

March 2015

First Semiannual Sampling Report

Former Holley Automotive Facility

Water Valley, Mississippi

Prepared for:

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1.0 Introduction

On March 23 through 25, 2015, Ecology & Environment, Inc. (E & E) performed the 2015 first semiannual sampling event at the Former Holley Automotive Facility located in Water Valley, Mississippi. This report summarizes the results of the sampling.

2.0 Groundwater Elevations and Groundwater Flow Direction

On March 25, 2014, E & E collected one set of groundwater elevations (see Table 1). Figure 1 shows the potentiometric surface, based on shallow groundwater elevations, recorded on March 25. The aquifer below the site consists of interbedded, discontinuous lenses of sandy and clayey sediments. The potentiometric surface map based on this interpretation is consistent with historical data and indicates that for the majority of the site, groundwater flow is to the north towards Otuocalofa Creek; however, in the area near the former Holley Automotive plant, a westerly component of groundwater flow is present.

As first reported in the September 2008 Sampling Report, two piezometers, PZ-1 and PZ-2, were installed on August 8, 2008, north of Otuocalofa Creek to a depth of 35 feet. These wells were initially intended to help determine the flow direction of groundwater in the area north of Otuocalofa Creek. The data indicated that the creek bottom is at a lower elevation than the groundwater north of the creek. Therefore, groundwater from the northern side of Otuocalofa Creek drains towards the creek rather than away from it. The creek thereby serves as a natural barrier to the migration of the plume farther north of the creek.

3.0 Groundwater Sampling

Twenty-four groundwater samples were collected during the March 2015 semiannual sampling event, which includes two duplicate samples. The areas around two groundwater wells, MW-45 and MW-46, were flooded due to recent heavy rains and the sites could not be accessed for sampling. Groundwater samples were obtained in accordance with United States Environmental Protection Agency (EPA) Region 4 groundwater standard operating procedures. As with all previous events, wells were purged using low-flow sampling techniques to ensure that a representative sample was collected from each monitoring well. Water levels were recorded to reduce well drawdown, and the field parameters of temperature, pH, turbidity, conductivity, dissolved oxygen (DO), and oxidation/reduction potential (ORP) were measured and recorded. Table 2 presents the well purging data for each well that was sampled during the March 2015 semiannual sampling. Groundwater purging and sampling equipment were calibrated prior to use and decontaminated between each sampling location.

After collection, groundwater samples, including trip blanks (for quality assurance and quality control [QA/QC]) were immediately labeled, custody-sealed, and placed on ice for shipment to TestAmerica Laboratories, Inc (TestAmerica). As with our past analytical protocol, the samples were analyzed by TestAmerica for chlorinated organic compounds by EPA Method 8260B.

4.0 Groundwater Analytical Results

Groundwater analytical results for chlorinated organics from the March 2015 sampling are presented in Table 3. Figure 2 illustrates the extent of trichloroethene (TCE) concentrations measured in groundwater at the site. Shallow and deep wells are presented on one map to illustrate the overall lateral and vertical extent of the TCE plume.

TCE was detected above the maximum concentration level (MCL) value of 5 micrograms per liter ($\mu\text{g}/\text{L}$) in the monitoring wells sampled, with exception of the following wells: MW-28S, MW-28D, MW-30S, MW-30D, MW-34, MW-38, MW-38S, MW-45, MW-47, and MW-48. MW-30D (3.1 $\mu\text{g}/\text{L}$) and MW-38S (1.1 $\mu\text{g}/\text{L}$) were the only wells sampled that had a concentration below the MCL but above the laboratory method detection limit (MDL). The TCE concentrations exceeding the MCL ranged from 58 $\mu\text{g}/\text{L}$ to 2800 $\mu\text{g}/\text{L}$. Five- year trend graphs for the TCE concentration in each monitoring well over time are presented as Attachment A.

