

- ▲ SURFACE WATER MONITORING LOCATION
- ⊗ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- ⊖ ABANDONED WELL
- FLOODPLAIN



SOURCE: BASE MAP EMCON, 12/98 AND 6/99. GIS, AND ESRI WEBMAP SERVICE.

STI PROPERTIES, INC.
162 EAST MEADOWLAKE PKWY
SWAINSBORO, GEORGIA

amec
AMEC Environment & Infrastructure, Inc.
1075 BIG SHANTY ROAD, NW, SUITE 100
KENNESAW, GEORGIA 30144 (770) 421-3400

FIGURE 6
SURFACE WATER ANALYTICAL RESULTS
DECEMBER 2014
JOB NO. 6125-08-0149

PREPARED BY/DATE TRK 1/29/2015
CHECKED BY/DATE TRK 2/4/2015

APPENDIX A

WELL PURGING/GROUNDWATER SAMPLING LOGS

STI SWAYNSBORO

FIELD SAMPLING REPORT

PROJECT NO: _____

AMEC E&I, INC.

3200 TOWN POINT DRIVE, SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-8 DEPTH TO PRODUCT: _____

DATE: 9-3-14

SAMPLE METHOD: PERISTALTIC

SAMPLE TIME: 1420

DUP./REP. OF: _____ DEPTH TO WATER: 5.60

GRAB COMPOSITE ()

TOTAL DEPTH: 11.50

PURGE VOLUME: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TIME	VOL. PURGED (gal)	pH	TEMP (°C)	SPEC. COND. (ms/cm)	ORP (mV)	TURB. (NTU)	DO (mg/L)	Pump Rate ml/min. (& pump setting)	New Water Level	
Initial: 1340	0.25	5.95	25.82	1.352	-87.9	15.8	0.60	200 ()	5.82	
1345	0.5	5.95	25.09	0.931	-89.1	12.6	0.83		↓	
1350	0.75	5.85	25.40	0.487	-70.0	13.5	1.04			
1355	1.0	5.73	25.52	0.336	-37.0	10.74	1.37			
1400	1.25	5.69	25.14	0.297	-2.1	9.79	1.44			
1405	1.5	5.66	25.35	0.282	0.8	7.81	1.43			
1410	1.75	5.65	25.28	0.278	0.1	6.24	1.39			
1415	2.0	5.64	25.22	0.270	-3.6	5.76	1.37			
1420	Collect Sample									

Low Flow Stability Criteria: pH = ± 0.1 ORP = ± 10mV Sp. Cond = ± 3% DO = ± 10% Turb. < 10 NTU

COMMENTS:	

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40ML VIAL	4	HCL		

GENERAL INFORMATION

WEATHER:	<u>Clear - Hot - Humid</u>
SHIPPED VIA:	<u>Delivered</u>
SHIPPED TO:	<u>AES</u>
SAMPLER:	<u>EVER GUILLEN</u>
OBSERVER:	

STI SWAINSBORO FIELD SAMPLING REPORT

PROJECT NO: _____

MACTEC ENGINEERING AND CONSULTING, INC.
3200 TOWN POINT DRIVE, SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-19 DEPTH TO PRODUCT: _____

DATE: 9-3-14

SAMPLE METHOD: PERISTALTIC

TIME: 1540

DUP./REP. OF: _____ DEPTH TO WATER: 6.33

GRAB COMPOSITE ()

TOTAL DEPTH: 16.40

PURGE VOLUME: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TIME	VOL. PURGED (gal)	pH	TEMP (°C)	SPEC. COND. (ms/cm)	ORP (mV)	TURB. (NTU)	DO (mg/L)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1455	0.25	5.78	27.83	0.189	103.5	29.8	5.79	200 ()	6.59
1500	0.15	5.80	25.15	0.216	51.1	41.8	1.44		6.92
1505	0.75	5.51	24.85	0.194	69.9	31.6	0.58		7.01
1510	1.0	5.42	24.93	0.185	74.3	28.1	0.55		7.04
1515	1.25	5.39	25.08	0.178	94.7	25.3	0.49		7.08
1520	1.50	5.38	25.30	0.175	119.0	48.1	0.45		7.11
1525	1.75	5.36	25.96	0.175	128.9	44.7	0.41		7.11
1530	2.0	5.36	25.92	0.176	129.8	49.6	0.44		7.11
1535	2.25	5.36	26.0	0.176	130.3	45.0	0.43		7.11
1540	collected								
COMMENTS: <u>Water has Reddish orange Tint - Not clearing - looks like IRON Fouling - Collected Sample With High Turb.</u>									

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 ML VIAL	4	HCL		

GENERAL INFORMATION	
WEATHER:	<u>HOT - HUMID - CLEAR</u>
SHIPPED VIA:	<u>DELIVERED</u>
SHIPPED TO:	<u>AES</u>
SAMPLER:	<u>EVER GUILLEN</u>
OBSERVER:	

STI
SWAINSBORO

FIELD SAMPLING REPORT

PROJECT NO: _____

MACTEC ENGINEERING AND CONSULTING, INC.
3200 TOWN POINT DRIVE, SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-8

DEPTH TO PRODUCT: _____

DATE: 11-6-14

SAMPLE METHOD: _____

SAMPLE TIME: 1430

DUP./REP. OF: _____

DEPTH TO WATER: 6.41

GRAB () COMPOSITE ()

TOTAL DEPTH: 11.50

PURGE VOLUME: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TIME	VOL. PURGED (gal)	pH	TEMP (°C)	SPEC. COND. (ms/cm)	ORP (mV)	TURB. (NTU)	DO (mg/L)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1345	0.25	6.03	23.71	1.788	-38.9	3.94	1.16	200 ()	6.76
1350	0.5	5.90	23.67	1.114	-43.0	6.13	1.53	200	6.78
1355	0.75	5.77	23.62	0.648	-14.1	7.72	2.22	200	6.78
1400	1.0	5.66	23.50	0.466	-4.2	6.89	2.47	200	6.79
1405	1.25	5.52	23.54	0.362	10.7	5.54	2.39	200	6.81
1410	1.50	5.48	23.52	0.341	15.1	3.42	2.26	200	6.82
1415	1.75	5.39	23.44	0.321	24.2	2.83	1.90	200	6.82
1420	2.0	5.38	23.37	0.322	27.6	2.56	1.70	200	6.82
1425	2.25	5.36	23.39	0.315	24.1	2.15	1.64	200	6.84
1430	collect sample								

Low Flow Stability Criteria: pH = ± 0.1 ORP = ± 10mV Sp. Cond = ± 3% DO = ± 10% Turb. < 10 NTU

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS

GENERAL INFORMATION

WEATHER:	<u>warm - cloudy - humid</u>		
SHIPPED VIA:			
SHIPPED TO:	<u>AES</u>		
SAMPLER:	<u>EVER GUILLEN</u>	OBSERVER:	

FIELD SAMPLING REPORT

PROJECT NO: _____

MACTEC ENGINEERING AND CONSULTING, INC.
3200 TOWN POINT DRIVE, SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-19 DEPTH TO PRODUCT: _____

DATE: 11/6/14

SAMPLE METHOD: low flow

SAMPLE TIME: 1440

DUP./REP. OF: _____ DEPTH TO WATER: 7.14

GRAB () COMPOSITE ()

TOTAL DEPTH: 16.40

PURGE VOLUME: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TIME	VOL. PURGED (gal)	pH	TEMP (°C)	SPEC. COND. (ms/cm)	ORP (mV)	TURB. (NTU)	DO (mg/L)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 13 40	<u>0.25</u>							()	
13 45	<u>0.50</u>								
13 50	<u>0.75</u>	<u>5.39</u>	<u>21.83</u>	<u>0.219</u>	<u>64.1</u>	<u>9.48</u>	<u>2.85</u>	<u>225</u>	
13 55	<u>1.0</u>	<u>5.34</u>	<u>21.79</u>	<u>0.212</u>	<u>72.6</u>	<u>16.30</u>		<u>175</u>	<u>9.9</u>
14 00	<u>1.25</u>	<u>5.28</u>	<u>21.95</u>	<u>0.199</u>	<u>94.4</u>	<u>20.7</u>	<u>0.69</u>	<u>175</u>	<u>9.5</u>
14 05	<u>1.50</u>	<u>5.31</u>	<u>22.02</u>	<u>0.198</u>	<u>91.0</u>	<u>20.4</u>	<u>0.67</u>	<u>175</u>	<u>9.75</u>
14 10	<u>1.75</u>	<u>5.43</u>	<u>22.19</u>	<u>0.198</u>	<u>75.7</u>	<u>20.3</u>	<u>0.65</u>	<u>175</u>	<u>9.9</u>
14 15	<u>2.00</u>	<u>5.44</u>	<u>22.24</u>	<u>0.204</u>	<u>66.3</u>	<u>20.5</u>	<u>0.65</u>	<u>150</u>	<u>10.0</u>
14 20	<u>2.25</u>	<u>5.46</u>	<u>22.18</u>	<u>0.208</u>	<u>63.6</u>	<u>17.4</u>	<u>0.66</u>	<u>150</u>	<u>10.1</u>
14 25	<u>2.50</u>	<u>5.50</u>	<u>22.09</u>	<u>0.213</u>	<u>55.3</u>	<u>17.0</u>	<u>0.56</u>	<u>150</u>	<u>10.2</u>
14 30	<u>2.75</u>	<u>5.51</u>	<u>22.12</u>	<u>0.216</u>	<u>53.3</u>	<u>14.6</u>	<u>0.54</u>	<u>150</u>	<u>10.3</u>
14 35	<u>3.00</u>	<u>5.48</u>	<u>22.07</u>	<u>0.219</u>	<u>58.4</u>	<u>8.85</u>	<u>0.50</u>	<u>150</u>	<u>10.4</u>
14 40	<u>3.25</u>	<u>5.47</u>	<u>22.13</u>	<u>0.219</u>	<u>58.1</u>	<u>8.00</u>	<u>0.51</u>	<u>150</u>	<u>10.5</u>

Low Flow Stability Criteria: pH = ± 0.1 ORP = ± 10mV Sp. Cond = ± 3% DO = ± 10% Turb. < 10 NTU

COMMENTS:	<p style="text-align: center;">F</p>

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
<u>40 mL</u>	<u>2</u>	<u>HCl</u>	<u>8260</u>	

GENERAL INFORMATION

WEATHER:	<u>id - 60's</u>
SHIPPED VIA:	<u>Client delivery</u>
SHIPPED TO:	
SAMPLER:	<u>T. Kinnard</u>
OBSERVER:	<u>NA</u>

PROJECT NAME:
STI Swainsboro, Ga

FIELD SAMPLING REPORT

Project Number: 6125-08-0149

AMEC, E&I
1075 BIG SHANTY ROAD NW, SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: 1ST QUARTER 2ND QUARTER 3RD QUARTER 4TH QUARTER

MONITORING WELL TYPE: Standard Compliance Background Extraction

WELL ID: MW-4

WELL MATERIAL: PVC

SAMPLE METHOD: PERISTALTIC

DUP./REP. OF: _____

Top of Screened interval (btoc): _____

Screen length: _____

Arrived at: _____

Initial PID = _____

Bailing PID = _____

WELL DIAMETER: 2"

DEPTH TO WATER: 2.30 GRAB (x) COMPOSITE ()

TOTAL DEPTH: _____

WATER COLUMN HEIGHT: _____

PURGE VOLUME: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level	
Initial: 1350	0.25	0.64	-101.9	6.06	0.403	22.79	11.8	200 ()	3.78	
1355	0.5	0.42	-107.7	5.99	0.404	22.76	7.03		4.23	
1400	0.75	0.48	-111.3	6.03	0.412	21.85	6.54		4.23	
1405	1.0	0.42	-95.1	6.02	0.407	21.90	4.72		↓	
1410	1.25	0.44	-73.1	6.01	0.407	21.91	4.23			
1415	1.5	0.39	-68.9	6.01	0.406	21.91	3.95			
1420	1.75	0.33	-67.3	6.02	0.406	21.89	3.73			
1425	2.0	0.31	-66.8	6.01	0.406	21.91	2.80			
1430	Collect Sample									

NOTES:

SAMPLE DATE: 12-2-14
SAMPLE TIME: 1430

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40ML VIAL	2	HCL	8260B	
40ML VIAL	2	HCL	RSK 175	

GENERAL INFORMATION	
WEATHER:	<u>COOL - Clear - DRY</u>
SHIPPED VIA:	Delivered to AES laboratory
SHIPPED TO:	AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340
SAMPLER:	<u>EVER GUILLEN</u>
OBSERVER:	

PROJECT NAME:
STI Swainsboro, Ga

FIELD SAMPLING REPORT

Project Number: 6125-08-0149

AMEC, E&I
1075 BIG SHANTY ROAD NW, SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: 1ST QUARTER 2ND QUARTER 3RD QUARTER 4TH QUARTER

MONITORING WELL TYPE: Standard Compliance Background Extraction

WELL ID: MW-5

WELL MATERIAL: PVC

SAMPLE METHOD: _____

DUP./REP. OF: _____

Top of Screened interval (btoc): _____

Screen length: _____

Arrived at: 12/2/14

Initial PID = _____

Bailing PID = _____

WELL DIAMETER: 2"
DEPTH TO WATER: 7.29 GRAB (x) COMPOSITE ()

TOTAL DEPTH: _____

WATER COLUMN HEIGHT: _____

PURGE VOLUME: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1450	3.66	3.60	250.3	4.59	0.046	20.90	30.7	200 ()	7.37
1455	0.25	0.92	253.6	4.49	0.046	21.03	19.7	200	7.37
1500	0.50	0.59	255.3	4.44	0.045	21.05	13.8	200	7.37
1505	0.75	0.49	257.9	4.42	0.044	21.00	12.3	200	7.37
1510	1.00	0.46	260.1	4.42	0.045	20.98	11.2	200	7.37
1515	1.25	0.44	263.4	4.39	0.045	20.96	9.61	200	7.37
1520	1.50	0.43	266.4	4.38	0.045	20.95	8.71	200	7.37
1525	1.75	0.41	267.2	4.38	0.045	20.94	7.41	200	7.37
1528	Sample time MW-5								

NOTES:

SAMPLE DATE: 12/2/14
SAMPLE TIME: 1528

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40ml/vial	2	HCl	8260	SITR VOCs
40ml/vial	2	HCl		Cones

GENERAL INFORMATION	
WEATHER:	<u>Sunny clear warm</u>
SHIPPED VIA:	<u>Delivered to AES laboratory</u>
SHIPPED TO:	<u>AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340</u>
SAMPLER: <u>Mark A.</u>	OBSERVER:

PROJECT NAME:
STI Swainsboro, Ga

FIELD SAMPLING REPORT

Project Number: 6125-08-0149

AMEC, E&I

1075 BIG SHANTY ROAD NW, SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: 1ST QUARTER 2ND QUARTER 3RD QUARTER 4TH QUARTER

MONITORING WELL TYPE: Standard Compliance Background Extraction

WELL ID: MW-6

WELL MATERIAL: PVC

SAMPLE METHOD: PERISTALTIC

WELL DIAMETER: 2"
DEPTH TO WATER: 4.65 GRAB (x) COMPOSITE ()

TOTAL DEPTH: _____

WATER COLUMN HEIGHT: _____

PURGE VOLUME: _____

DUP./REP. OF: _____

Top of Screened interval (btoc): _____

Screen length: _____

Arrived at: _____

Initial PID = _____

Bailing PID = _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1615	0.25	1.13	-82.7	5.56	0.154	24.15	43.1	200 ()	4.93
1620	0.5	0.23	-113.2	5.57	0.157	24.49	23.1		4.95
1625	0.75	0.31	-99.4	5.52	0.156	24.38	16.7		4.98
1630	1.0	0.27	-95.9	5.50	0.155	24.25	18.6		5.02
1635	1.25	0.27	-97.9	5.48	0.154	24.18	18.5		5.02
1640	1.5	0.23	-99.0	5.47	0.153	24.06	16.6		5.02
1645	1.75	0.21	-95.1	5.45	0.152	23.99	15.1		5.02
1650	2.0	0.23	-107.4	5.42	0.148	23.95	13.1		5.02
1655	2.25	0.20	-108.2	5.41	0.146	23.88	12.0		5.02
1700	2.5	0.21	-99.9	5.40	0.143	23.85	9.58		5.02
1705	2.75	0.22	-101.8	5.40	0.142	23.85	8.63		5.02
1710	Collect Sample								

NOTES:

SAMPLE DATE: 12-2-14
SAMPLE TIME: 1710

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40ML VIAL	2	HCL	8260B	
40ML VIAL	2	HCL	RSK175	

GENERAL INFORMATION	
WEATHER:	<u>COOL - CLEAR - DRY</u>
SHIPPED VIA:	Delivered to AES laboratory
SHIPPED TO:	AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340
SAMPLER: <u>EVER GUILLEN</u>	OBSERVER:

PROJECT NAME:
STI Swainsboro, Ga

FIELD SAMPLING REPORT

Project Number: 6125-08-0149

AMEC, E&I
1075 BIG SHANTY ROAD NW, SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: 1ST QUARTER 2ND QUARTER 3RD QUARTER 4TH QUARTER

MONITORING WELL TYPE: Standard Compliance Background Extraction

WELL ID: MW-7

WELL MATERIAL: PVC

SAMPLE METHOD: peristaltic pump

DUP./REP. OF: _____

Top of Screened interval (btoc): _____

Screen length: _____

Arrived at: 1330

Initial PID = _____

Bailing PID = _____

WELL DIAMETER: 2"

DEPTH TO WATER: 3.50 GRAB (x) COMPOSITE ()

TOTAL DEPTH: 4.85

WATER COLUMN HEIGHT: _____

PURGE VOLUME: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: <u>1340</u>		<u>4.18</u>	<u>257.7</u>	<u>4.64</u>	<u>0.083</u>	<u>17.73</u>	<u>21.1</u>	<u>200 ()</u>	<u>3.72</u>
<u>1345</u>	<u>.25</u>	<u>3.21</u>	<u>257.3</u>	<u>4.62</u>	<u>0.082</u>	<u>17.72</u>	<u>22.0</u>	<u>200</u>	<u>3.73</u>
<u>1350</u>	<u>.50</u>	<u>2.91</u>	<u>258.6</u>	<u>4.62</u>	<u>0.084</u>	<u>17.54</u>	<u>20.8</u>	<u>200</u>	<u>3.73</u>
<u>1355</u>	<u>.75</u>	<u>2.48</u>	<u>259.8</u>	<u>4.60</u>	<u>0.085</u>	<u>17.79</u>	<u>19.6</u>	<u>200</u>	<u>3.73</u>
<u>1400</u>	<u>1.00</u>	<u>2.30</u>	<u>257.1</u>	<u>4.61</u>	<u>0.085</u>	<u>17.69</u>	<u>19.5</u>	<u>200</u>	<u>3.73</u>
<u>1405</u>	<u>1.25</u>	<u>2.27</u>	<u>256.6</u>	<u>4.62</u>	<u>0.085</u>	<u>17.73</u>	<u>16.1</u>	<u>200</u>	<u>3.73</u>
<u>1410</u>	<u>1.50</u>	<u>2.25</u>	<u>260.4</u>	<u>4.61</u>	<u>0.086</u>	<u>17.76</u>	<u>10.2</u>	<u>200</u>	<u>3.73</u>
<u>1412</u>	<u>Sample time MW-7</u>								