Concentrations of cis-1,2-dichloroethene (cis-1,2-DCE) were detected at or above the MCL (70 $\mu\text{g}/\text{L}$) in seven of the wells sampled: MW-22S (190 $\mu\text{g}/\text{L}$), MW-22D (72 $\mu\text{g}/\text{L}$), MW-27 (130 $\mu\text{g}/\text{L}$), MW-37 (88 $\mu\text{g}/\text{L}$), , and MW-44 (74 $\mu\text{g}/\text{L}$).

The March 2015 semiannual sampling event analytical results indicate that the concentrations of 1,1-dichloroethene (1,1-DCE) , trans-1,2-dichloroethene (trans-1,2-DCE), and vinyl chloride were detected below MCL values of 7 $\mu\text{g}/\text{L}$, 100 $\mu\text{g}/\text{L}$, and 2 $\mu\text{g}/\text{L}$ respectively. Table 3 provides analytical results for the monitoring wells sampled. TestAmerica laboratory reports are located in Appendix B.

5.0 Groundwater Natural Attenuation Results

A summary of the field-measured parameters collected during the March 2015 semiannual sampling event is provided in Table 2. An evaluation of the field-measured parameters is provided below:

Temperature: Temperature affects the solubility of dissolved gases and other geochemical species. The rate of biodegradation is accelerated in groundwater temperatures greater than 20 degrees Celsius ($^{\circ}\text{C}$). During the March 2015 semiannual sampling event, the sample temperatures ranged from 13.20 $^{\circ}\text{C}$ to 20.30 $^{\circ}\text{C}$.

pH: pH levels affect the presence and activity of microbial populations in groundwater. The optimal pH range for biodegradation is between 5 standard units (SUs) and 9 SUs. During the March 2015 semiannual sampling event, the sample pH values ranged from 4.92 SUs to 6.07 SUs.

Dissolved Oxygen: DO is the most geochemically favored electron acceptor used by microbes for aerobic biodegradation. Anaerobic bacteria become nonfunctional at concentrations that exceed 5 milligrams per liter (mg/L) (or 55% @ 20° C), causing reductive dechlorination to cease. During the March 2015 semiannual sampling event, the DO ranged from 38.5 % to 94.01%.

Oxidation-Reduction Potential: ORP is a measure of the relative tendency of a solution to accept or transfer electrons. ORP levels between 50 millivolts (mV) and -100 (mV) hold potential for reductive dechlorination, and levels between -100 mV and -400 mV are optimal for reductive dechlorination. During the March 2015 semiannual sampling event, the ORP levels ranged from --94.30 mV to 2.90 mV.

6.0 Surface Water Analytical Results

Three creek water samples, CS-1, CS-2, and CS-3, were collected for laboratory analysis. The samples were collected from the bank of the creek in three locations along Otoucalofa Creek (depicted in Figure 2). It should be noted that the water level in the creek was high and flowing swiftly due to recent rains in the area. Each creek sample was shown to be non-detect for TCE, cis-1,2-DCE, 1,1-DCE, trans-1,2-DCE, and vinyl chloride. For the three most recent events, June 2014, September 2014, and March 2015, all contaminants of concern have been below the lab MDL and are considered absent during this time frame.

As seen in Table 3, TCE concentrations in the three creek samples have fluctuated over the last four years. The first detection was made in December of 2010 and since that first detection, concentrations have fluctuated from below MDLs, up to 7.5 µg/L. Currently, the Ambient Water Quality Criteria (AWQC) for water and organism is listed at 2.5 µg/L. It is expected that this criteria will soon be lowered to 0.6 µg/L, pending approval from the EPA.

The case narrative completed by Test America reported that all calibration, blanks, and surrogates acceptance criteria were met. Analytical or quality problems observed are detailed in the Case Narrative of the lab pack, provided as Attachment B.