NOTES:

SAMPLE DATE: 12/2/14
SAMPLE TIME: 1412

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
<u>40</u>	<u>2</u>	<u>HCl</u>		<u>Side Vocs</u>
<u>40</u>	<u>2</u>	<u>HCl</u>		<u>Bases</u>

GENERAL INFORMATION	
WEATHER:	<u>Sunny clear warming</u>
SHIPPED VIA:	<u>Delivered to AES laboratory</u>
SHIPPED TO:	<u>AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340</u>
SAMPLER:	<u>Mark A.</u>
OBSERVER:	

PROJECT NAME:
STI Swainsboro, Ga

FIELD SAMPLING REPORT

Project Number: 6125-08-0149

AMEC, E&I
1075 BIG SHANTY ROAD NW, SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: 1ST QUARTER 2ND QUARTER 3RD QUARTER 4TH QUARTER

MONITORING WELL TYPE: Standard Compliance Background Extraction

WELL ID: MW-8

WELL MATERIAL: PVC

SAMPLE METHOD: _____

DUP./REP. OF: DUP-1

Top of Screened interval (btoc): _____

Screen length: _____

Arrived at: 1555

Initial PID = _____

Bailing PID = _____

WELL DIAMETER: 2"

DEPTH TO WATER: 3.21 GRAB (x) COMPOSITE ()

TOTAL DEPTH: 11.50

WATER COLUMN HEIGHT: _____

PURGE VOLUME: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1558		2.19	-31.7	6.52	0.412	18.68	14.4	200 ()	3.41
1603	.25	1.07	-41.3	6.24	0.415	18.54	7.79	200	3.43
1608	.50	0.94	-36.4	6.19	0.414	18.58	6.76	200	3.43
1613	.75	0.76	-21.7	6.16	0.414	18.67	5.88	200	3.43
1614	1.00	0.53	-26.8	6.13	0.411	18.70	5.68	200	3.43
1623	1.25	0.50	-27.8	6.13	0.411	18.72	5.10	200	3.43
1628	1.50	0.48	-25.1	6.12	0.407	18.73	'	200	3.43
1633	1.75	0.44	-25.5	6.12	0.407	18.72		200	3.43
1635	Sample time MW-8								

NOTES: DUP-1 taken at this location for site VOCs and Gases. Sample time (1200)

SAMPLE DATE: 12/2/14
SAMPLE TIME: 1635

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 ml/wal	2	HCl	8260	Site VOCs
40 ml/wal	2	HCl	8175	Gases

GENERAL INFORMATION	
WEATHER:	<u>Sunny clear warm</u>
SHIPPED VIA:	<u>Delivered to AES laboratory</u>
SHIPPED TO:	<u>AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340</u>
SAMPLER:	<u>Mark A.</u>
OBSERVER:	

PROJECT NAME:
STI Swainsboro, Ga

FIELD SAMPLING REPORT

Project Number: 6125-08-0149

AMEC, E&I
1075 BIG SHANTY ROAD NW, SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: 1ST QUARTER 2ND QUARTER 3RD QUARTER 4TH QUARTER

MONITORING WELL TYPE: Standard Compliance Background Extraction

WELL ID: MW-9R

WELL MATERIAL: PVC

SAMPLE METHOD: RELISTATIC

WELL DIAMETER: 2"
DEPTH TO WATER: 3.22 GRAB (x) COMPOSITE ()

DUP./REP. OF: _____

TOTAL DEPTH: _____

Top of Screened interval (btoc): _____

WATER COLUMN HEIGHT: _____

Screen length: _____

PURGE VOLUME: _____

Arrived at: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

Initial PID = _____

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

Bailing PID = _____

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 905	0.5	0.62	-90.0	5.91	0.649	21.33	39.9	200 ()	3.52
910	0.75	0.60	-88.5	5.90	0.650	21.09	27.4		3.52
915	1.0	0.52	-88.2	5.89	0.642	20.79	23.8		
920	1.25	0.48	-88.3	5.90	0.636	20.75	18.9		
925	1.5	0.47	-95.2	5.91	0.620	20.62	14.4		
930	1.75	0.45	-92.1	5.91	0.618	20.54	11.1		
935	2.0	0.44	-81.9	5.92	0.610	20.50	10.08		
940	2.25	0.42	-90.5	5.93	0.609	20.44	8.63		
945		Collect							

NOTES:

SAMPLE DATE: 12-2-14
SAMPLE TIME: 945

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 ML VIAL	2	HCL	BZ60B	
40 ML VIAL	2	HCL	RSK175	

GENERAL INFORMATION	
WEATHER:	<u>COLD - CLEAR - DRY</u>
SHIPPED VIA:	Delivered to AES laboratory
SHIPPED TO:	AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340
SAMPLER:	<u>GUYER GUILLEN</u>
OBSERVER:	

PROJECT NAME:
STI Swainsboro, Ga

FIELD SAMPLING REPORT

Project Number: 6125-08-0149

AMEC, E&I
1075 BIG SHANTY ROAD NW, SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: 1ST QUARTER 2ND QUARTER 3RD QUARTER 4TH QUARTER

MONITORING WELL TYPE: Standard Compliance Background Extraction

WELL ID: MW-11

WELL MATERIAL: PVC

SAMPLE METHOD: Peristaltic Pump

DUP./REP. OF: _____

WELL DIAMETER: 2"

DEPTH TO WATER: 4.11 GRAB (x) COMPOSITE ()

TOTAL DEPTH: 7.71

WATER COLUMN HEIGHT: _____

Top of Screened interval (btoc): _____

PURGE VOLUME: _____

Screen length: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

Arrived at: 1136

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

Initial PID = _____

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

Bailing PID = _____

TIME	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: <u>1140</u>		<u>2.17</u>	<u>135.8</u>	<u>5.21</u>	<u>0.109</u>	<u>17.09</u>	<u>69</u>	<u>200</u>	<u>4.25</u>
<u>1145</u>	<u>.25</u>	<u>1.94</u>	<u>208.5</u>	<u>4.81</u>	<u>0.109</u>	<u>16.44</u>	<u>39.9</u>	<u>200</u>	<u>4.25</u>
<u>1150</u>	<u>.50</u>	<u>1.24</u>	<u>241.7</u>	<u>4.74</u>	<u>0.110</u>	<u>16.39</u>	<u>30.3</u>	<u>200</u>	<u>4.25</u>
<u>1155</u>	<u>.75</u>	<u>1.36</u>	<u>247.9</u>	<u>4.71</u>	<u>0.110</u>	<u>16.35</u>	<u>28.4</u>	<u>200</u>	<u>4.25</u>
<u>1200</u>	<u>1.00</u>	<u>0.76</u>	<u>270.9</u>	<u>4.71</u>	<u>0.111</u>	<u>16.44</u>	<u>15.4</u>	<u>200</u>	<u>4.25</u>
<u>1205</u>	<u>1.25</u>	<u>0.72</u>	<u>273.0</u>	<u>4.71</u>	<u>0.111</u>	<u>16.43</u>	<u>14.8</u>	<u>200</u>	<u>4.25</u>
<u>1210</u>	<u>1.50</u>	<u>0.69</u>	<u>276.5</u>	<u>4.70</u>	<u>0.111</u>	<u>16.49</u>	<u>11.9</u>	<u>200</u>	<u>4.25</u>
<u>1215</u>	<u>1.75</u>	<u>0.67</u>	<u>279.1</u>	<u>4.69</u>	<u>0.112</u>	<u>16.39</u>	<u>-</u>	<u>200</u>	<u>4.25</u>
<u>1217</u>	<u>Sample time MW-11</u>								

NOTES:

SAMPLE DATE: 12/2/14
SAMPLE TIME: 1217

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
<u>40ml/vial</u>	<u>2</u>	<u>HCl</u>	<u>9260</u>	<u>SITP VOCs</u>
<u>40ml/vial</u>	<u>2</u>	<u>HCl</u>	<u>Rsk</u>	<u>GASPS</u>

GENERAL INFORMATION	
WEATHER:	<u>Sunny clear cool</u>
SHIPPED VIA:	<u>Delivered to AES laboratory</u>
SHIPPED TO:	<u>AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340</u>
SAMPLER:	<u>Mark A</u>
OBSERVER:	

PROJECT NAME:
STI Swainsboro, Ga

FIELD SAMPLING REPORT

Project Number: 6125-08-0149

AMEC, E&I

1075 BIG SHANTY ROAD NW, SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: 1ST QUARTER 2ND QUARTER 3RD QUARTER 4TH QUARTER

MONITORING WELL TYPE: Standard Compliance Background Extraction

WELL ID: MW-12

WELL MATERIAL: PVC

SAMPLE METHOD: PERISTALTIC

DUP./REP. OF: _____

Top of Screened interval (btoc): _____

Screen length: _____

Arrived at: _____

Initial PID = _____

Bailing PID = _____

WELL DIAMETER: 2"

DEPTH TO WATER: 3.41 GRAB (x) COMPOSITE ()

TOTAL DEPTH: 7.00

WATER COLUMN HEIGHT: 11.56

PURGE VOLUME: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 735	0.25	5.63	193.3	6.49	0.287	18.51	7.83	200 ()	3.83
740	0.5	2.40	138.7	5.18	0.094	18.52	6.71		
745	0.75	2.36	42.1	4.93	0.057	18.54	6.49		
750	1.0	2.31	15.5	4.87	0.045	18.56	5.50		
755	1.25	2.27	16.9	4.87	0.044	18.57	5.84		
800	1.50	2.98	33.9 33.9	4.82	0.042	18.60	5.54		
805	1.75	3.39	33.4	4.79	0.039	18.63	5.21		
810	2.0	3.72	35.6	4.78	0.037	18.64	5.32		
815	2.25	3.64	35.4	4.77	0.037	18.66	5.08		
820	2.5	3.59	33.7	4.75	0.036	18.67	5.04		
825		Collect Sample							

NOTES:

SAMPLE DATE: 12-2-14
SAMPLE TIME: 825

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 ML VIAL	2	HCL	82608	
40 ML VIAL	2	HCL	85K175	

GENERAL INFORMATION	
WEATHER:	<u>Cold - Clear - DRV</u>
SHIPPED VIA:	Delivered to AES laboratory
SHIPPED TO:	AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340
SAMPLER:	<u>EVER GUILLEN</u>
OBSERVER:	

PROJECT NAME:
STI Swainsboro, Ga

FIELD SAMPLING REPORT

Project Number: 6125-08-0149

AMEC, E&I
1075 BIG SHANTY ROAD NW, SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: 1ST QUARTER 2ND QUARTER 3RD QUARTER 4TH QUARTER

MONITORING WELL TYPE: Standard Compliance Background Extraction

WELL ID: MW-18

WELL MATERIAL: PVC

SAMPLE METHOD: _____

DUP./REP. OF: _____

Top of Screened interval (btoc): _____

Screen length: _____

Arrived at: 1017

Initial PID = _____

Bailing PID = _____

WELL DIAMETER: 2"
DEPTH TO WATER: 3.33 GRAB (x) COMPOSITE ()

TOTAL DEPTH: 14.20

WATER COLUMN HEIGHT: 10.87

PURGE VOLUME: 10.87 x 0.163 x 3 = 5.31 gal

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: <u>1022</u>		<u>2.81</u>	<u>33.8</u>	<u>5.66</u>	<u>0.288</u>	<u>21.65</u>	<u>5.43</u>	<u>300 ()</u>	<u>3.41</u>
<u>1029</u>	<u>0.50</u>	<u>0.42</u>	<u>32.7</u>	<u>5.67</u>	<u>0.288</u>	<u>21.79</u>	<u>4.60</u>	<u>300</u>	<u>3.71</u>
<u>1034</u>	<u>1.00</u>	<u>0.28</u>	<u>33.4</u>	<u>5.62</u>	<u>0.289</u>	<u>21.86</u>	<u>4.24</u>	<u>300</u>	<u>3.76</u>
<u>1040</u>	<u>1.50</u>	<u>0.25</u>	<u>26.1</u>	<u>5.60</u>	<u>0.287</u>	<u>21.75</u>	<u>3.40</u>	<u>300</u>	<u>3.78</u>
<u>1046</u>	<u>2.00</u>	<u>0.22</u>	<u>21.1</u>	<u>5.58</u>	<u>0.289</u>	<u>21.68</u>	<u>3.23</u>	<u>300</u>	<u>3.83</u>
<u>1052</u>	<u>2.50</u>	<u>0.21</u>	<u>9.9</u>	<u>5.55</u>	<u>0.284</u>	<u>21.65</u>	<u>2.64</u>	<u>300</u>	<u>3.85</u>
<u>1058</u>	<u>3.00</u>	<u>0.21</u>	<u>-4.4</u>	<u>5.54</u>	<u>0.281</u>	<u>21.66</u>	<u>2.83</u>	<u>300</u>	<u>3.87</u>
<u>1104</u>	<u>3.50</u>	<u>0.20</u>	<u>-6.5</u>	<u>5.53</u>	<u>0.281</u>	<u>21.71</u>	<u>2.45</u>	<u>300</u>	<u>3.89</u>
<u>1110</u>	<u>4.00</u>	<u>0.22</u>	<u>-10.1</u>	<u>5.52</u>	<u>0.279</u>	<u>21.94</u>	<u>2.14</u>	<u>300</u>	<u>3.90</u>
<u>1116</u>	<u>4.50</u>	<u>0.21</u>	<u>-18.1</u>	<u>5.51</u>	<u>0.280</u>	<u>21.97</u>	<u>2.20</u>	<u>300</u>	<u>3.92</u>
<u>1122</u>	<u>5.00</u>	<u>0.23</u>	<u>-22.1</u>	<u>5.51</u>	<u>0.280</u>	<u>21.93</u>	<u>2.21</u>	<u>300</u>	<u>3.94</u>
<u>1128</u>	<u>5.50</u>	<u>0.25</u>	<u>-21.4</u>	<u>5.51</u>	<u>0.280</u>	<u>21.90</u>	<u>2.23</u>	<u>300</u>	<u>3.96</u>
<u>1130</u>	<u>Sample time MW-18</u>								

NOTES: Water level will not stabilize, will pump 3 well volumes before samples
MA 12/2/14

SAMPLE DATE: 12/2/14
SAMPLE TIME: 1130

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
<u>40 ml/vial</u>	<u>3</u>	<u>HCl</u>	<u>B260</u>	<u>Site VOCs</u>
<u>40 ml/vial</u>	<u>2</u>	<u>HCl</u>	<u>Rsk</u>	<u>Gases</u>

GENERAL INFORMATION	
WEATHER:	<u>Sunny clear cool</u>
SHIPPED VIA:	<u>Delivered to AES laboratory</u>
SHIPPED TO:	<u>AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340</u>
SAMPLER:	<u>Mark A.</u>
OBSERVER:	

PROJECT NAME:
STI Swainsboro, Ga

FIELD SAMPLING REPORT

Project Number: 6125-08-0149

AMEC, E&I

1075 BIG SHANTY ROAD NW, SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: 1ST QUARTER 2ND QUARTER 3RD QUARTER 4TH QUARTER

MONITORING WELL TYPE: Standard Compliance Background Extraction

WELL ID: MW-20D

WELL MATERIAL: PVC

SAMPLE METHOD: Peristaltic Pump

DUP./REP. OF: _____

WELL DIAMETER: 2"

DEPTH TO WATER: 7.44 GRAB (x) COMPOSITE ()

TOTAL DEPTH: 34.40

WATER COLUMN HEIGHT: _____

Top of Screened Interval (btoc): _____

Screen length: _____

PURGE VOLUME: _____

Arrived at: 0900

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

Initial PID = _____

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

Bailing PID = _____

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 0910	-	2.97	140.1	4.96	0.060	18.13	21.7	200 ()	7.80
0920	.25	1.20	171.5	4.72	0.062	18.16	15.5	100	8.83
0930	.50	0.89	183.6	4.70	0.063	18.21	11.1	100	8.89
0940	.75	0.62	217.7	4.42	0.062	18.42	7.48	100	8.90
0950	1.00	0.81	223.4	4.44	0.063	18.51	7.32	100	8.91
1000	1.25	0.79	230.1	4.44	0.062	18.52	7.09	100	8.91
1002	Sample + Amt MW-20D								

NOTES:

SAMPLE DATE: 12/2/14
SAMPLE TIME: 1002

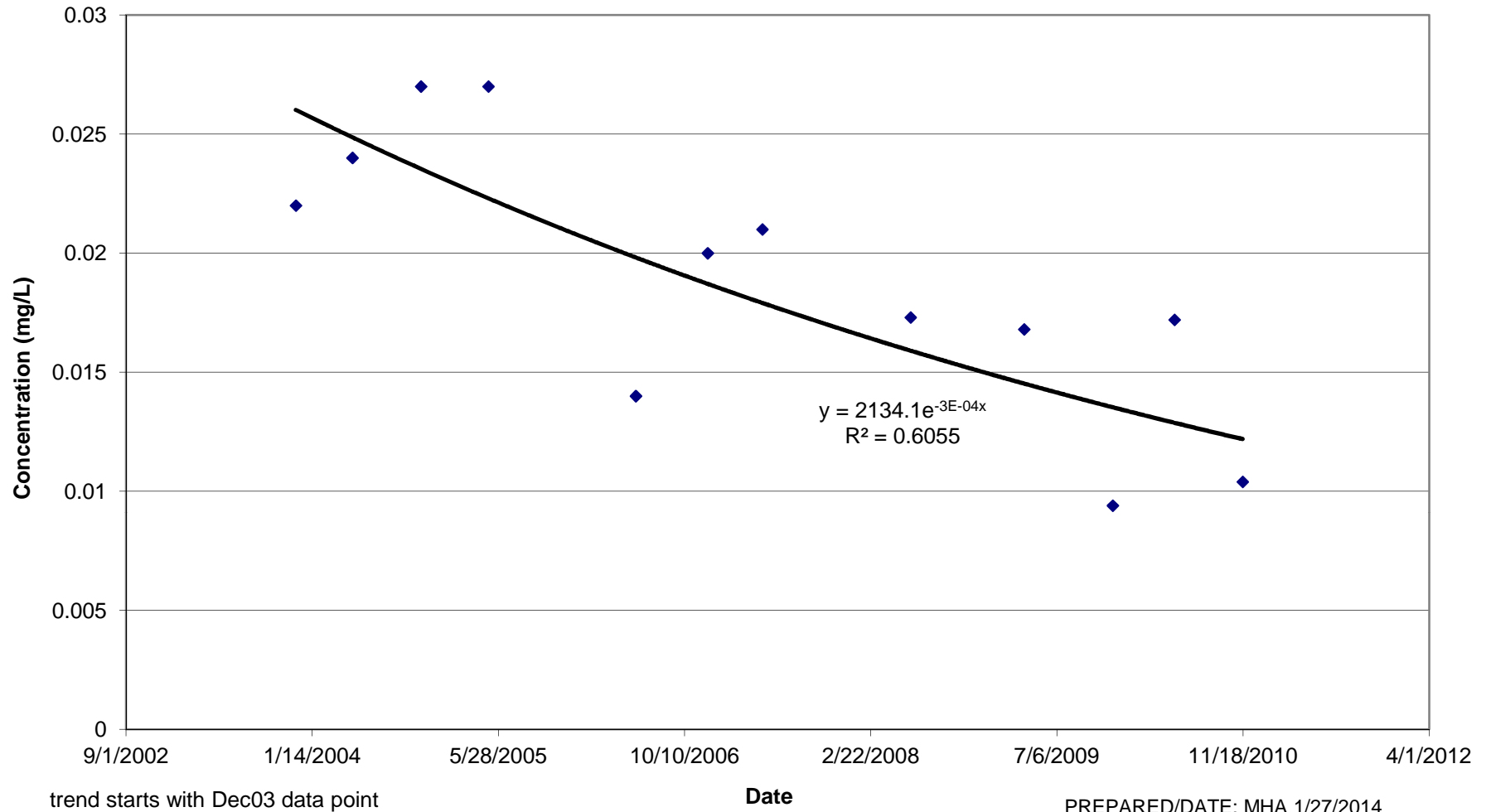
CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40ml/wal	2	HCl	8260	Site rocks
40ml/wal	2	HCl	R&K	Gases