7.0 Conclusions

The size of the identified dissolved TCE plume has remained relatively stable for the past five years. The analytical results of the wells that were installed to monitor plume migration (MW-28S, MW-28D, MW-34, MW-45, MW-47, and MW-48) were below the laboratory MDLs for all constituents. This indicates that the TCE plume has not migrated with any significance to the east or west as previously speculated. A review of the past five years of quarterly sampling data indicates that the concentrations of TCE, 1,1-DCE, trans-1,2-DCE, and vinyl chloride have continuously been detected below laboratory MDLs for MW-28S, MW-28D, MW-31S, MW-34, MW-38, and MW-38S. MW-45 is typically included in this list however the location was not sampled during the March 2015 event due to the area being flooded.

Though TCE concentrations in several of the monitoring wells sampled exceeded the MCL, the presence of cis-1,2-DCE indicates breakdown of the TCE through anaerobic degradation. Natural attenuation monitoring parameters indicate the aquifer is conducive for anaerobic degradation; however, the rate of degradation may be limited in a few areas by pH, dissolved oxygen, and ORP.

Creek surface water samples have exhibited concentrations below lab MDLs for the past three samplings. E & E will continue to monitor TCE levels in the creek so that these concentrations remain below the AWQC of 2.5 µg/L and the anticipated AWQC of 0.6 µg/L.

Quarterly groundwater sampling events at the Former Holley Automotive facility have been conducted every quarter since May 2006. An examination of these data and a review of the previously mentioned five-year trend graphs indicate that TCE trends have overwhelmingly been constant but in a few cases have increased slightly (MW-25D, MW-35, MW-46). A small, increasing trend in a few wells can be expected due to the amoebic-like nature of a groundwater plume. These noted trends will continue to be monitored to ensure that significant plume migration is not taking place.

TABLES AND FIGURES

Water Valley, Mississippi

WELL ID	MW-11	MW-12	MW-15	MW-16	MW-22S	MW-22D	MW-23D	MW-24	MW-25S
WELL DEPTH FROM TOC	43.60	40.94	43.37	19.23	29.24	46.80	42.77	21.70	37.43
TOC ELEVATION	279.99	277.24	276.27	277.12	282.46	282.61	276.15	275.96	286.92