GENERAL INFORMATION	
WEATHER:	Sunny clear cool
SHIPPED VIA:	Delivered to AES laboratory
SHIPPED TO:	AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340
SAMPLER:	Mark A.
OBSERVER:	

APPENDIX B

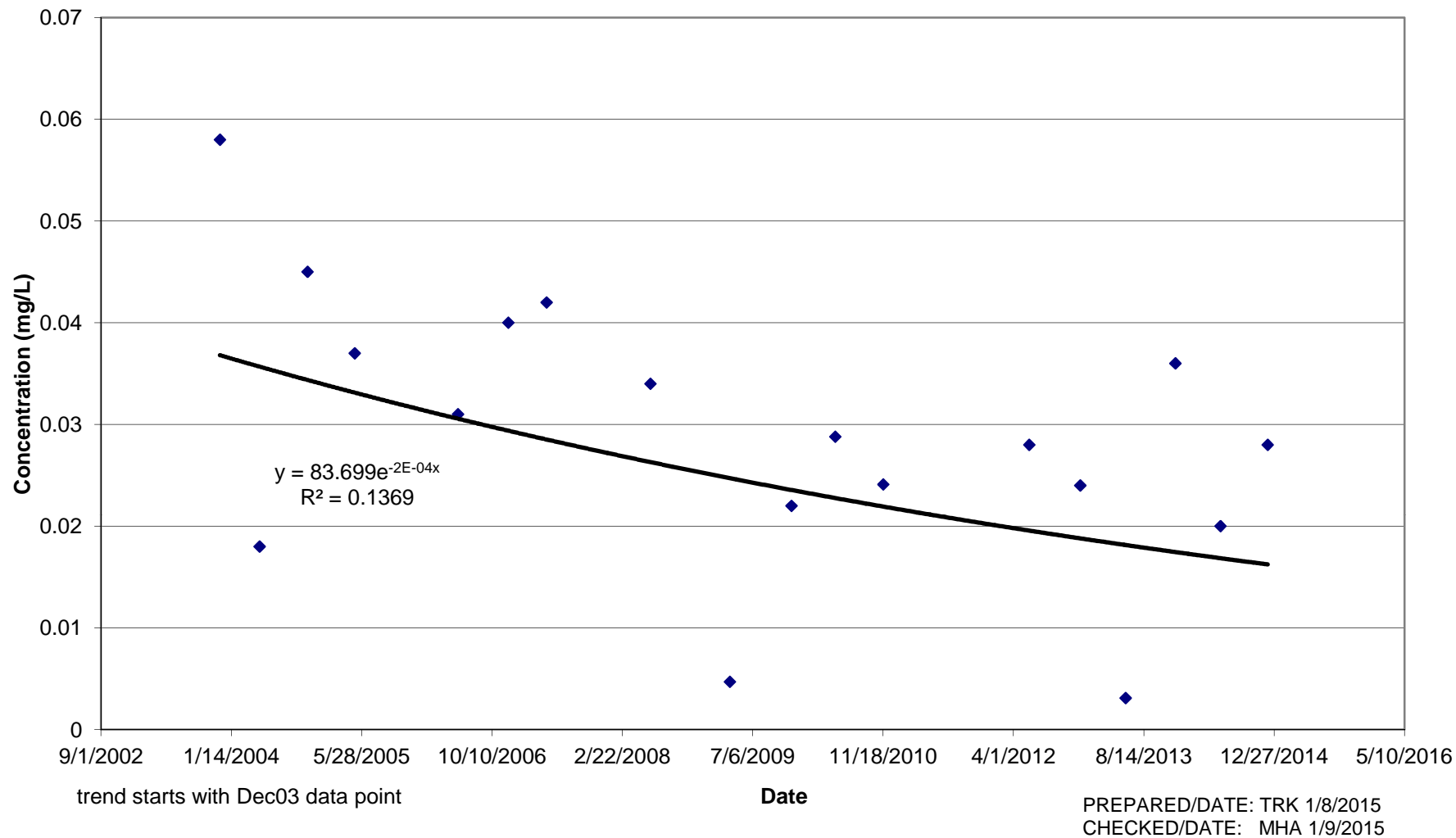
VOC CONCENTRATION TREND GRAPHS

MW-3 Vinyl Chloride Concentration Versus Time Trend Plot

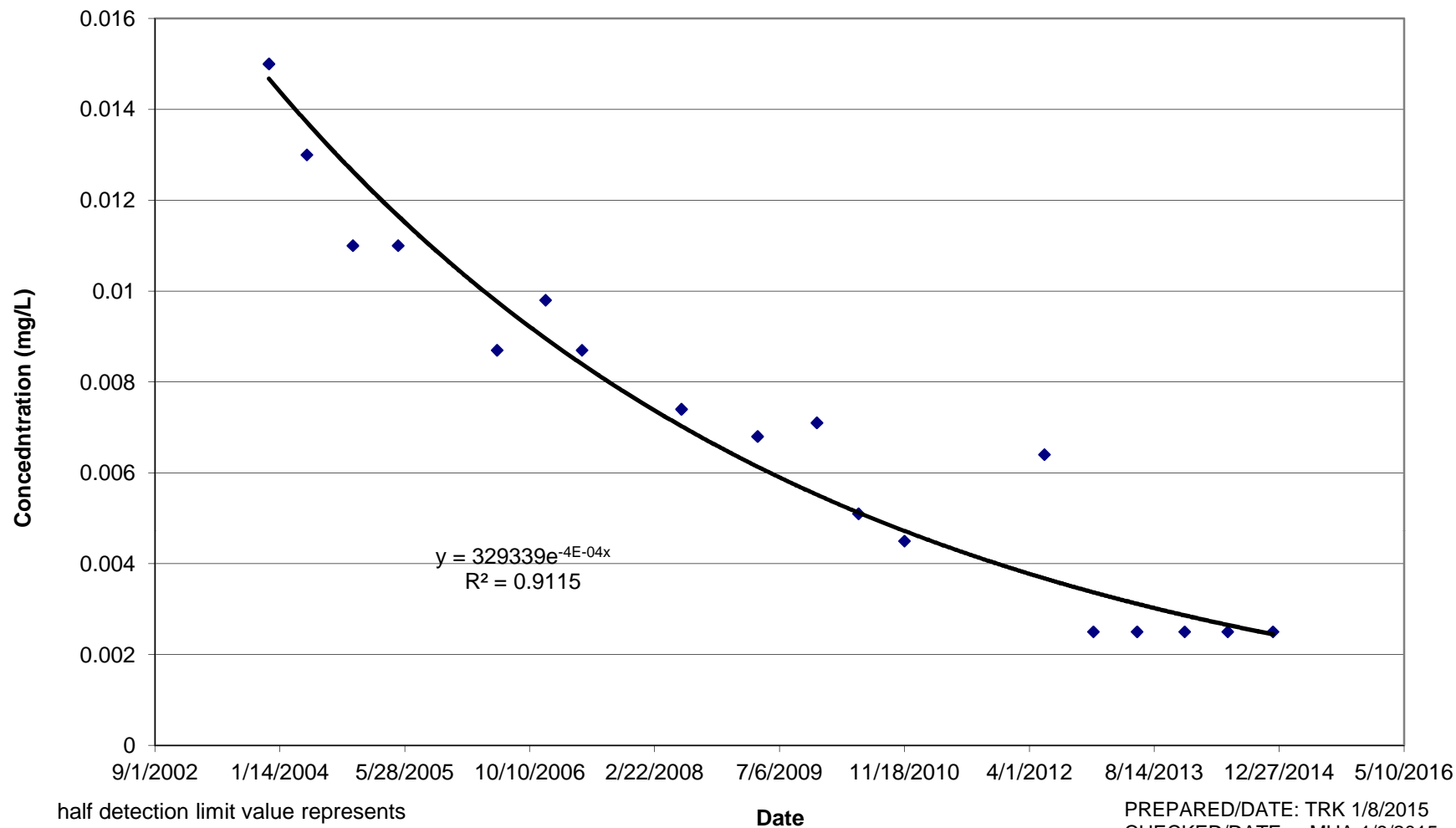


PREPARED/DATE: MHA 1/27/2014
CHECKED/DATE: GJW 2/4/2014

MW-4 Vinyl Chloride Concentration Versus Time Trend Plot



MW-5 1,1-Dichloroethene Concentration Versus Time Trend Plot

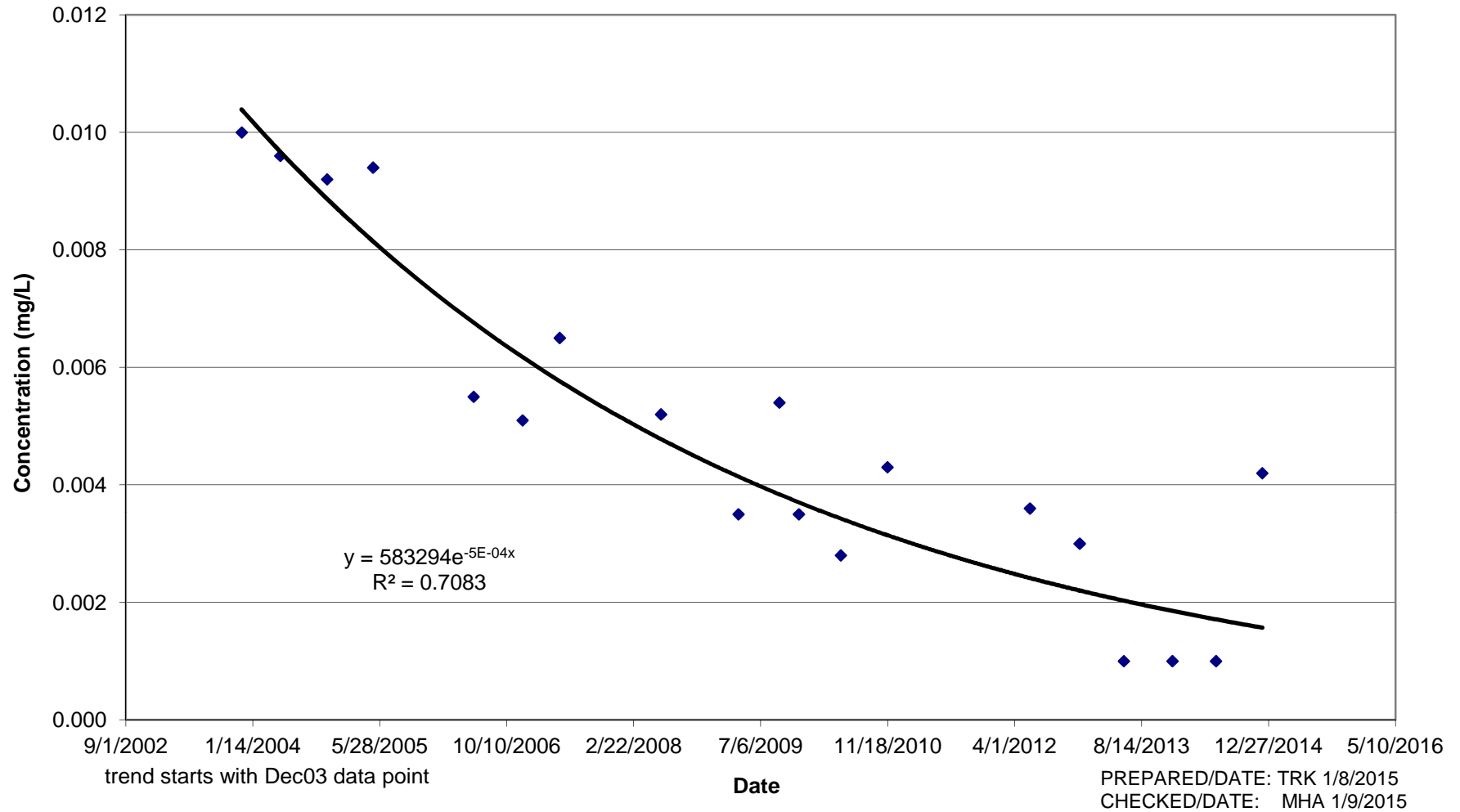


half detection limit value represents
below result limit results

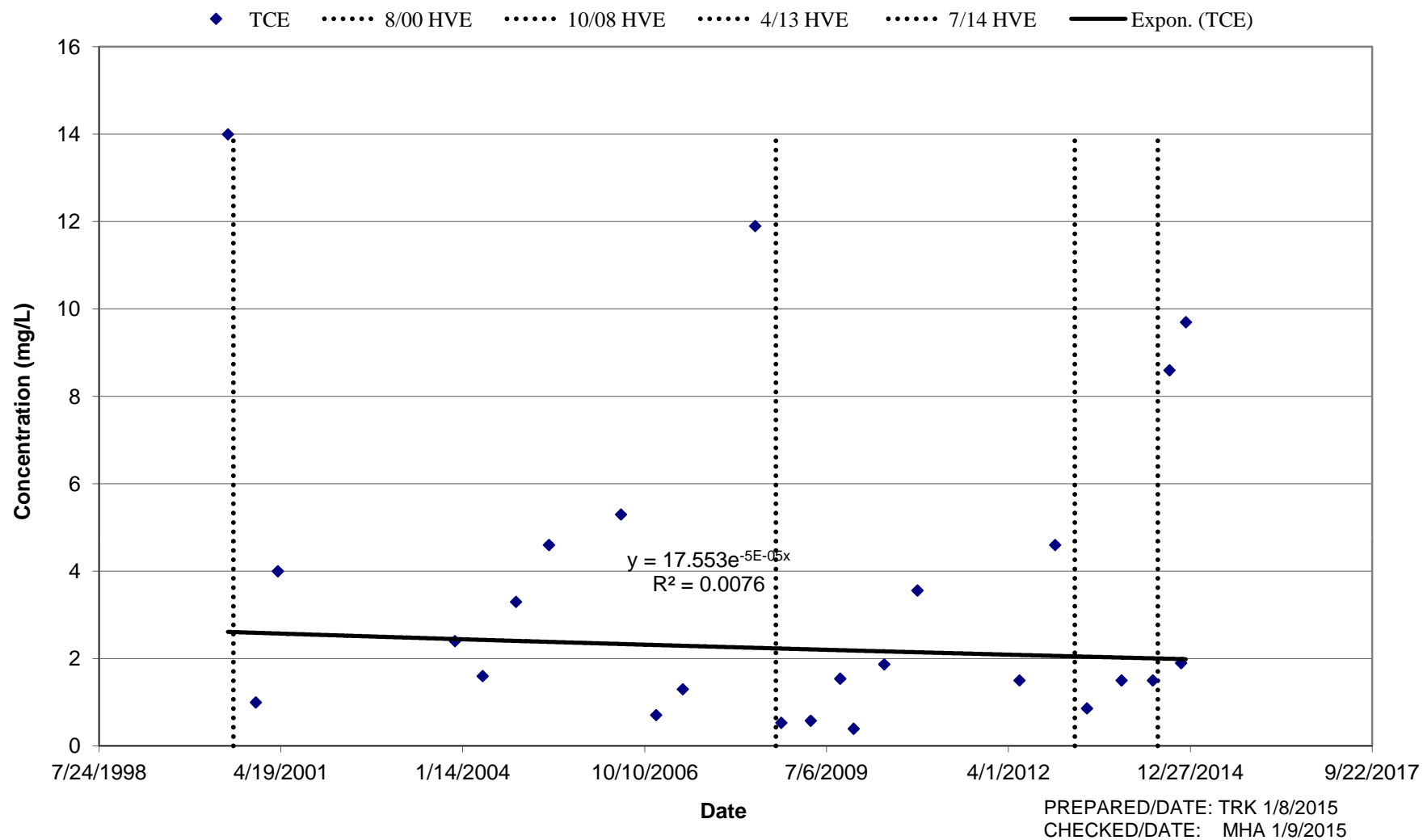
Date

PREPARED/DATE: TRK 1/8/2015
CHECKED/DATE: MHA 1/9/2015

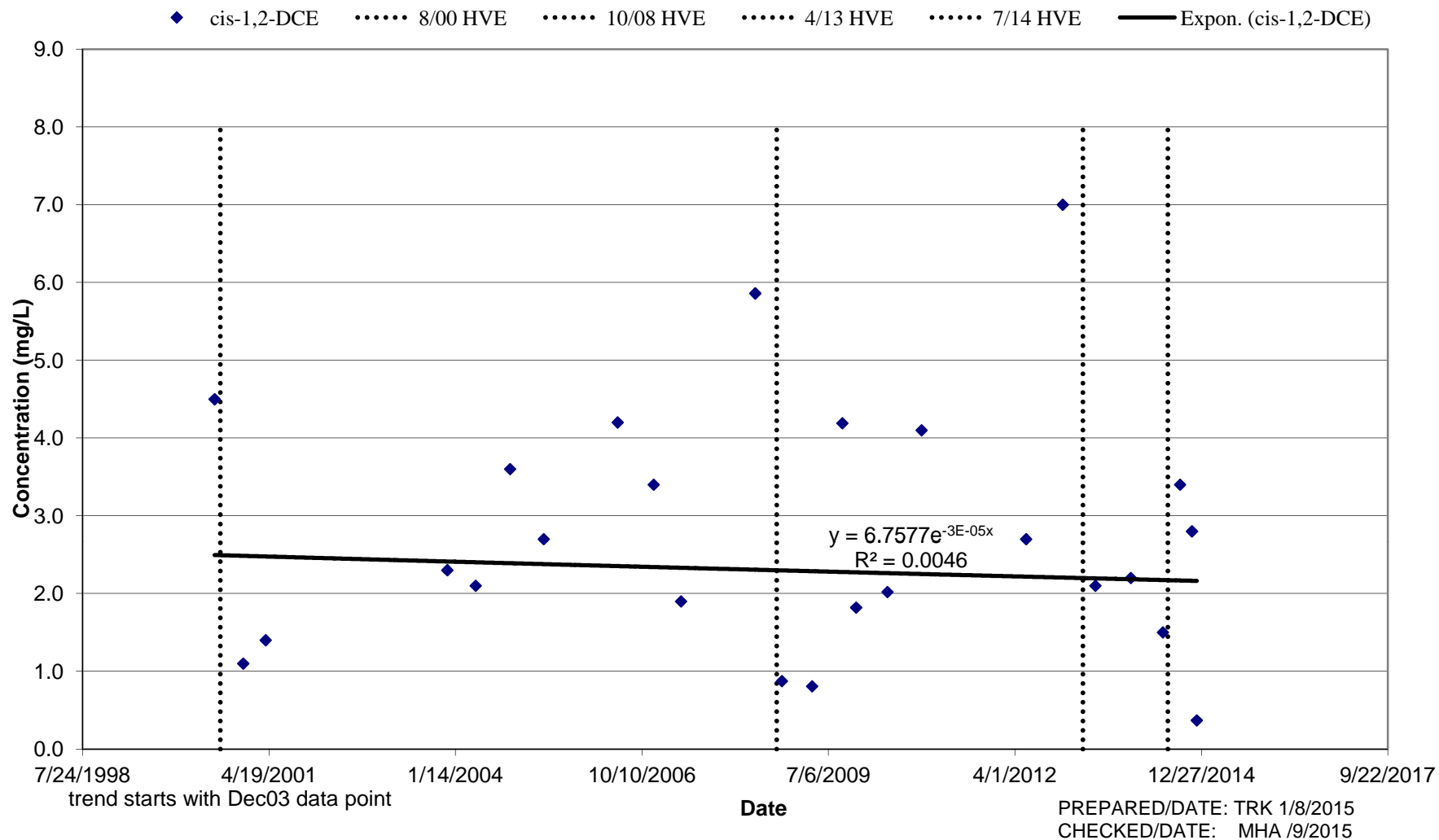
MW-6 Vinyl Chloride Concentration Versus Time Trend Plot