DATE	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW
9/18/2006	270.88	9.11	266.22	11.02	268.50	7.77	266.94	10.18	273.32	9.14	274.73	7.88	264.25	11.90	268.22	7.74	270.57	16.35
12/18/2006	272.29	7.70	269.48	7.76	271.97	4.30	270.62	6.50	274.30	8.16	275.63	6.98	265.53	10.62	270.26	5.70	271.28	15.64
3/27/2007	272.00	7.99	267.17	10.07	270.59	5.68	268.96	8.16	274.31	8.15	275.59	7.02	260.94	15.21	--	--	271.45	15.47
6/19/2007	271.51	8.48	267.13	10.11	270.26	6.01	268.48	8.64	273.78	8.68	275.11	7.50	261.46	14.69	272.22	3.74	270.79	16.13
9/7/2007	270.84	9.15	266.47	10.77	268.73	7.54	267.36	9.76	273.16	9.30	274.43	8.18	263.65	12.50	271.50	4.46	270.68	16.24
12/7/2007	271.89	8.10	269.22	8.02	271.96	4.31	270.59	6.53	273.83	8.63	275.15	7.46	264.01	12.14	273.28	2.68	270.72	16.20
3/10/2008	272.85	7.14	270.27	6.97	272.41	3.86	271.19	5.93	274.71	7.75	275.90	6.71	265.70	10.45	274.51	1.45	271.88	15.04
6/16/2008	272.23	7.76	269.00	8.24	270.87	5.40	269.75	7.37	274.32	8.14	275.55	7.06	266.05	10.10	273.42	2.54	271.52	15.40
9/16/2008	274.88	5.11	267.98	9.26	271.16	5.11	268.82	8.30	273.52	8.94	274.84	7.77	265.01	11.14	272.47	3.49	270.64	16.28
12/2/2008	275.26	4.73	269.32	7.92	271.85	4.42	270.35	6.77	273.81	8.65	275.11	7.50	265.72	10.43	273.34	2.62	270.82	16.10
3/23/2009	276.32	3.67	270.21	7.03	271.99	4.28	270.91	6.21	274.70	7.76	275.84	6.77	267.22	8.93	274.33	1.63	271.72	15.20
6/15/2009	276.48	3.51	270.32	6.92	272.53	3.74	271.04	6.08	274.96	7.50	276.13	6.48	267.35	8.80	274.66	1.30	272.22	14.70
9/28/2009	275.85	4.14	270.87	6.37	272.69	3.58	271.76	5.36	274.49	7.97	275.76	6.85	267.30	8.85	274.48	1.48	271.44	15.48
12/14/2009	276.71	3.28	271.22	6.02	273.08	3.19	271.75	5.37	275.11	7.35	276.29	6.32	268.09	8.06	275.23	0.73	272.24	14.68
3/23/2010	276.83	3.16	270.93	6.31	272.74	3.53	271.52	5.60	275.45	7.01	276.59	6.02	269.85	6.30	275.23	0.73	272.56	14.36
7/27/2010	274.79	5.20	267.22	10.02	269.14	7.13	267.80	9.32	273.72	8.74	275.08	7.53	264.61	11.54	272.12	3.84	270.94	15.98
9/21/2010	0.00	0.00	267.64	9.60	268.77	7.50	267.43	9.69	273.16	9.30	274.36	8.25	263.93	12.22	271.54	4.42	270.42	16.50
12/13/2010	275.00	4.99	269.12	8.12	271.63	4.64	270.10	7.02	273.74	8.72	275.10	7.51	265.44	10.71	273.09	2.87	270.60	16.32
3/29/2011	276.15	3.84	271.16	6.08	272.89	3.38	271.79	5.33	274.77	7.69	275.92	6.69	267.91	8.24	274.93	1.03	271.76	15.16
6/14/2011	275.10	4.89	268.46	8.78	270.35	5.92	268.95	8.17	273.85	8.61	275.07	7.54	265.47	10.68	272.85	3.11	271.02	15.90
9/20/2011	274.45	5.54	267.65	9.59	270.39	5.88	268.37	8.75	273.16	9.30	274.49	8.12	264.53	11.62	272.28	3.68	270.18	16.74
12/27/2011	275.31	4.68	270.98	6.26	273.16	3.11	271.69	5.43	274.35	8.11	275.57	7.04	268.13	8.02	274.77	1.19	271.20	15.72
3/20/2012	276.05	3.94	270.02	7.22	271.79	4.48	270.77	6.35	274.49	7.97	275.63	6.98	267.10	9.05	274.25	1.71	271.38	15.54
6/19/2012	274.54	5.45	267.75	9.49	269.64	6.63	268.47	8.65	273.24	9.22	274.51	8.10	266.60	9.55	272.24	3.72	270.29	16.63
9/26/2012	274.09	5.90	266.98	10.26	269.16	7.11	267.80	9.32	272.75	9.71	274.09	8.52	264.16	11.99	271.66	4.30	270.01	16.91
12/18/2012	274.96	5.03	269.55	7.69	272.07	4.20	270.65	6.47	273.68	8.78	274.93	7.68	265.91	10.24	273.50	2.46	270.68	16.24
3/12/2013	276.25	3.74	270.29	6.95	272.30	3.97	271.00	6.12	274.60	7.86	275.72	6.89	266.67	9.48	274.64	1.32	271.75	15.17
6/25/2013	275.65	4.34	268.96	8.28	-	-	269.70	7.42	274.28	8.18	275.47	7.14	-	-	273.47	2.49	271.56	15.36
9/16/2013	274.35	5.64	267.18	10.06	-	-	-	-	273.12	9.34	274.28	8.33	266.07	10.08	271.82	4.14	270.54	16.38
12/16/2013	275.77	4.22	270.86	6.38	-	-	271.43	5.69	274.44	8.02	275.64	6.97	269.71	6.44	274.69	1.27	271.58	15.34
3/17/2014	274.63	5.36	269.86	7.38	-	-	270.55	6.57	274.71	7.75	275.81	6.80	266.79	9.36	274.19	1.77	271.80	15.12
6/24/2014	275.84	4.15	269.46	7.78	-	-	269.96	7.16	274.41	8.05	275.56	7.05	266.62	9.53	273.78	2.18	271.42	15.50
9/9/2014	274.69	5.30	267.40	9.84	-	-	268.10	9.02	273.45	9.01	274.55	8.06	265.94	10.21	272.16	3.80	270.79	16.13
3/25/2015	274.01	5.98	270.70	6.54	-	-	269.91	7.21	275.32	7.14	276.21	6.40	267.59	8.56	272.98	2.98	275.50	11.42