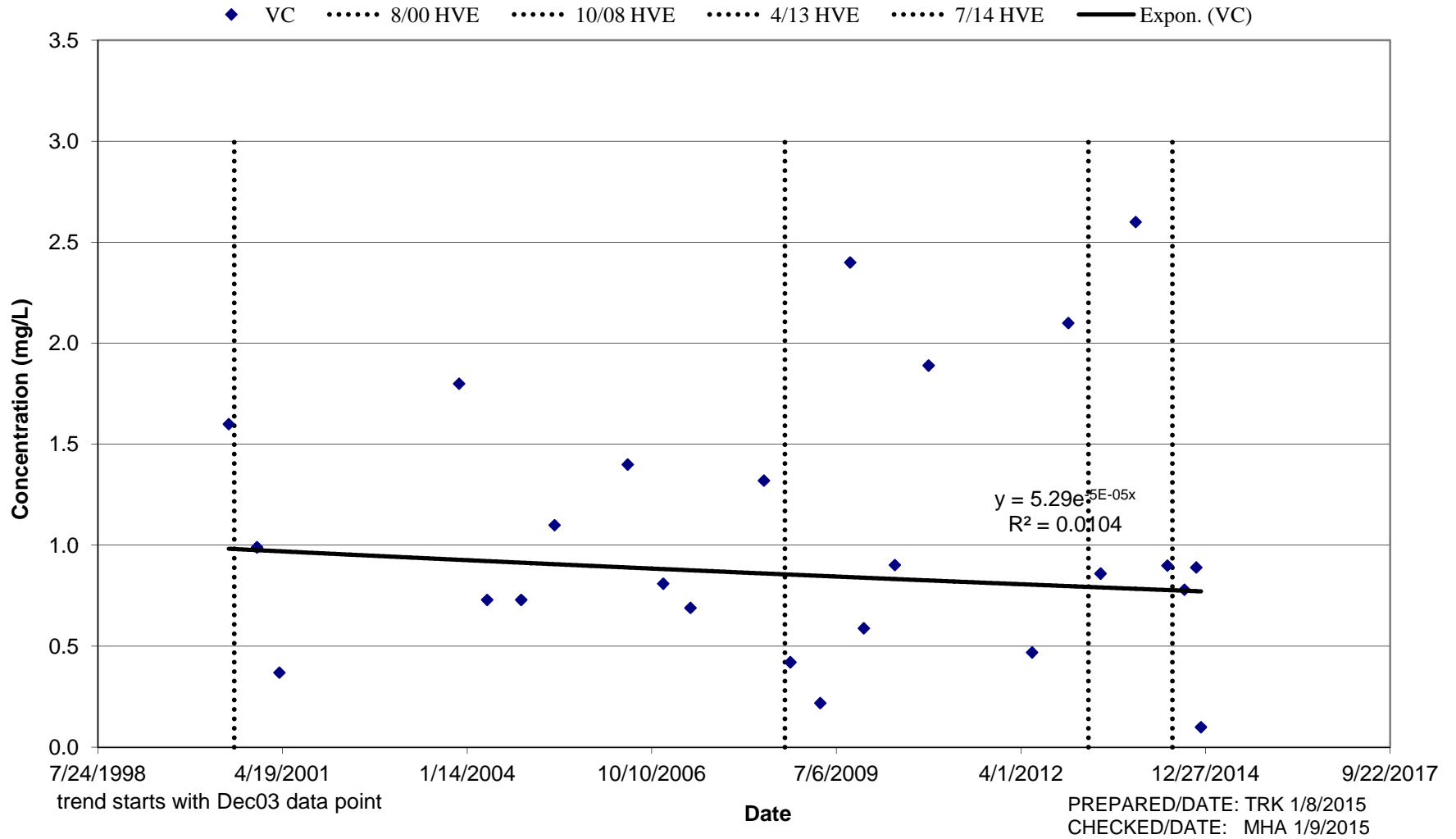
MW-8 Trichloroethene Concentration Versus Time Trend Plot



MW-8 cis-1,2-Dichloroethene Concentration Versus Time Trend Plot

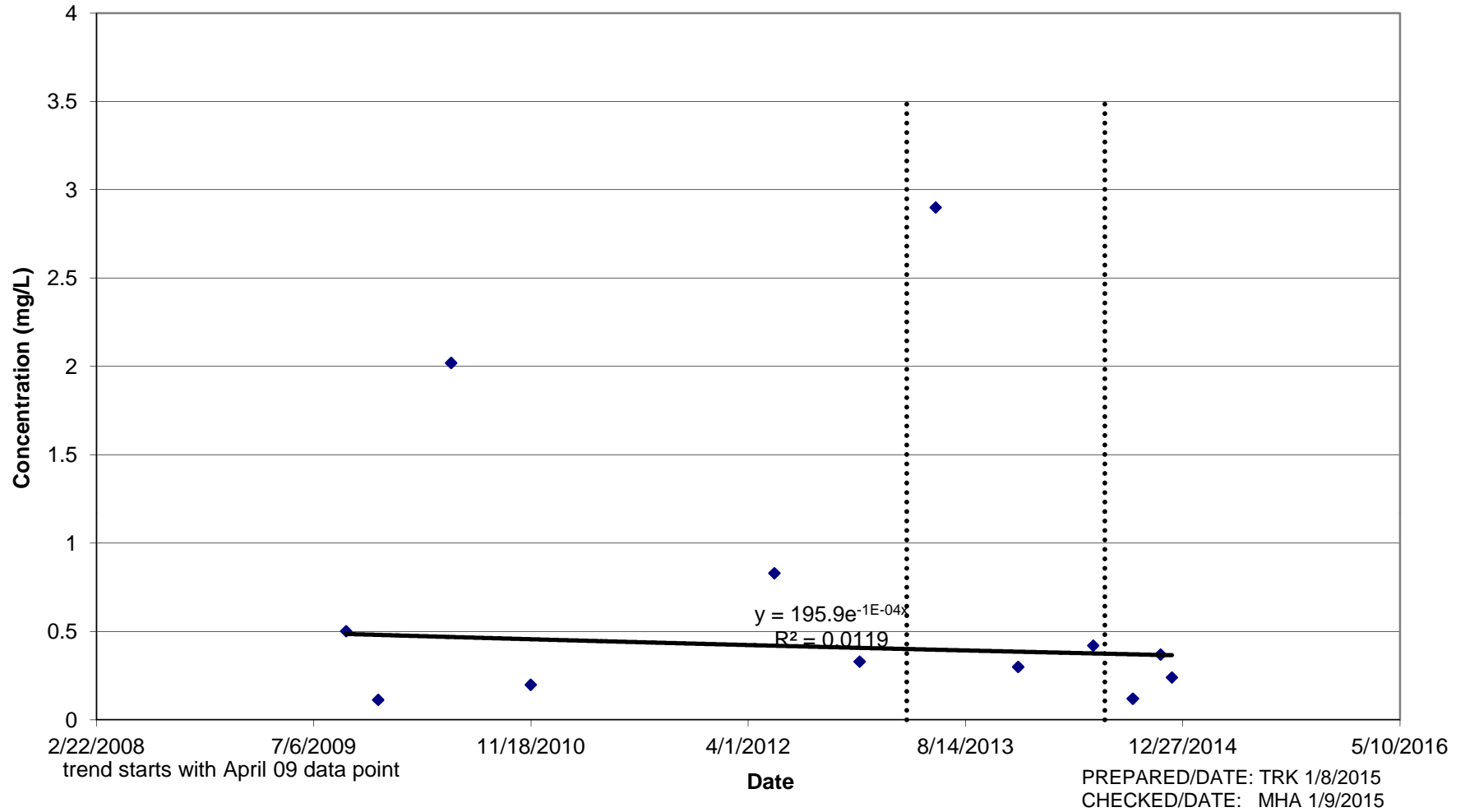


MW-8 Vinyl Chloride Concentration Versus Time Trend Plot

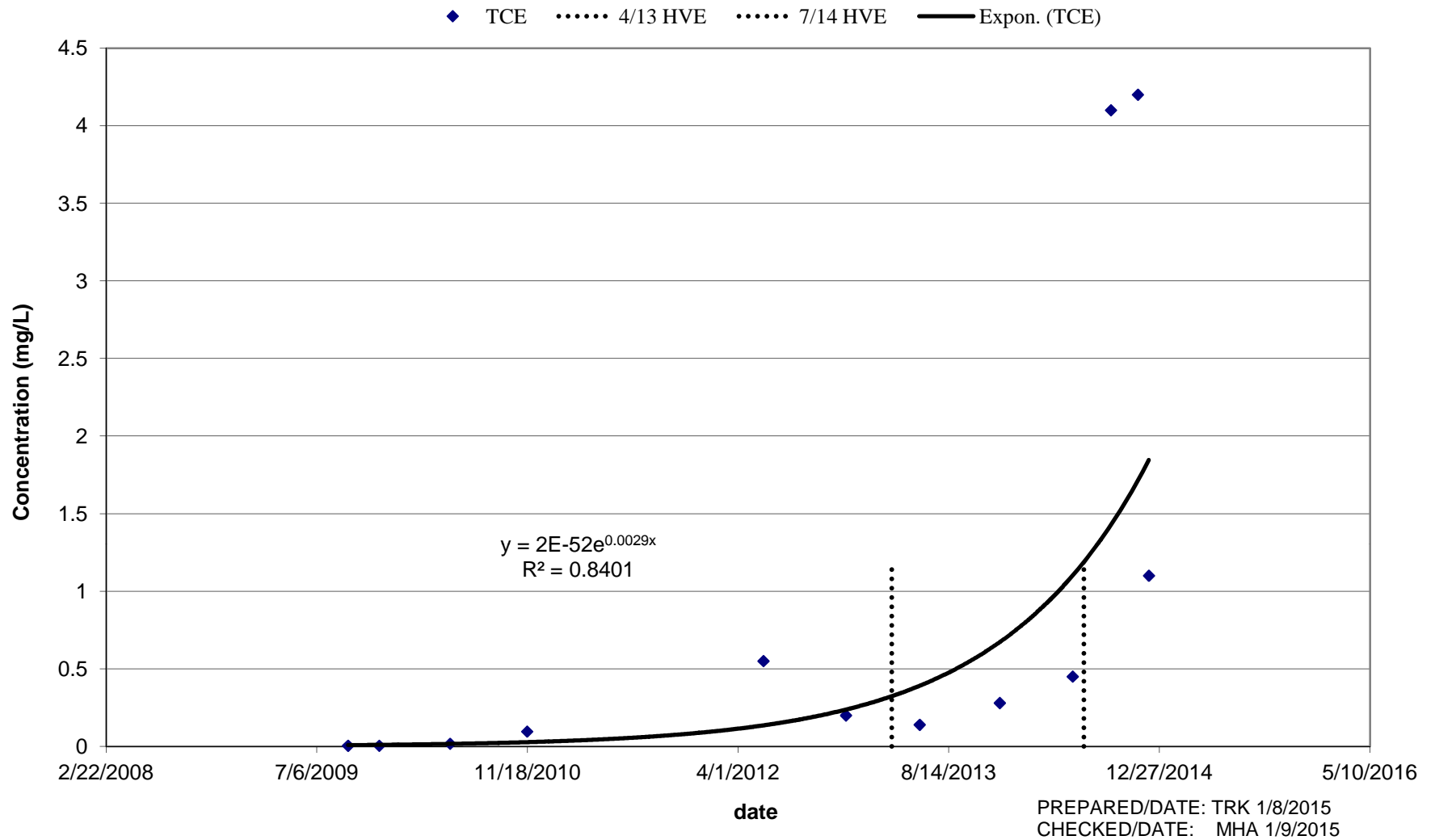


MW-19 Vinyl Chloride Concentration Versus Time Trend Plot

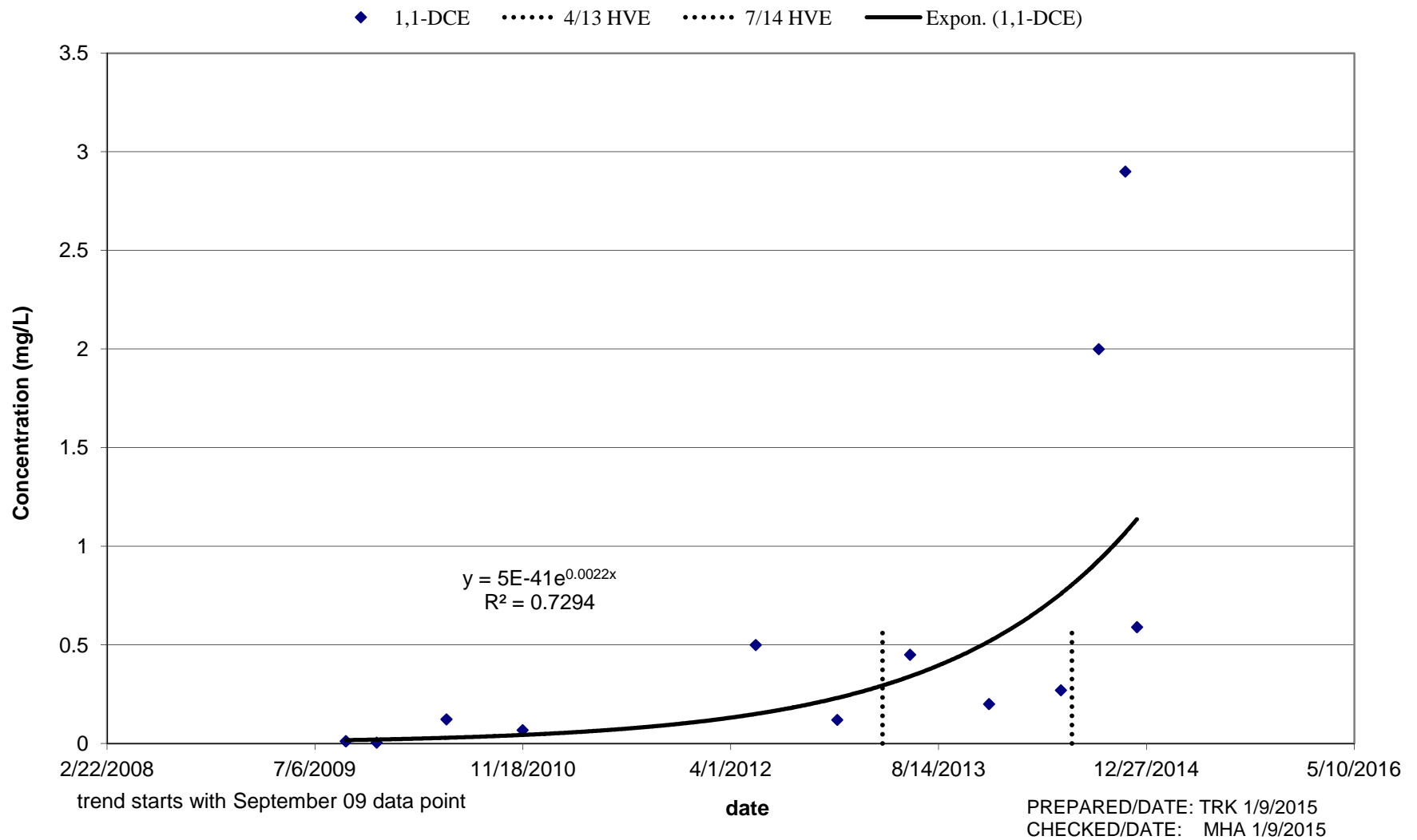
◆ VC 4/13 HVE 7/14 HVE — Expon. (VC)



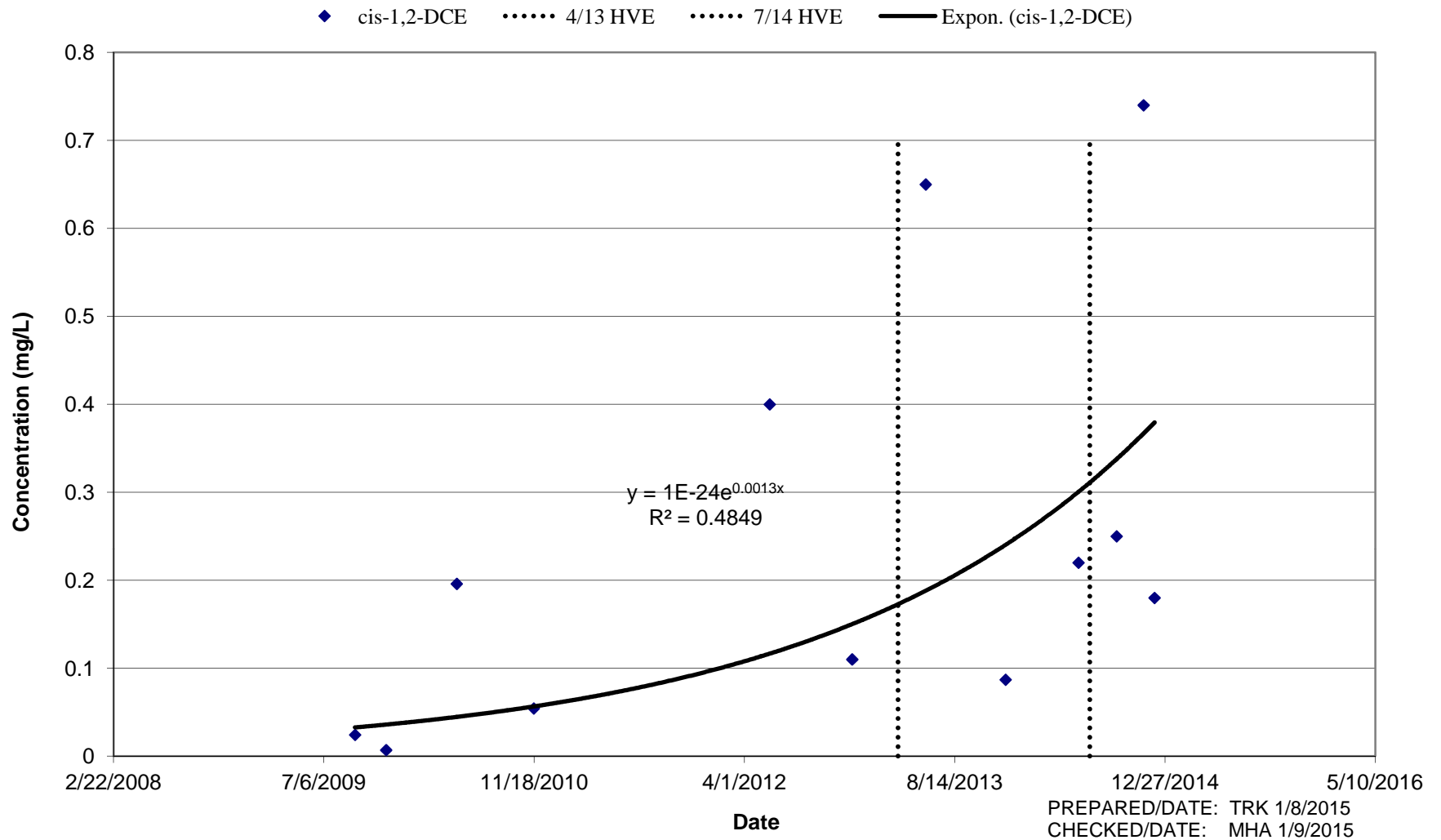
MW-19 Trichloroethene Concentration Versus Time Trend Plot



MW-19 1,1-Dichloroethene Concentration Versus Time Trend Plot



MW-19 cis-1,2-Dichloroethene Concentration Versus Time Trend Plot



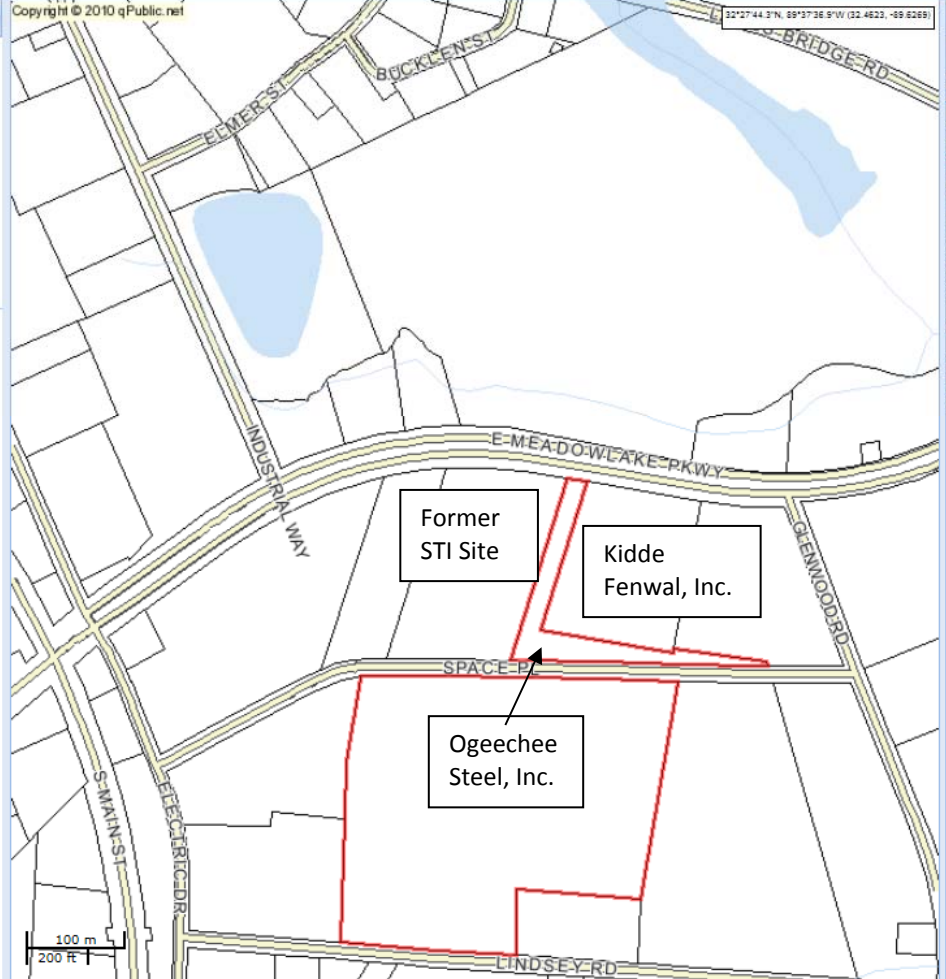
APPENDIX C

VICINITY TAX PARCEL MAP

- Controls**
- Available Layers
 - Parcels
 - Parcel Numbers
 - Address #
 - Yearly Sales
 - Roads
 - Flood Map
 - Lakes & Rivers
 - Aerial Photos (2013)
 - Aerial Photos (2005)



Show Scale



Reports

Parcel
View as: [Google Earth](#) | [Bird's Eye](#) | [Google Maps & Street View](#)

PARCEL INFORMATION TABLE

Selected Parcel	096 005D (Click for Complete Card)
Class Code (NOTE: Not Zoning Info)	I4
Taxing District	SWAINSBORO
Acres	20.46

OWNERSHIP INFORMATION

Name	OGEECHEE STEEL INC
Mailing Address	P O BOX 1469 SWAINSBORO, GA 304010000
Situs/Physical Address	0 LINDSEY RD

VALUES

Land Value	\$61,329.00
Improvement Value	\$263,805.00
Accessory Value	\$19,697.00
Total Value	\$344,831.00

LAST 2 SALES

Date	Price	Reason	Qual
02-1997	\$0	TR	U
02-1997	\$0	GV	U

Website last updated January 4, 2015
GIS Maps last updated September 24, 2014

- Parcel List
- Legend
- Measure

APPENDIX D
GROUNDWATER MODELING UPDATE

MODEL CALIBRATION – YEAR 2014 (YR 18) STI SWAINSBORO, GA

BIOCHLOR Natural Attenuation Decision Support System
Version 2.2
Excel 2000

STI
 Swainsboro, GA
Run Name

Data Input Instructions:
 115 → 1. Enter value directly....or
 ↑ or ↓ → 2. Calculate by filling in gray cells. Press Enter, then **C**
 0.02
(To restore formula, hit "Restore Formula" button)
Variable* → Data used directly in model.

TYPE OF CHLORINATED SOLVENT: Ethenes Ethanes

1. ADVECTION

Seepage Velocity* V_s (ft/yr) **C**

Hydraulic Conductivity K (cm/sec)

Hydraulic Gradient i (ft/ft)

Effective Porosity n (-)

2. DISPERSION

Alpha x* (ft) **Calc. Alpha x**

(Alpha y) / (Alpha x)* (-)

(Alpha z) / (Alpha x)* (-)

3. ADSORPTION

Retardation Factor* R **C**

Soil Bulk Density, rho (kg/L)

Fraction Organic Carbon, f_{oc} (-)

Partition Coefficient K_{oc}

PCE	426 (L/kg)	4.41 (-)
TCE	130 (L/kg)	2.04 (-)
DCE	125 (L/kg)	2.00 (-)
VC	30 (L/kg)	1.24 (-)
ETH	302 (L/kg)	3.42 (-)

Common R (used in model)* = 2.04

4. BIOTRANSFORMATION Order Decay Coefficient:

Zone	Order	λ (1/yr)	half-life (yrs)	Yield
Zone 1	PCE → TCE	0.000		0.79
	TCE → DCE	2.400		0.74
	DCE → VC	2.200		0.64
	VC → ETH	1.900		0.45
Zone 2	PCE → TCE	0.000		
	TCE → DCE	0.000		
	DCE → VC	0.000		
	VC → ETH	0.000		

5. GENERAL

Simulation Time* (yr)

Modeled Area Width* (ft)

Modeled Area Length* (ft)

Zone 1 Length* (ft)

Zone 2 Length* (ft)

6. SOURCE DATA TYPE: Decaying Single Planar

Source Options

Source Thickness in Sat. Zone* (ft)

Width* (ft)

Conc. (mg/L)*	C1
PCE	0.1
TCE	28.0
DCE	18.0
VC	4.0
ETH	0.23

k_d * (1/yr)

PCE	0.1
TCE	0.1
DCE	0.1
VC	0.1
ETH	0.1

7. FIELD DATA FOR COMPARISON

Conc. (mg/L)	10	100	350						
PCE Conc. (mg/L)									
TCE Conc. (mg/L)	5.5	.003	.003						
DCE Conc. (mg/L)	3.23	.003	.003						
VC Conc. (mg/L)	0.6	.005	.001						
ETH Conc. (mg/L)									
Distance from Source (ft)	10	100	350						
Date Data Collected	2014								

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE

RUN ARRAY

Help

Restore

RESET

SEE

Paste

Unprotect

Vertical Plane Source: Determine Source Well Location and Input Solvent Concentrations

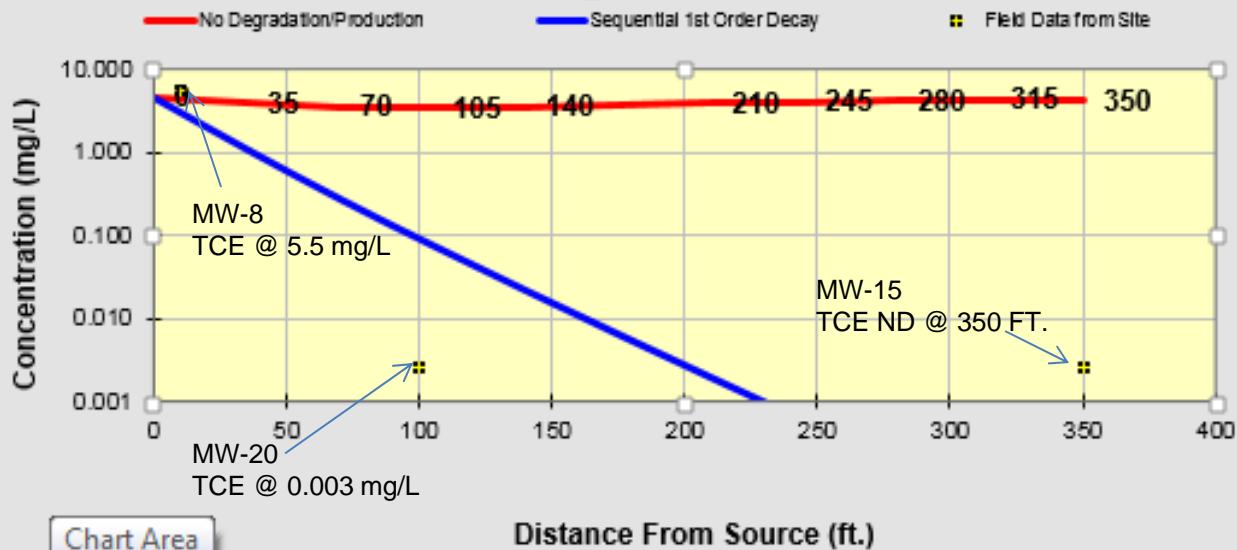
View of Plume Looking Down

Observed Centerline Conc. at Monitoring Wells

MODEL CALIBRATION – TCE IN YEAR 2014 (YR 18) STI SWAINSBORO, GA

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

TCE	Distance from Source (ft)										
No Degradation	0	35	70	105	140	175	210	245	280	315	350
Biotransformation	4.6284	1.104	0.279	0.077	0.022	0.007	0.002	0.001	0.000	0.000	0.000
	Monitoring Well Locations (ft)										
	10	100	350								
Field Data from Site	5.500	0.003	0.003								



- See PCE
- See TCE
- See DCE
- See VC
- See ETH

Prepare Animation

Time:

18.0 Years

Log ↔ Linear

Unprotect Sheet

Return to Input

To All

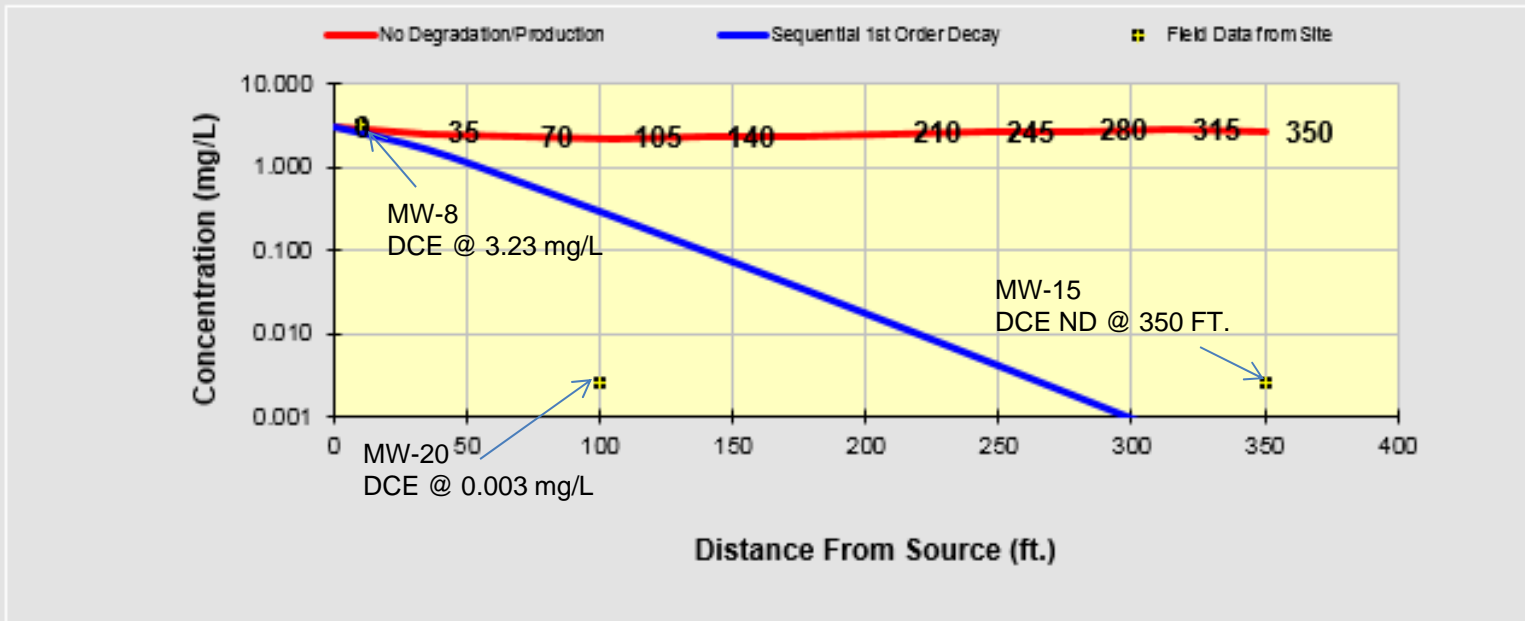
To Array

MODEL CALIBRATION – DCE IN YEAR 2014 (YR 18) STI SWAINSBORO, GA

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

DCE	Distance from Source (ft)										
	0	35	70	105	140	175	210	245	280	315	350
No Degradation	2.975	2.525	2.270	2.222	2.269	2.369	2.497	2.626	2.722	2.741	2.646
Biotransformation	2.9754	1.597	0.647	0.251	0.095	0.035	0.013	0.005	0.002	0.001	0.000

	Monitoring Well Locations (ft)										
	10	100	350								
Field Data from Site	3.230	0.003	0.003								



- See PCE
- See TCE
- See DCE
- See VC
- See ETH

Prepare Animation

Time:

18.0 Years

Log ↔ Linear

Unprotect Sheet

Return to Input

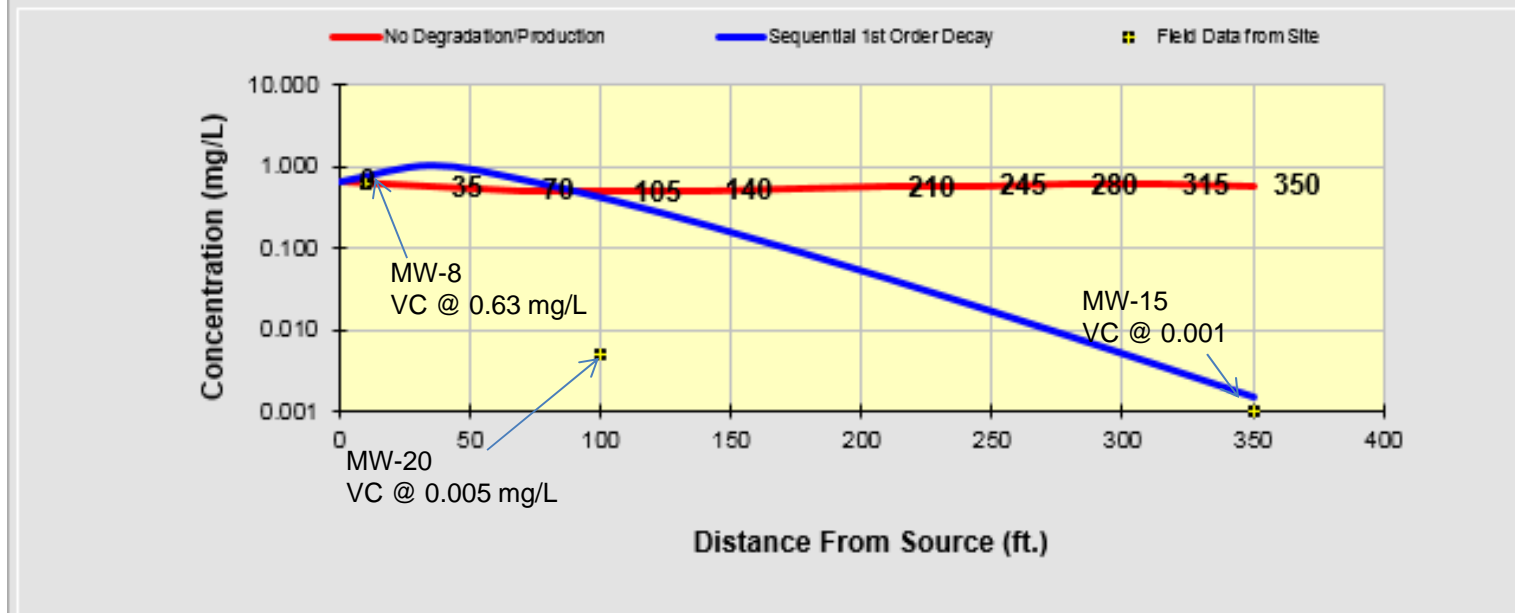
To All

To Array

MODEL CALIBRATION – VC IN YEAR 2014 (YR 18) STI SWAINSBORO, GA

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

VC	Distance from Source (ft)										
	0	35	70	105	140	175	210	245	280	315	350
No Degradation	0.661	0.561	0.504	0.494	0.504	0.526	0.555	0.584	0.605	0.609	0.588
Biotransformation	0.6612	1.057	0.703	0.388	0.195	0.092	0.042	0.019	0.008	0.003	0.001
	Monitoring Well Locations (ft)										
	10	100	350								
Field Data from Site	0.630	0.005	0.001								



- [See PCE](#)
- [See TCE](#)
- [See DCE](#)
- [See VC](#)
- [See ETH](#)

Prepare Animation

Time:

18.0 Years

Log ↔ Linear

Unprotect Sheet

Return to Input

To All

To Array

APPENDIX E
LABORATORY REPORTS



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

December 10, 2014

Greg Wrenn
AMEC E&I, Inc. -Kennesaw
1075 Big Shanty Rd NW
Kennesaw GA 30144

TEL: (770) 421-3444
FAX: (770) 421-3486

RE: Swainsboro GA

Dear Greg Wrenn:

Order No: 1412417

Analytical Environmental Services, Inc. received 20 samples on 12/4/2014 10:50:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Tara Esbeck
Project Manager



ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704

AES

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 141247

Date: 12-4-14 Page 2 of 2

COMPANY: AMEC		ADDRESS: 1075 Big Shanty RD NW Suite 100 Kennesaw, GA					ANALYSIS REQUESTED										Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.																																								
PHONE: 770-421-3400		FAX:					<table border="1"> <tr> <td>Site VOCs</td> <td>Site Gases</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>										Site VOCs	Site Gases																																							No # of Containers
Site VOCs	Site Gases																																																								
SAMPLED BY: Mark A. Z EVER G.		SIGNATURE: <i>[Signature]</i>					PRESERVATION (See codes)										REMARKS																																								
#	SAMPLE ID	SAMPLED		Grab	Composite	Matrix (See codes)																																																			
		DATE	TIME																																																						
1	DUP-1	12-2-14	1200	✓		GW	2	2														4																																			
2	SW-2	12-3-14	1015	✓		SW	2	2														2																																			
3	SW-4	12-3-14	1050	✓		SW	2	2														2																																			
4	SW-5	12-3-14	1130	✓		SW	2	2														2																																			
5	SW-6	12-3-14	1200	✓		SW	2	2														2																																			
6	TRIP BLANK			✓		W	2	2														2																																			
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RELINQUISHED BY		DATE/TIME	RECEIVED BY		DATE/TIME	PROJECT INFORMATION										RECEIPT																																									
1: <i>[Signature]</i>		12-4-14 1050	2: <i>[Signature]</i>		12/4/14 10:50	PROJECT NAME: STI										Total # of Containers																																									
2:			3:			PROJECT #: 6125-08-0149										Turnaround Time Request <input checked="" type="radio"/> Standard 5 Business Days <input type="radio"/> 2 Business Day Rush <input type="radio"/> Next Business Day Rush <input type="radio"/> Same Day Rush (auth req.) <input type="radio"/> Other _____																																									
3:						SITE ADDRESS: Swainsboro, GA																																																			
						SEND REPORT TO: GRP9 WPCAN										STATE PROGRAM (if any): _____ E-mail? Y/N; Fax? Y/N DATA PACKAGE: I II III IV																																									
						INVOICE TO: (IF DIFFERENT FROM ABOVE)																																																			
SPECIAL INSTRUCTIONS/COMMENTS: Site VOCs area site specific list of VOCs only Site Gases SOP-Rsk 175 methane, ethane, and ethane		SHIPMENT METHOD																																																							
		OUT / / VIA:																																																							
		IN <input checked="" type="radio"/> CLIENT <input type="radio"/> FedEx <input type="radio"/> UPS <input type="radio"/> MAIL <input type="radio"/> COURIER																																																							
		GREYHOUND OTHER _____																																																							
		QUOTE #:												PO#:																																											

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
 PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-12
Project Name: Swainsboro GA	Collection Date: 12/2/2014 8:25:00 AM
Lab ID: 1412417-001	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				(SW5030B)				
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 00:54	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 00:54	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 00:54	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 00:54	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 00:54	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 00:54	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 00:54	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 00:54	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 00:54	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 00:54	NP
Vinyl chloride	BRL	2.0		ug/L	200235	1	12/09/2014 00:54	NP
Surr: 4-Bromofluorobenzene	84.8	70.6-123		%REC	200235	1	12/09/2014 00:54	NP
Surr: Dibromofluoromethane	110	78.7-124		%REC	200235	1	12/09/2014 00:54	NP
Surr: Toluene-d8	95.7	81.3-120		%REC	200235	1	12/09/2014 00:54	NP
GC Analysis of Gaseous Samples SOP-RSK 175				(RSK175)				
Ethane	BRL	9		ug/L	200110	1	12/05/2014 17:15	JM
Ethylene	BRL	7		ug/L	200110	1	12/05/2014 17:15	JM
Methane	BRL	4		ug/L	200110	1	12/05/2014 17:15	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-20
Project Name: Swainsboro GA	Collection Date: 12/2/2014 8:43:00 AM
Lab ID: 1412417-002	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B		(SW5030B)						
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 01:19	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 01:19	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 01:19	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 01:19	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 01:19	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 01:19	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 01:19	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 01:19	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 01:19	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 01:19	NP
Vinyl chloride	3.7	2.0		ug/L	200235	1	12/09/2014 01:19	NP
Surr: 4-Bromofluorobenzene	86.3	70.6-123		%REC	200235	1	12/09/2014 01:19	NP
Surr: Dibromofluoromethane	111	78.7-124		%REC	200235	1	12/09/2014 01:19	NP
Surr: Toluene-d8	96.7	81.3-120		%REC	200235	1	12/09/2014 01:19	NP
GC Analysis of Gaseous Samples SOP-RSK 175		(RSK175)						
Ethane	BRL	9		ug/L	200110	1	12/05/2014 17:20	JM
Ethylene	BRL	7		ug/L	200110	1	12/05/2014 17:20	JM
Methane	3200	80		ug/L	200110	20	12/05/2014 17:46	JM

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-20D
Project Name: Swainsboro GA	Collection Date: 12/2/2014 10:02:00 AM
Lab ID: 1412417-003	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 01:43	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 01:43	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 01:43	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 01:43	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 01:43	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 01:43	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 01:43	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 01:43	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 01:43	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 01:43	NP
Vinyl chloride	BRL	2.0		ug/L	200235	1	12/09/2014 01:43	NP
Surr: 4-Bromofluorobenzene	84	70.6-123		%REC	200235	1	12/09/2014 01:43	NP
Surr: Dibromofluoromethane	112	78.7-124		%REC	200235	1	12/09/2014 01:43	NP
Surr: Toluene-d8	97	81.3-120		%REC	200235	1	12/09/2014 01:43	NP
GC Analysis of Gaseous Samples SOP-RSK 175					(RSK175)			
Ethane	BRL	9		ug/L	200110	1	12/05/2014 17:24	JM
Ethylene	BRL	7		ug/L	200110	1	12/05/2014 17:24	JM
Methane	BRL	4		ug/L	200110	1	12/05/2014 17:24	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-9R
Project Name: Swainsboro GA	Collection Date: 12/2/2014 9:45:00 AM
Lab ID: 1412417-004	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:08	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:08	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:08	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:08	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 02:08	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:08	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 02:08	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 02:08	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 02:08	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 02:08	NP
Vinyl chloride	BRL	2.0		ug/L	200235	1	12/09/2014 02:08	NP
Surr: 4-Bromofluorobenzene	84.4	70.6-123		%REC	200235	1	12/09/2014 02:08	NP
Surr: Dibromofluoromethane	115	78.7-124		%REC	200235	1	12/09/2014 02:08	NP
Surr: Toluene-d8	96.9	81.3-120		%REC	200235	1	12/09/2014 02:08	NP

GC Analysis of Gaseous Samples SOP-RSK 175					(RSK175)			
Ethane	BRL	9		ug/L	200110	1	12/05/2014 17:29	JM
Ethylene	BRL	7		ug/L	200110	1	12/05/2014 17:29	JM
Methane	100	4		ug/L	200110	1	12/05/2014 17:29	JM

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-15
Project Name: Swainsboro GA	Collection Date: 12/2/2014 10:50:00 AM
Lab ID: 1412417-005	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B			(SW5030B)					
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:33	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:33	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:33	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:33	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 02:33	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:33	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 02:33	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 02:33	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 02:33	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 02:33	NP
Vinyl chloride	BRL	2.0		ug/L	200235	1	12/09/2014 02:33	NP
Surr: 4-Bromofluorobenzene	84.4	70.6-123		%REC	200235	1	12/09/2014 02:33	NP
Surr: Dibromofluoromethane	114	78.7-124		%REC	200235	1	12/09/2014 02:33	NP
Surr: Toluene-d8	97.5	81.3-120		%REC	200235	1	12/09/2014 02:33	NP
GC Analysis of Gaseous Samples SOP-RSK 175			(RSK175)					
Ethane	BRL	9		ug/L	200110	1	12/05/2014 17:34	JM
Ethylene	BRL	7		ug/L	200110	1	12/05/2014 17:34	JM
Methane	580	20		ug/L	200110	5	12/05/2014 17:53	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-18
Project Name: Swainsboro GA	Collection Date: 12/2/2014 11:30:00 AM
Lab ID: 1412417-006	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B			(SW5030B)					
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:58	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:58	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:58	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:58	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 02:58	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 02:58	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 02:58	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 02:58	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 02:58	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 02:58	NP
Vinyl chloride	3.0	2.0		ug/L	200235	1	12/09/2014 02:58	NP
Surr: 4-Bromofluorobenzene	84.1	70.6-123		%REC	200235	1	12/09/2014 02:58	NP
Surr: Dibromofluoromethane	110	78.7-124		%REC	200235	1	12/09/2014 02:58	NP
Surr: Toluene-d8	95.2	81.3-120		%REC	200235	1	12/09/2014 02:58	NP
GC Analysis of Gaseous Samples SOP-RSK 175			(RSK175)					
Ethane	BRL	9		ug/L	200110	1	12/05/2014 18:03	JM
Ethylene	BRL	7		ug/L	200110	1	12/05/2014 18:03	JM
Methane	7100	400		ug/L	200110	100	12/05/2014 18:42	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-21
Project Name: Swainsboro GA	Collection Date: 12/2/2014 12:15:00 PM
Lab ID: 1412417-007	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 03:23	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 03:23	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 03:23	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 03:23	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 03:23	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 03:23	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 03:23	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 03:23	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 03:23	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 03:23	NP
Vinyl chloride	BRL	2.0		ug/L	200235	1	12/09/2014 03:23	NP
Surr: 4-Bromofluorobenzene	84.1	70.6-123		%REC	200235	1	12/09/2014 03:23	NP
Surr: Dibromofluoromethane	112	78.7-124		%REC	200235	1	12/09/2014 03:23	NP
Surr: Toluene-d8	97.2	81.3-120		%REC	200235	1	12/09/2014 03:23	NP
GC Analysis of Gaseous Samples SOP-RSK 175					(RSK175)			
Ethane	BRL	9		ug/L	200110	1	12/05/2014 18:08	JM
Ethylene	BRL	7		ug/L	200110	1	12/05/2014 18:08	JM
Methane	2300	80		ug/L	200110	20	12/05/2014 18:47	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-11
Project Name: Swainsboro GA	Collection Date: 12/2/2014 12:17:00 PM
Lab ID: 1412417-008	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				(SW5030B)				
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 03:47	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 03:47	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 03:47	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 03:47	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 03:47	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 03:47	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 03:47	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 03:47	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 03:47	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 03:47	NP
Vinyl chloride	BRL	2.0		ug/L	200235	1	12/09/2014 03:47	NP
Surr: 4-Bromofluorobenzene	83.9	70.6-123		%REC	200235	1	12/09/2014 03:47	NP
Surr: Dibromofluoromethane	110	78.7-124		%REC	200235	1	12/09/2014 03:47	NP
Surr: Toluene-d8	95.6	81.3-120		%REC	200235	1	12/09/2014 03:47	NP
GC Analysis of Gaseous Samples SOP-RSK 175				(RSK175)				
Ethane	BRL	9		ug/L	200110	1	12/05/2014 18:12	JM
Ethylene	BRL	7		ug/L	200110	1	12/05/2014 18:12	JM
Methane	7	4		ug/L	200110	1	12/05/2014 18:12	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-7
Project Name: Swainsboro GA	Collection Date: 12/25/2014 2:12:00 PM
Lab ID: 1412417-009	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 04:12	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 04:12	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 04:12	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 04:12	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 04:12	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 04:12	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 04:12	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 04:12	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 04:12	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 04:12	NP
Vinyl chloride	BRL	2.0		ug/L	200235	1	12/09/2014 04:12	NP
Surr: 4-Bromofluorobenzene	84.2	70.6-123		%REC	200235	1	12/09/2014 04:12	NP
Surr: Dibromofluoromethane	110	78.7-124		%REC	200235	1	12/09/2014 04:12	NP
Surr: Toluene-d8	96.2	81.3-120		%REC	200235	1	12/09/2014 04:12	NP
GC Analysis of Gaseous Samples SOP-RSK 175					(RSK175)			
Ethane	BRL	9		ug/L	200110	1	12/05/2014 18:17	JM
Ethylene	BRL	7		ug/L	200110	1	12/05/2014 18:17	JM
Methane	6	4		ug/L	200110	1	12/05/2014 18:17	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-4
Project Name: Swainsboro GA	Collection Date: 12/2/2014 2:30:00 PM
Lab ID: 1412417-010	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 04:36	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 04:36	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 04:36	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 04:36	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 04:36	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 04:36	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 04:36	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 04:36	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 04:36	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 04:36	NP
Vinyl chloride	28	2.0		ug/L	200235	1	12/09/2014 04:36	NP
Surr: 4-Bromofluorobenzene	86.3	70.6-123		%REC	200235	1	12/09/2014 04:36	NP
Surr: Dibromofluoromethane	114	78.7-124		%REC	200235	1	12/09/2014 04:36	NP
Surr: Toluene-d8	99.1	81.3-120		%REC	200235	1	12/09/2014 04:36	NP
GC Analysis of Gaseous Samples SOP-RSK 175					(RSK175)			
Ethane	BRL	9		ug/L	200110	1	12/05/2014 18:21	JM
Ethylene	BRL	7		ug/L	200110	1	12/05/2014 18:21	JM
Methane	5900	200		ug/L	200110	50	12/05/2014 18:51	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-5
Project Name: Swainsboro GA	Collection Date: 12/2/2014 3:28:00 PM
Lab ID: 1412417-011	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B (SW5030B)								
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:00	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:00	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:00	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:00	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 05:00	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:00	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 05:00	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 05:00	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 05:00	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 05:00	NP
Vinyl chloride	BRL	2.0		ug/L	200235	1	12/09/2014 05:00	NP
Surr: 4-Bromofluorobenzene	85.9	70.6-123		%REC	200235	1	12/09/2014 05:00	NP
Surr: Dibromofluoromethane	113	78.7-124		%REC	200235	1	12/09/2014 05:00	NP
Surr: Toluene-d8	96.4	81.3-120		%REC	200235	1	12/09/2014 05:00	NP
GC Analysis of Gaseous Samples SOP-RSK 175 (RSK175)								
Ethane	BRL	9		ug/L	200110	1	12/05/2014 18:26	JM
Ethylene	BRL	7		ug/L	200110	1	12/05/2014 18:26	JM
Methane	90	4		ug/L	200110	1	12/05/2014 18:26	JM

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-19
Project Name: Swainsboro GA	Collection Date: 12/2/2014 3:50:00 PM
Lab ID: 1412417-012	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B (SW5030B)								
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 07:53	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 07:53	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 07:53	NP
1,1-Dichloroethane	46	5.0		ug/L	200235	1	12/09/2014 07:53	NP
1,1-Dichloroethene	590	50		ug/L	200235	10	12/09/2014 12:37	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 07:53	NP
Chloroethane	180	10		ug/L	200235	1	12/09/2014 07:53	NP
cis-1,2-Dichloroethene	180	50		ug/L	200235	10	12/09/2014 12:37	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 07:53	NP
Trichloroethene	1100	50		ug/L	200235	10	12/09/2014 12:37	NP
Vinyl chloride	240	20		ug/L	200235	10	12/09/2014 12:37	NP
Surr: 4-Bromofluorobenzene	79.9	70.6-123		%REC	200235	10	12/09/2014 12:37	NP
Surr: 4-Bromofluorobenzene	83.4	70.6-123		%REC	200235	1	12/09/2014 07:53	NP
Surr: Dibromofluoromethane	110	78.7-124		%REC	200235	10	12/09/2014 12:37	NP
Surr: Dibromofluoromethane	113	78.7-124		%REC	200235	1	12/09/2014 07:53	NP
Surr: Toluene-d8	95.4	81.3-120		%REC	200235	10	12/09/2014 12:37	NP
Surr: Toluene-d8	96.8	81.3-120		%REC	200235	1	12/09/2014 07:53	NP

GC Analysis of Gaseous Samples SOP-RSK 175 (RSK175)								
Ethane	10	9		ug/L	200110	1	12/05/2014 18:30	JM
Ethylene	65	7		ug/L	200110	1	12/05/2014 18:30	JM
Methane	1200	40		ug/L	200110	10	12/05/2014 18:56	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-8
Project Name: Swainsboro GA	Collection Date: 12/2/2014 4:35:00 PM
Lab ID: 1412417-013	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	4600	250		ug/L	200235	50	12/09/2014 00:05	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 08:18	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 08:18	NP
1,1-Dichloroethane	34	5.0		ug/L	200235	1	12/09/2014 08:18	NP
1,1-Dichloroethene	4300	250		ug/L	200235	50	12/09/2014 00:05	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 08:18	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 08:18	NP
cis-1,2-Dichloroethene	370	250		ug/L	200235	50	12/09/2014 00:05	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 08:18	NP
Trichloroethene	9700	250		ug/L	200235	50	12/09/2014 00:05	NP
Vinyl chloride	100	2.0		ug/L	200235	1	12/09/2014 08:18	NP
Surr: 4-Bromofluorobenzene	83.7	70.6-123		%REC	200235	50	12/09/2014 00:05	NP
Surr: 4-Bromofluorobenzene	84.7	70.6-123		%REC	200235	1	12/09/2014 08:18	NP
Surr: Dibromofluoromethane	116	78.7-124		%REC	200235	50	12/09/2014 00:05	NP
Surr: Dibromofluoromethane	143	78.7-124	S	%REC	200235	1	12/09/2014 08:18	NP
Surr: Toluene-d8	99.2	81.3-120		%REC	200235	50	12/09/2014 00:05	NP
Surr: Toluene-d8	98.2	81.3-120		%REC	200235	1	12/09/2014 08:18	NP
GC Analysis of Gaseous Samples SOP-RSK 175					(RSK175)			
Ethane	BRL	9		ug/L	200110	1	12/05/2014 19:03	JM
Ethylene	BRL	7		ug/L	200110	1	12/05/2014 19:03	JM
Methane	440	20		ug/L	200110	5	12/05/2014 19:21	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-6
Project Name: Swainsboro GA	Collection Date: 12/2/2014 5:10:00 PM
Lab ID: 1412417-014	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:25	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:25	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:25	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:25	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 05:25	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:25	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 05:25	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 05:25	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 05:25	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 05:25	NP
Vinyl chloride	4.2	2.0		ug/L	200235	1	12/09/2014 05:25	NP
Surr: 4-Bromofluorobenzene	82	70.6-123		%REC	200235	1	12/09/2014 05:25	NP
Surr: Dibromofluoromethane	113	78.7-124		%REC	200235	1	12/09/2014 05:25	NP
Surr: Toluene-d8	98.5	81.3-120		%REC	200235	1	12/09/2014 05:25	NP
GC Analysis of Gaseous Samples SOP-RSK 175					(RSK175)			
Ethane	BRL	9		ug/L	200110	1	12/05/2014 19:08	JM
Ethylene	BRL	7		ug/L	200110	1	12/05/2014 19:08	JM
Methane	2100	80		ug/L	200110	20	12/05/2014 19:26	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: DUP-1
Project Name: Swainsboro GA	Collection Date: 12/2/2014 12:00:00 PM
Lab ID: 1412417-015	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	4800	250		ug/L	200235	50	12/09/2014 00:29	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 07:28	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 07:28	NP
1,1-Dichloroethane	42	5.0		ug/L	200235	1	12/09/2014 07:28	NP
1,1-Dichloroethene	4300	250		ug/L	200235	50	12/09/2014 00:29	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 07:28	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 07:28	NP
cis-1,2-Dichloroethene	400	250		ug/L	200235	50	12/09/2014 00:29	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 07:28	NP
Trichloroethene	9600	250		ug/L	200235	50	12/09/2014 00:29	NP
Vinyl chloride	160	2.0		ug/L	200235	1	12/09/2014 07:28	NP
Surr: 4-Bromofluorobenzene	86.7	70.6-123		%REC	200235	50	12/09/2014 00:29	NP
Surr: 4-Bromofluorobenzene	86.8	70.6-123		%REC	200235	1	12/09/2014 07:28	NP
Surr: Dibromofluoromethane	116	78.7-124		%REC	200235	50	12/09/2014 00:29	NP
Surr: Dibromofluoromethane	141	78.7-124	S	%REC	200235	1	12/09/2014 07:28	NP
Surr: Toluene-d8	96.7	81.3-120		%REC	200235	50	12/09/2014 00:29	NP
Surr: Toluene-d8	97.7	81.3-120		%REC	200235	1	12/09/2014 07:28	NP
GC Analysis of Gaseous Samples SOP-RSK 175					(RSK175)			
Ethane	BRL	9		ug/L	200112	1	12/08/2014 17:57	JM
Ethylene	BRL	7		ug/L	200112	1	12/08/2014 17:57	JM
Methane	410	8		ug/L	200112	2	12/08/2014 18:22	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
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- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 10-Dec-14