Water Valley, Mississippi

WELL ID	MW-29D	MW-30S	MW-30D	MW-31S	MW-31D	MW-32	MW-33	MW-34	MW-35
WELL DEPTH FROM TOC	41.81	19.81	39.95	24.84	42.04	34.91	36.94	42.20	46.42
TOC ELEVATION	274.89	272.77	274.07	276.28	274.29	276.02	274.61	277.16	274.51

DATE	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW								
9/18/2006	261.06	13.83	258.66	14.11	262.67	11.40	258.40	17.88	259.26	15.03	267.65	8.37	267.04	7.57	267.73	9.43	259.19	15.32
12/18/2006	259.37	15.52	259.63	13.14	263.04	11.03	258.78	17.50	259.45	14.84	268.21	7.81	267.77	6.84	271.69	5.47	258.83	15.68
3/27/2007	259.06	15.83	259.84	12.93	262.93	11.14	259.00	17.28	259.29	15.00	266.99	9.03	266.89	7.72	270.31	6.85	258.71	15.80
6/19/2007	259.07	15.82	258.42	14.35	263.86	10.21	258.35	17.93	264.47	9.82	-	NS	266.72	7.89	269.10	8.06	258.91	15.60
9/7/2007	260.35	14.54	258.95	13.82	262.67	11.40	258.20	18.08	258.95	15.34	-	NS	266.63	7.98	268.12	9.04	258.77	15.74
12/7/2007	261.88	13.01	259.40	13.37	263.06	11.01	258.42	17.86	259.30	14.99	268.47	7.55	268.00	6.61	271.86	5.30	259.59	14.92
3/10/2008	263.47	11.42	262.05	10.72	264.06	10.01	259.48	16.80	260.05	14.24	270.01	6.01	269.51	5.10	272.13	5.03	260.98	13.53
6/16/2008	262.43	12.46	260.97	11.80	263.16	10.91	259.27	17.01	259.45	14.84	268.76	7.26	268.64	5.97	270.43	6.73	260.08	14.43
9/16/2008	261.36	13.53	258.82	13.95	262.57	11.50	258.34	17.94	259.16	15.13	267.64	8.38	267.58	7.03	269.56	7.60	259.20	15.31
12/2/2008	261.74	13.15	258.67	14.10	262.84	11.23	258.46	17.82	259.39	14.90	268.27	7.75	268.03	6.58	271.48	5.68	259.51	15.00
3/23/2009	263.45	11.44	261.95	10.82	263.76	10.31	261.89	14.39	259.84	14.45	270.01	6.01	269.56	5.05	271.70	5.46	260.94	13.57
6/15/2009	263.64	11.25	262.20	10.57	264.04	10.03	260.02	16.26	259.97	14.32	270.24	5.78	269.75	4.86	271.98	5.18	260.98	13.53
9/28/2009	263.21	11.68	259.57	13.20	263.73	10.34	259.02	17.26	260.17	14.12	270.00	6.02	269.38	5.23	272.46	4.70	260.80	13.71
12/14/2009	264.27	10.62	262.54	10.23	264.81	9.26	260.06	16.22	260.62	13.67	270.88	5.14	270.31	4.30	272.80	4.36	261.71	12.80
3/23/2010	264.58	10.31	263.52	9.25	265.04	9.03	261.52	14.76	260.97	13.32	270.77	5.25	270.51	4.10	272.28	4.88	262.18	12.33
7/27/2010	261.35	13.54	259.27	13.50	262.89	11.18	258.50	17.78	259.27	15.02	267.27	8.75	267.47	7.14	268.40	8.76	259.34	15.17