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: SW-2
Project Name: Swainsboro GA	Collection Date: 12/3/2014 10:15:00 AM
Lab ID: 1412417-016	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:49	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:49	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:49	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:49	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 05:49	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 05:49	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 05:49	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 05:49	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 05:49	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 05:49	NP
Vinyl chloride	BRL	2.0		ug/L	200235	1	12/09/2014 05:49	NP
Surr: 4-Bromofluorobenzene	82.8	70.6-123		%REC	200235	1	12/09/2014 05:49	NP
Surr: Dibromofluoromethane	113	78.7-124		%REC	200235	1	12/09/2014 05:49	NP
Surr: Toluene-d8	96.5	81.3-120		%REC	200235	1	12/09/2014 05:49	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 10-Dec-14

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: SW-4
Project Name: Swainsboro GA	Collection Date: 12/3/2014 10:50:00 AM
Lab ID: 1412417-017	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 06:14	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 06:14	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 06:14	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 06:14	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 06:14	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 06:14	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 06:14	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 06:14	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 06:14	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 06:14	NP
Vinyl chloride	BRL	2.0		ug/L	200235	1	12/09/2014 06:14	NP
Surr: 4-Bromofluorobenzene	85.2	70.6-123		%REC	200235	1	12/09/2014 06:14	NP
Surr: Dibromofluoromethane	113	78.7-124		%REC	200235	1	12/09/2014 06:14	NP
Surr: Toluene-d8	97.4	81.3-120		%REC	200235	1	12/09/2014 06:14	NP

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: SW-5
Project Name: Swainsboro GA	Collection Date: 12/3/2014 11:30:00 AM
Lab ID: 1412417-018	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 06:39	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 06:39	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 06:39	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 06:39	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 06:39	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 06:39	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 06:39	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 06:39	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 06:39	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 06:39	NP
Vinyl chloride	BRL	2.0		ug/L	200235	1	12/09/2014 06:39	NP
Surr: 4-Bromofluorobenzene	83	70.6-123		%REC	200235	1	12/09/2014 06:39	NP
Surr: Dibromofluoromethane	110	78.7-124		%REC	200235	1	12/09/2014 06:39	NP
Surr: Toluene-d8	95.7	81.3-120		%REC	200235	1	12/09/2014 06:39	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: SW-6
Project Name: Swainsboro GA	Collection Date: 12/3/2014 12:00:00 PM
Lab ID: 1412417-019	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 07:04	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 07:04	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 07:04	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 07:04	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 07:04	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/09/2014 07:04	NP
Chloroethane	BRL	10		ug/L	200235	1	12/09/2014 07:04	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 07:04	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 07:04	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/09/2014 07:04	NP
Vinyl chloride	BRL	2.0		ug/L	200235	1	12/09/2014 07:04	NP
Surr: 4-Bromofluorobenzene	84.4	70.6-123		%REC	200235	1	12/09/2014 07:04	NP
Surr: Dibromofluoromethane	115	78.7-124		%REC	200235	1	12/09/2014 07:04	NP
Surr: Toluene-d8	98.9	81.3-120		%REC	200235	1	12/09/2014 07:04	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: TRIP BLANK
Project Name: Swainsboro GA	Collection Date: 12/3/2014
Lab ID: 1412417-020	Matrix: Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	BRL	5.0		ug/L	200235	1	12/08/2014 22:01	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	200235	1	12/08/2014 22:01	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	200235	1	12/08/2014 22:01	NP
1,1-Dichloroethane	BRL	5.0		ug/L	200235	1	12/08/2014 22:01	NP
1,1-Dichloroethene	BRL	5.0		ug/L	200235	1	12/08/2014 22:01	NP
1,2-Dichloroethane	BRL	5.0		ug/L	200235	1	12/08/2014 22:01	NP
Chloroethane	BRL	10		ug/L	200235	1	12/08/2014 22:01	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/08/2014 22:01	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	200235	1	12/08/2014 22:01	NP
Trichloroethene	BRL	5.0		ug/L	200235	1	12/08/2014 22:01	NP
Vinyl chloride	BRL	2.0		ug/L	200235	1	12/08/2014 22:01	NP
Surr: 4-Bromofluorobenzene	85.2	70.6-123		%REC	200235	1	12/08/2014 22:01	NP
Surr: Dibromofluoromethane	111	78.7-124		%REC	200235	1	12/08/2014 22:01	NP
Surr: Toluene-d8	96.9	81.3-120		%REC	200235	1	12/08/2014 22:01	NP

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client AMEC/Kennesaw Work Order Number 1412417

Checklist completed by Tommy Pacuian Signature Date 12/4/14

Carrier name: FedEx ___ UPS ___ Courier ___ Client US Mail ___ Other ___

Shipping container/cooler in good condition? Yes No ___ Not Present ___
Custody seals intact on shipping container/cooler? Yes ___ No ___ Not Present
Custody seals intact on sample bottles? Yes ___ No ___ Not Present
Container/Temp Blank temperature in compliance? (4°C±2)* Yes No ___

Cooler #1 3.1°C Cooler #2 ___ Cooler #3 ___ Cooler #4 ___ Cooler #5 ___ Cooler #6 ___

Chain of custody present? Yes No ___
Chain of custody signed when relinquished and received? Yes No ___
Chain of custody agrees with sample labels? Yes No ___
Samples in proper container/bottle? Yes No ___
Sample containers intact? Yes No ___
Sufficient sample volume for indicated test? Yes No ___
All samples received within holding time? Yes No ___
Was TAT marked on the COC? Yes No ___
Proceed with Standard TAT as per project history? Yes ___ No ___ Not Applicable
Water - VOA vials have zero headspace? No VOA vials submitted ___ Yes No ___
Water - pH acceptable upon receipt? Yes No ___ Not Applicable ___

Adjusted? ___ Checked by ___
Sample Condition: Good Other(Explain) ___
(For diffusive samples or AIHA lead) Is a known blank included? Yes ___ No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: AMEC E&I, Inc. -Kennesaw
Project Name: Swainsboro GA
Workorder: 1412417

ANALYTICAL QC SUMMARY REPORT

BatchID: 200110

Sample ID: MB-200110	Client ID:	Units: ug/L	Prep Date: 12/05/2014	Run No: 281434							
SampleType: MBLK	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 200110	Analysis Date: 12/05/2014	Seq No: 5957290							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	BRL	9									
Ethylene	BRL	7									
Methane	BRL	4									

Sample ID: LCS-200110	Client ID:	Units: ug/L	Prep Date: 12/05/2014	Run No: 281434							
SampleType: LCS	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 200110	Analysis Date: 12/05/2014	Seq No: 5957291							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	108.4	9	200.0		54.2	41.2	115				
Ethylene	76.83	7	200.0		38.4	26.5	115				
Methane	121.7	4	200.0		60.8	45.1	115				

Sample ID: LCSD-200110	Client ID:	Units: ug/L	Prep Date: 12/05/2014	Run No: 281434							
SampleType: LCSD	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 200110	Analysis Date: 12/05/2014	Seq No: 5957292							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	109.8	9	200.0		54.9	41.2	115	108.4	1.32	20	
Ethylene	78.12	7	200.0		39.1	26.5	115	76.83	1.67	20	
Methane	124.1	4	200.0		62.0	45.1	115	121.7	1.96	20	

Sample ID: 1412302-014AMS	Client ID:	Units: ug/L	Prep Date: 12/05/2014	Run No: 281434							
SampleType: MS	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 200110	Analysis Date: 12/05/2014	Seq No: 5957354							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	98.78	9	200.0		49.4	40.5	115				
Ethylene	66.16	7	200.0		33.1	25.1	115				
Methane	229.5	4	200.0	56.18	86.7	40.4	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
 Project Name: Swainsboro GA
 Workorder: 1412417

ANALYTICAL QC SUMMARY REPORT

BatchID: 200110

Sample ID: 1412302-014AMSD	Client ID:	Units: ug/L	Prep Date: 12/05/2014	Run No: 281434							
SampleType: MSD	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 200110	Analysis Date: 12/05/2014	Seq No: 5957355							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	102.4	9	200.0		51.2	40.5	115	98.78	3.60	20	
Ethylene	68.81	7	200.0		34.4	25.1	115	66.16	3.94	20	
Methane	239.8	4	200.0	56.18	91.8	40.4	115	229.5	4.36	20	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: Swainsboro GA
Workorder: 1412417

ANALYTICAL QC SUMMARY REPORT

BatchID: 200112

Sample ID: MB-200112	Client ID:	Units: ug/L	Prep Date: 12/05/2014	Run No: 281517							
SampleType: MBLK	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 200112	Analysis Date: 12/08/2014	Seq No: 5959211							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	BRL	9									
Ethylene	BRL	7									
Methane	BRL	4									

Sample ID: LCS-200112	Client ID:	Units: ug/L	Prep Date: 12/05/2014	Run No: 281517							
SampleType: LCS	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 200112	Analysis Date: 12/08/2014	Seq No: 5959216							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	121.5	9	200.0		60.7	41.2	115				
Ethylene	83.34	7	200.0		41.7	26.5	115				
Methane	134.4	4	200.0		67.2	45.1	115				

Sample ID: LCSD-200112	Client ID:	Units: ug/L	Prep Date: 12/05/2014	Run No: 281517							
SampleType: LCSD	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 200112	Analysis Date: 12/08/2014	Seq No: 5959226							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	123.0	9	200.0		61.5	41.2	115	121.5	1.20	20	
Ethylene	84.25	7	200.0		42.1	26.5	115	83.34	1.09	20	
Methane	136.4	4	200.0		68.2	45.1	115	134.4	1.53	20	

Sample ID: 1412651-002AMS	Client ID:	Units: ug/L	Prep Date: 12/05/2014	Run No: 281517							
SampleType: MS	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 200112	Analysis Date: 12/08/2014	Seq No: 5959247							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	117.2	9	200.0		58.6	40.5	115				
Ethylene	81.22	7	200.0		40.6	25.1	115				
Methane	129.9	4	200.0		64.9	40.4	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: Swainsboro GA
Workorder: 1412417

ANALYTICAL QC SUMMARY REPORT

BatchID: 200112

Sample ID: 1412651-002AMSD	Client ID:	Units: ug/L	Prep Date: 12/05/2014	Run No: 281517							
SampleType: MSD	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 200112	Analysis Date: 12/08/2014	Seq No: 5959249							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	117.3	9	200.0		58.7	40.5	115	117.2	0.095	20	
Ethylene	81.44	7	200.0		40.7	25.1	115	81.22	0.278	20	
Methane	130.1	4	200.0		65.0	40.4	115	129.9	0.160	20	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: Swainsboro GA
Workorder: 1412417

ANALYTICAL QC SUMMARY REPORT

BatchID: 200235

Sample ID: MB-200235	Client ID:	Units: ug/L	Prep Date: 12/08/2014	Run No: 281474							
SampleType: MBLK	TestCode: TCL VOLATILE ORGANICS SW8260B	BatchID: 200235	Analysis Date: 12/08/2014	Seq No: 5958097							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
Chloroethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
Trichloroethene	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	42.61	0	50.00		85.2	70.6	123				
Surr: Dibromofluoromethane	55.57	0	50.00		111	78.7	124				
Surr: Toluene-d8	47.86	0	50.00		95.7	81.3	120				

Sample ID: LCS-200235	Client ID:	Units: ug/L	Prep Date: 12/08/2014	Run No: 281474							
SampleType: LCS	TestCode: TCL VOLATILE ORGANICS SW8260B	BatchID: 200235	Analysis Date: 12/08/2014	Seq No: 5958096							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	60.57	5.0	50.00		121	64.2	137				
Trichloroethene	49.66	5.0	50.00		99.3	70.5	134				
Surr: 4-Bromofluorobenzene	42.62	0	50.00		85.2	70.6	123				
Surr: Dibromofluoromethane	51.69	0	50.00		103	78.7	124				
Surr: Toluene-d8	45.70	0	50.00		91.4	81.3	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: Swainsboro GA
Workorder: 1412417

ANALYTICAL QC SUMMARY REPORT

BatchID: 200235

Sample ID: 1412417-012AMS	Client ID: MW-19	Units: ug/L	Prep Date: 12/08/2014	Run No: 281474							
SampleType: MS	TestCode: TCL VOLATILE ORGANICS SW8260B	BatchID: 200235	Analysis Date: 12/08/2014	Seq No: 5958103							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	3702	250	2500	574.5	125	60.5	156				
Trichloroethene	3662	250	2500	1038	105	71.8	139				
Surr: 4-Bromofluorobenzene	2088	0	2500		83.5	70.6	123				
Surr: Dibromofluoromethane	2652	0	2500		106	78.7	124				
Surr: Toluene-d8	2360	0	2500		94.4	81.3	120				

Sample ID: 1412417-012AMSD	Client ID: MW-19	Units: ug/L	Prep Date: 12/08/2014	Run No: 281474							
SampleType: MSD	TestCode: TCL VOLATILE ORGANICS SW8260B	BatchID: 200235	Analysis Date: 12/08/2014	Seq No: 5958104							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	3633	250	2500	574.5	122	60.5	156	3702	1.87	20	
Trichloroethene	3558	250	2500	1038	101	71.8	139	3662	2.89	20	
Surr: 4-Bromofluorobenzene	2136	0	2500		85.5	70.6	123	2088	0	0	
Surr: Dibromofluoromethane	2641	0	2500		106	78.7	124	2652	0	0	
Surr: Toluene-d8	2324	0	2500		93.0	81.3	120	2360	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



December 09, 2014

Tanya Kinnard
AMEC E&I, Inc. -Kennesaw
1075 Big Shanty Rd NW
Kennesaw GA 30144

TEL: (770) 421-3444
FAX: (770) 421-3486

RE: STI Swainsboro

Dear Tanya Kinnard:

Order No: 1411681

Analytical Environmental Services, Inc. received 3 samples on 11/8/2014 12:31:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Tara Esbeck
Project Manager

Revision 12/9/2014



COMPANY: AMEC		ADDRESS: 1075 Big Shanty Rd Kennesaw GA 30144				ANALYSIS REQUESTED						Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.		No # of Containers	
PHONE:		FAX:				PRESERVATION (See codes)						REMARKS			
SAMPLED BY: TANYA KINNARD		SIGNATURE: <i>[Signature]</i>												VOCS <input checked="" type="checkbox"/>	
#	SAMPLE ID	SAMPLED		Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)						REMARKS		
		DATE	TIME												
1	MW-8	11/6/14	1430	X		GW	X							X	
2	MW-19		1440	X		GW	X							X	
3	Trip blank			X		W	X							X	
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
RELINQUISHED BY		DATE/TIME		RECEIVED BY		DATE/TIME		PROJECT INFORMATION						RECEIPT	
1: <i>[Signature]</i>		11-8-14/1230		1: <i>[Signature]</i>		11/8/14 12:31		PROJECT NAME: ST1 Swainesboro						Total # of Containers	
2: <i>[Signature]</i>				2:				PROJECT #:						<input checked="" type="checkbox"/> Turnaround Time Request <input type="checkbox"/> Standard 5 Business Days <input type="checkbox"/> 2 Business Day Rush <input type="checkbox"/> Next Business Day Rush <input type="checkbox"/> Same Day Rush (auth req.) <input type="checkbox"/> Other _____	
3:				3:				SITE ADDRESS: Swainesboro GA							
SPECIAL INSTRUCTIONS/COMMENTS:		SHIPMENT METHOD				INVOICE TO:						STATE PROGRAM (if any):			
TCE, Site specific list: 1,1,2,2-TCA; Trans 1,2-DCE; VC CE; 1,1-DCE; 1,1,2-TCA; 1,1,2-DCE 1,1-DCA; 1,1,2-DCA		OUT / / VIA:		IN / / VIA:		<input checked="" type="checkbox"/> CLIENT <input type="checkbox"/> FedEx <input type="checkbox"/> UPS MAIL <input type="checkbox"/> COURIER <input type="checkbox"/> GREYHOUND <input type="checkbox"/> OTHER _____						GA E-mail? <input checked="" type="checkbox"/> Y/N; Fax? Y/N DATA PACKAGE: I II III IV			
QUOTE #:		PO#:				SEND REPORT TO: greg wrenn						(IF DIFFERENT FROM ABOVE)			

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S+M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-8
Project Name: STI Swainsboro	Collection Date: 11/6/2014 2:30:00 PM
Lab ID: 1411681-001	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	1200	500		ug/L	198992	100	11/14/2014 00:37	GC
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	198992	1	11/12/2014 19:08	MD
1,1,2-Trichloroethane	BRL	5.0		ug/L	198992	1	11/12/2014 19:08	MD
1,1-Dichloroethane	180	5.0		ug/L	198992	1	11/12/2014 19:08	MD
1,1-Dichloroethene	3200	500		ug/L	198992	100	11/14/2014 00:37	GC
1,2-Dichloroethane	BRL	5.0		ug/L	198992	1	11/12/2014 19:08	MD
Chloroethane	16	10		ug/L	198992	1	11/12/2014 19:08	MD
cis-1,2-Dichloroethene	2800	500		ug/L	198992	100	11/14/2014 00:37	GC
trans-1,2-Dichloroethene	BRL	5.0		ug/L	198992	1	11/12/2014 19:08	MD
Trichloroethene	1900	500		ug/L	198992	100	11/14/2014 00:37	GC
Vinyl chloride	890	200		ug/L	198992	100	11/14/2014 00:37	GC
Surr: 4-Bromofluorobenzene	87.8	70.6-123		%REC	198992	100	11/14/2014 00:37	GC
Surr: 4-Bromofluorobenzene	91.4	70.6-123		%REC	198992	1	11/12/2014 19:08	MD
Surr: Dibromofluoromethane	101	78.7-124		%REC	198992	100	11/14/2014 00:37	GC
Surr: Dibromofluoromethane	106	78.7-124		%REC	198992	1	11/12/2014 19:08	MD
Surr: Toluene-d8	94.9	81.3-120		%REC	198992	1	11/12/2014 19:08	MD
Surr: Toluene-d8	102	81.3-120		%REC	198992	100	11/14/2014 00:37	GC