9/21/2010	260.71	14.18	258.59	14.18	262.42	11.65	258.06	18.22	258.87	15.42	266.42	9.60	266.83	7.78	268.20	8.96	257.79	16.72
12/13/2010	261.46	13.43	258.49	14.28	262.85	11.22	258.28	18.00	259.30	14.99	267.92	8.10	267.84	6.77	271.31	5.85	259.31	15.20
3/29/2011	263.87	11.02	261.41	11.36	264.34	9.73	259.23	17.05	260.34	13.95	270.76	5.26	269.94	4.67	272.63	4.53	260.13	14.38
6/14/2011	261.85	13.04	260.13	12.64	262.98	11.09	258.73	17.55	259.29	15.00	268.15	7.87	268.06	6.55	269.97	7.19	259.67	14.84
9/20/2011	261.15	13.74	258.49	14.28	263.36	10.71	258.07	18.21	259.98	14.31	267.08	8.94	267.23	7.38	269.35	7.81	259.35	15.16
12/27/2011	264.27	10.62	260.98	11.79	265.77	8.30	258.84	17.44	262.35	11.94	271.16	4.86	269.85	4.76	272.85	4.31	260.87	13.64
3/20/2012	263.40	11.49	261.98	10.79	263.84	10.23	261.58	14.70	259.92	14.37	270.03	5.99	269.51	5.10	271.44	5.72	259.94	14.57
6/19/2012	261.32	13.57	259.12	13.65	262.55	11.52	258.41	17.87	259.14	15.15	-	NA	267.47	7.14	269.18	7.98	258.28	16.23
9/26/2012	260.80	14.09	258.54	14.23	262.36	11.71	258.02	18.26	259.05	15.24	-	NA	266.89	7.72	268.62	8.54	257.96	16.55
12/18/2012	262.01	12.88	258.99	13.78	263.21	10.86	258.54	17.74	259.75	14.54	-	NA	268.21	6.40	271.65	5.51	258.76	15.75
3/12/2013	264.41	10.48	262.67	10.10	264.98	9.09	259.95	16.33	261.09	13.20	-	5.47	270.00	4.61	271.69	5.47	260.80	13.71
6/25/2013	262.63	12.26	261.46	11.31	263.31	10.76	259.50	16.78	259.62	14.67	268.85	7.17	268.76	5.85	270.27	6.89	259.33	15.18
9/16/2013	261.06	13.83	259.15	13.62	262.51	11.56	258.34	17.94	259.11	15.18	-	-	267.18	7.43	268.37	8.79	258.22	16.29
12/16/2013	264.44	10.45	263.76	9.01	264.36	9.71	259.58	16.70	260.38	13.91	270.85	5.17	269.97	4.64	272.09	5.07	260.77	13.74
3/17/2014	263.08	11.81	261.64	11.13	263.82	10.25	259.65	16.63	259.96	14.33	269.67	6.35	269.38	5.23	271.13	6.03	259.76	14.75
6/24/2014	263.11	11.78	262.31	10.46	263.64	10.43	-	-	-	-	-	-	269.16	5.45	270.62	6.54	259.87	14.64
9/9/2014	261.33	13.56	259.60	13.17	262.77	11.30	-	-	-	-	-	-	267.48	7.13	268.73	8.43	258.48	16.03
3/25/2015	-	-	261.83	10.94	264.39	9.68	261.40	14.88	261.73	12.56	-	-	268.96	5.65	268.98	8.18	262.15	12.36

Water Valley, Mississippi

WELL ID	MW-37	MW-38	MW-38S	MW-39	MW-40	MW-41	MW-42	MW-43	MW-44
WELL DEPTH FROM TOC	27.43	62.24	33.24	67.33	41.56	44.60	46.44	62.80	67.46
TOC ELEVATION	284.60	295.55	295.43	305.67	277.04	284.08	300.99	283.42	292.90