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-19
Project Name: STI Swainsboro	Collection Date: 11/6/2014 2:40:00 PM
Lab ID: 1411681-002	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B (SW5030B)								
1,1,1-Trichloroethane	BRL	5.0		ug/L	198992	1	11/12/2014 18:40	MD
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	198992	1	11/12/2014 18:40	MD
1,1,2-Trichloroethane	BRL	5.0		ug/L	198992	1	11/12/2014 18:40	MD
1,1-Dichloroethane	35	5.0		ug/L	198992	1	11/12/2014 18:40	MD
1,1-Dichloroethene	2900	500		ug/L	198992	100	11/14/2014 01:05	GC
1,2-Dichloroethane	BRL	5.0		ug/L	198992	1	11/12/2014 18:40	MD
Chloroethane	BRL	10		ug/L	198992	1	11/12/2014 18:40	MD
cis-1,2-Dichloroethene	740	500		ug/L	198992	100	11/14/2014 01:05	GC
trans-1,2-Dichloroethene	BRL	5.0		ug/L	198992	1	11/12/2014 18:40	MD
Trichloroethene	4200	500		ug/L	198992	100	11/14/2014 01:05	GC
Vinyl chloride	370	200		ug/L	198992	100	11/14/2014 01:05	GC
Surr: 4-Bromofluorobenzene	89.9	70.6-123		%REC	198992	1	11/12/2014 18:40	MD
Surr: 4-Bromofluorobenzene	91.5	70.6-123		%REC	198992	100	11/14/2014 01:05	GC
Surr: Dibromofluoromethane	93.9	78.7-124		%REC	198992	1	11/12/2014 18:40	MD
Surr: Dibromofluoromethane	99.6	78.7-124		%REC	198992	100	11/14/2014 01:05	GC
Surr: Toluene-d8	92.7	81.3-120		%REC	198992	1	11/12/2014 18:40	MD
Surr: Toluene-d8	100	81.3-120		%REC	198992	100	11/14/2014 01:05	GC

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: TRIP BLANK
Project Name: STI Swainsboro	Collection Date: 11/6/2014
Lab ID: 1411681-003	Matrix: Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				(SW5030B)				
1,1,1-Trichloroethane	BRL	5.0		ug/L	198992	1	11/12/2014 14:53	MD
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	198992	1	11/12/2014 14:53	MD
1,1,2-Trichloroethane	BRL	5.0		ug/L	198992	1	11/12/2014 14:53	MD
1,1-Dichloroethane	BRL	5.0		ug/L	198992	1	11/12/2014 14:53	MD
1,1-Dichloroethene	BRL	5.0		ug/L	198992	1	11/12/2014 14:53	MD
1,2-Dichloroethane	BRL	5.0		ug/L	198992	1	11/12/2014 14:53	MD
Chloroethane	BRL	10		ug/L	198992	1	11/12/2014 14:53	MD
cis-1,2-Dichloroethene	BRL	5.0		ug/L	198992	1	11/12/2014 14:53	MD
trans-1,2-Dichloroethene	BRL	5.0		ug/L	198992	1	11/12/2014 14:53	MD
Trichloroethene	BRL	5.0		ug/L	198992	1	11/12/2014 14:53	MD
Vinyl chloride	BRL	2.0		ug/L	198992	1	11/12/2014 14:53	MD
Surr: 4-Bromofluorobenzene	92.9	70.6-123		%REC	198992	1	11/12/2014 14:53	MD
Surr: Dibromofluoromethane	99.2	78.7-124		%REC	198992	1	11/12/2014 14:53	MD
Surr: Toluene-d8	96.4	81.3-120		%REC	198992	1	11/12/2014 14:53	MD

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client AMEC/Kennecott

Work Order Number 1411681

Checklist completed by Joanna Pacurar 11/8/14
Signature Date

Carrier name: FedEx UPS Courier Client US Mail Other

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Container/Temp Blank temperature in compliance? (4°C±2)* Yes No

Cooler #1 31°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Was TAT marked on the COC? Yes No

Proceed with Standard TAT as per project history? Yes No Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____

Sample Condition: Good Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: AMEC E&I, Inc. -Kennesaw
Project Name: STI Swainsboro
Workorder: 1411681

ANALYTICAL QC SUMMARY REPORT

BatchID: 198992

Sample ID: MB-198992	Client ID:	Units: ug/L	Prep Date: 11/10/2014	Run No: 279699							
SampleType: MBLK	TestCode: TCL VOLATILE ORGANICS SW8260B	BatchID: 198992	Analysis Date: 11/10/2014	Seq No: 5913231							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
Chloroethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
Trichloroethene	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	51.93	0	50.00		104	70.6	123				
Surr: Dibromofluoromethane	53.40	0	50.00		107	78.7	124				
Surr: Toluene-d8	51.28	0	50.00		103	81.3	120				

Sample ID: LCS-198992	Client ID:	Units: ug/L	Prep Date: 11/10/2014	Run No: 279699							
SampleType: LCS	TestCode: TCL VOLATILE ORGANICS SW8260B	BatchID: 198992	Analysis Date: 11/10/2014	Seq No: 5913230							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	48.28	5.0	50.00		96.6	63.1	140				
Trichloroethene	49.75	5.0	50.00		99.5	71.2	135				
Surr: 4-Bromofluorobenzene	49.51	0	50.00		99.0	70.6	123				
Surr: Dibromofluoromethane	51.60	0	50.00		103	78.7	124				
Surr: Toluene-d8	48.03	0	50.00		96.1	81.3	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: STI Swainsboro
Workorder: 1411681

ANALYTICAL QC SUMMARY REPORT

BatchID: 198992

Sample ID: 1411664-008AMS	Client ID:	Units: ug/L	Prep Date: 11/10/2014	Run No: 279899							
SampleType: MS	TestCode: TCL VOLATILE ORGANICS SW8260B	BatchID: 198992	Analysis Date: 11/13/2014	Seq No: 5917820							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	1325	100	1000		133	60.2	159				
Trichloroethene	1684	100	1000	598.0	109	70.1	144				
Surr: 4-Bromofluorobenzene	818.8	0	1000		81.9	70.6	123				
Surr: Dibromofluoromethane	1055	0	1000		106	78.7	124				
Surr: Toluene-d8	964.2	0	1000		96.4	81.3	120				

Sample ID: 1411664-008AMSD	Client ID:	Units: ug/L	Prep Date: 11/10/2014	Run No: 279899							
SampleType: MSD	TestCode: TCL VOLATILE ORGANICS SW8260B	BatchID: 198992	Analysis Date: 11/13/2014	Seq No: 5917821							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	1311	100	1000		131	60.2	159	1325	1.05	19.2	
Trichloroethene	1643	100	1000	598.0	105	70.1	144	1684	2.44	20	
Surr: 4-Bromofluorobenzene	811.2	0	1000		81.1	70.6	123	818.8	0	0	
Surr: Dibromofluoromethane	1051	0	1000		105	78.7	124	1055	0	0	
Surr: Toluene-d8	970.6	0	1000		97.1	81.3	120	964.2	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



September 23, 2014

Tanya Kinnard
AMEC E&I, Inc. -Kennesaw
1075 Big Shanty Rd NW
Kennesaw GA 30144

TEL: (770) 421-3444
FAX: (770) 421-3486

RE: STI Swainsboro

Dear Tanya Kinnard:

Order No: 1409366

Analytical Environmental Services, Inc. received 2 samples on 9/4/2014 1:55:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Tara Esbeck
Project Manager

Revision 9/23/2014

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-8
Project Name: STI Swainsboro	Collection Date: 9/3/2014
Lab ID: 1409366-001	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	3900	250		ug/L	195930	50	09/08/2014 18:18	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	195930	1	09/06/2014 19:56	NH
1,1,2-Trichloroethane	BRL	5.0		ug/L	195930	1	09/06/2014 19:56	NH
1,1-Dichloroethane	170	5.0		ug/L	195930	1	09/06/2014 19:56	NH
1,1-Dichloroethene	5300	250		ug/L	195930	50	09/08/2014 18:18	NP
1,2-Dichloroethane	BRL	5.0		ug/L	195930	1	09/06/2014 19:56	NH
Chloroethane	13	10		ug/L	195930	1	09/06/2014 19:56	NH
cis-1,2-Dichloroethene	3400	250		ug/L	195930	50	09/08/2014 18:18	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	195930	1	09/06/2014 19:56	NH
Trichloroethene	8600	250		ug/L	195930	50	09/08/2014 18:18	NP
Vinyl chloride	780	100		ug/L	195930	50	09/08/2014 18:18	NP
Surr: 4-Bromofluorobenzene	85.9	66.2-120		%REC	195930	50	09/08/2014 18:18	NP
Surr: 4-Bromofluorobenzene	82.7	66.2-120		%REC	195930	1	09/06/2014 19:56	NH
Surr: Dibromofluoromethane	98.5	79.5-121		%REC	195930	50	09/08/2014 18:18	NP
Surr: Dibromofluoromethane	149	79.5-121	S	%REC	195930	1	09/06/2014 19:56	NH
Surr: Toluene-d8	96.3	77-117		%REC	195930	50	09/08/2014 18:18	NP
Surr: Toluene-d8	98.3	77-117		%REC	195930	1	09/06/2014 19:56	NH
GC Analysis of Gaseous Samples SOP-RSK 175					(RSK175)			
Ethane	20	9		ug/L	195847	1	09/05/2014 16:30	JM
Ethylene	BRL	7		ug/L	195847	1	09/05/2014 16:30	JM
Methane	6500	400		ug/L	195847	100	09/05/2014 16:45	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: AMEC E&I, Inc. -Kennesaw	Client Sample ID: MW-19
Project Name: STI Swainsboro	Collection Date: 9/3/2014
Lab ID: 1409366-002	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					(SW5030B)			
1,1,1-Trichloroethane	BRL	5.0		ug/L	195930	1	09/06/2014 19:32	NH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	195930	1	09/06/2014 19:32	NH
1,1,2-Trichloroethane	BRL	5.0		ug/L	195930	1	09/06/2014 19:32	NH
1,1-Dichloroethane	18	5.0		ug/L	195930	1	09/06/2014 19:32	NH
1,1-Dichloroethene	2000	500		ug/L	195930	100	09/08/2014 18:43	NP
1,2-Dichloroethane	BRL	5.0		ug/L	195930	1	09/06/2014 19:32	NH
Chloroethane	22	10		ug/L	195930	1	09/06/2014 19:32	NH
cis-1,2-Dichloroethene	250	200		ug/L	195930	100	09/08/2014 18:43	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	195930	1	09/06/2014 19:32	NH
Trichloroethene	4100	500		ug/L	195930	100	09/08/2014 18:43	NP
Vinyl chloride	120	2.0		ug/L	195930	1	09/06/2014 19:32	NH
Surr: 4-Bromofluorobenzene	83.4	66.2-120		%REC	195930	1	09/06/2014 19:32	NH
Surr: 4-Bromofluorobenzene	85.9	66.2-120		%REC	195930	100	09/08/2014 18:43	NP
Surr: Dibromofluoromethane	97	79.5-121		%REC	195930	100	09/08/2014 18:43	NP
Surr: Dibromofluoromethane	101	79.5-121		%REC	195930	1	09/06/2014 19:32	NH
Surr: Toluene-d8	95.4	77-117		%REC	195930	1	09/06/2014 19:32	NH
Surr: Toluene-d8	97.2	77-117		%REC	195930	100	09/08/2014 18:43	NP
GC Analysis of Gaseous Samples SOP-RSK 175					(RSK175)			
Ethane	BRL	9		ug/L	195847	1	09/05/2014 16:34	JM
Ethylene	28	7		ug/L	195847	1	09/05/2014 16:34	JM
Methane	860	40		ug/L	195847	10	09/05/2014 16:51	JM

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client AMEC

Work Order Number 1409366

Checklist completed by [Signature] 9/4/11
Signature Date

Carrier name: FedEx UPS Courier Client US Mail Other

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Container/Temp Blank temperature in compliance? ($0^{\circ} \leq 6^{\circ}C$)* Yes No

Cooler #1 3.3 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Was TAT marked on the COC? Yes No

Proceed with Standard TAT as per project history? Yes No Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____

Sample Condition: Good Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: AMEC E&I, Inc. -Kennesaw
Project Name: STI Swainsboro
Workorder: 1409366

ANALYTICAL QC SUMMARY REPORT

BatchID: 195847

Sample ID: MB-195847	Client ID:	Units: ug/L	Prep Date: 09/05/2014	Run No: 275158							
SampleType: MBLK	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 195847	Analysis Date: 09/05/2014	Seq No: 5807685							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	BRL	9									
Ethylene	BRL	7									
Methane	BRL	4									

Sample ID: LCS-195847	Client ID:	Units: ug/L	Prep Date: 09/05/2014	Run No: 275158							
SampleType: LCS	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 195847	Analysis Date: 09/05/2014	Seq No: 5807686							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	116.1	9	200.0		58.0	41.6	115				
Ethylene	78.02	7	200.0		39.0	26.9	115				
Methane	130.6	4	200.0		65.3	45.2	115				

Sample ID: LCSD-195847	Client ID:	Units: ug/L	Prep Date: 09/05/2014	Run No: 275158							
SampleType: LCSD	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 195847	Analysis Date: 09/05/2014	Seq No: 5807687							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	123.9	9	200.0		62.0	41.6	115	116.1	6.55	20	
Ethylene	83.52	7	200.0		41.8	26.9	115	78.02	6.81	20	
Methane	139.5	4	200.0		69.8	45.2	115	130.6	6.62	20	

Sample ID: 1409366-002BMS	Client ID: MW-19	Units: ug/L	Prep Date: 09/05/2014	Run No: 275158							
SampleType: MS	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 195847	Analysis Date: 09/05/2014	Seq No: 5807696							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	125.3	9	200.0	3.416	60.9	40.1	115				
Ethylene	126.7	7	200.0	42.04	42.4	24.5	115				
Methane	2085	4	200.0	2029	28.1	41.1	115				SE

Qualifiers:	> Greater than Result value	< Less than Result value	B Analyte detected in the associated method blank
BRL	Below reporting limit	E Estimated (value above quantitation range)	H Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N Analyte not NELAC certified	R RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S Spike Recovery outside limits due to matrix	

Client: AMEC E&I, Inc. -Kennesaw
Project Name: STI Swainsboro
Workorder: 1409366

ANALYTICAL QC SUMMARY REPORT

BatchID: 195847

Sample ID: 1409366-002BMS	Client ID: MW-19	Units: ug/L	Prep Date: 09/05/2014	Run No: 275158							
SampleType: MS	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 195847	Analysis Date: 09/05/2014	Seq No: 5807700							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	115.5	90	200.0		57.8	40.1	115				
Ethylene	116.7	70	200.0	4.063	56.3	24.5	115				
Methane	1931	40	200.0	194.2	868	41.1	115				S

Sample ID: 1409366-002BMSD	Client ID: MW-19	Units: ug/L	Prep Date: 09/05/2014	Run No: 275158							
SampleType: MSD	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 195847	Analysis Date: 09/05/2014	Seq No: 5807698							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	126.5	9	200.0	3.416	61.6	40.1	115	125.3	0.993	20	
Ethylene	128.3	7	200.0	42.04	43.1	24.5	115	126.7	1.24	20	
Methane	2105	4	200.0	2029	38.0	41.1	115	2085	0.944	20	SE

Sample ID: 1409366-002BMSD	Client ID: MW-19	Units: ug/L	Prep Date: 09/05/2014	Run No: 275158							
SampleType: MSD	TestCode: GC Analysis of Gaseous Samples SOP-RSK 175	BatchID: 195847	Analysis Date: 09/05/2014	Seq No: 5807701							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Ethane	115.1	90	200.0		57.6	40.1	115	115.5	0.321	20	
Ethylene	116.6	70	200.0	4.063	56.3	24.5	115	116.7	0.077	20	
Methane	1898	40	200.0	194.2	852	41.1	115	1931	1.71	20	S

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: STI Swainsboro
Workorder: 1409366

ANALYTICAL QC SUMMARY REPORT

BatchID: 195930

Sample ID: MB-195930	Client ID:	Units: ug/L	Prep Date: 09/06/2014	Run No: 275229							
SampleType: MBLK	TestCode: TCL VOLATILE ORGANICS SW8260B	BatchID: 195930	Analysis Date: 09/06/2014	Seq No: 5809334							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
Chloroethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
Trichloroethene	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	40.42	0	50.00		80.8	66.2	120				
Surr: Dibromofluoromethane	51.54	0	50.00		103	79.5	121				
Surr: Toluene-d8	49.32	0	50.00		98.6	77	117				

Sample ID: LCS-195930	Client ID:	Units: ug/L	Prep Date: 09/06/2014	Run No: 275229							
SampleType: LCS	TestCode: TCL VOLATILE ORGANICS SW8260B	BatchID: 195930	Analysis Date: 09/06/2014	Seq No: 5809336							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	52.10	5.0	50.00		104	63.1	140				
Trichloroethene	48.31	5.0	50.00		96.6	71.2	135				
Surr: 4-Bromofluorobenzene	40.37	0	50.00		80.7	66.2	120				
Surr: Dibromofluoromethane	50.70	0	50.00		101	79.5	121				
Surr: Toluene-d8	49.26	0	50.00		98.5	77	117				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: STI Swainsboro
Workorder: 1409366

ANALYTICAL QC SUMMARY REPORT

BatchID: 195930

Sample ID: 1408P18-001AMS	Client ID:	Units: ug/L	Prep Date: 09/06/2014	Run No: 275229							
SampleType: MS	TestCode: TCL VOLATILE ORGANICS SW8260B	BatchID: 195930	Analysis Date: 09/06/2014	Seq No: 5809339							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	52.06	5.0	50.00		104	60.2	159				
Trichloroethene	47.25	5.0	50.00		94.5	70.1	144				
Surr: 4-Bromofluorobenzene	40.23	0	50.00		80.5	66.2	120				
Surr: Dibromofluoromethane	49.75	0	50.00		99.5	79.5	121				
Surr: Toluene-d8	49.03	0	50.00		98.1	77	117				

Sample ID: 1408P18-001AMSD	Client ID:	Units: ug/L	Prep Date: 09/06/2014	Run No: 275229							
SampleType: MSD	TestCode: TCL VOLATILE ORGANICS SW8260B	BatchID: 195930	Analysis Date: 09/06/2014	Seq No: 5809342							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	51.29	5.0	50.00		103	60.2	159	52.06	1.49	19.2	
Trichloroethene	47.97	5.0	50.00		95.9	70.1	144	47.25	1.51	20	
Surr: 4-Bromofluorobenzene	40.44	0	50.00		80.9	66.2	120	40.23	0	0	
Surr: Dibromofluoromethane	50.92	0	50.00		102	79.5	121	49.75	0	0	
Surr: Toluene-d8	49.34	0	50.00		98.7	77	117	49.03	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		