DATE	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW								
9/18/2006	275.48	9.12	270.75	24.80	270.76	24.67	270.34	35.33	266.72	10.32	276.20	7.88	270.36	30.63	269.88	13.54	270.28	22.62
12/18/2006	275.64	8.96	271.39	24.16	271.17	24.26	270.86	34.81	267.33	9.71	276.80	7.28	270.87	30.12	270.44	12.98	270.76	22.14
3/27/2007	275.98	8.62	271.54	24.01	271.55	23.88	271.17	34.50	267.28	9.76	276.98	7.10	271.17	29.82	270.66	12.76	271.07	21.83
6/19/2007	275.57	9.03	270.91	24.64	270.88	24.55	270.53	35.14	266.78	10.26	276.44	7.64	270.48	30.51	270.04	13.38	270.39	22.51
9/7/2007	275.19	9.41	270.65	24.90	270.66	24.77	270.27	35.40	266.51	10.53	275.93	8.15	270.28	30.71	269.78	13.64	270.18	22.72
12/7/2007	275.17	9.43	270.67	24.88	270.67	24.76	270.34	35.33	267.31	9.73	276.27	7.81	270.28	30.71	269.94	13.48	270.23	22.67
3/10/2008	276.03	8.57	271.54	24.01	271.51	23.92	271.23	34.44	268.81	8.23	277.03	7.05	271.19	29.80	270.90	12.52	271.15	21.75
6/16/2008	275.92	8.68	271.45	24.10	271.45	23.98	271.24	34.43	269.09	7.95	276.86	7.22	271.17	29.82	270.79	12.63	271.11	21.79
9/16/2008	275.40	9.20	270.81	24.74	270.79	24.64	270.35	35.32	267.01	10.03	276.13	7.95	270.36	30.63	269.94	13.48	270.27	22.63
12/2/2008	275.30	9.30	270.80	24.75	270.78	24.65	270.33	35.34	267.22	9.82	276.27	7.81	270.32	30.67	269.92	13.50	270.22	22.68
3/23/2009	276.18	8.42	271.74	23.81	271.73	23.70	-	NS	268.74	8.30	277.04	7.04	271.31	29.68	271.02	12.40	271.26	21.64
6/15/2009	276.50	8.10	270.03	25.52	271.82	23.61	-	NS	269.00	8.04	277.34	6.74	271.55	29.44	271.22	12.20	271.47	21.43
9/28/2009	276.03	8.57	271.14	24.41	271.10	24.33	-	NS	268.21	8.83	276.88	7.20	270.66	30.33	270.42	13.00	270.62	22.28
12/14/2009	276.46	8.14	272.00	23.55	271.94	23.49	-	NS	269.37	7.67	277.41	6.67	271.56	29.43	271.29	12.13	271.49	21.41
3/23/2010	276.98	7.62	272.35	23.20	272.32	23.11	-	NS	269.70	7.34	277.82	6.26	271.91	29.08	271.60	11.82	271.80	21.10
7/27/2010	275.86	8.74	271.07	24.48	271.05	24.38	-	NS	267.13	9.91	276.55	7.53	270.66	30.33	270.20	13.22	270.57	22.33
9/21/2010	275.29	9.31	270.60	24.95	270.61	24.82	-	NS	0.00	0.00	276.03	8.05	270.70	30.29	269.70	13.72	270.10	22.80
12/13/2010	275.27	9.33	270.77	24.78	270.73	24.70	-	NS	267.03	10.01	276.31	7.77	270.31	30.68	269.90	13.52	270.21	22.69
3/29/2011	276.23	8.37	271.51	24.04	271.52	23.91	-	NS	268.77	8.27	277.05	7.03	271.10	29.89	270.84	12.58	270.03	22.87
6/14/2011	275.73	8.87	271.07	24.48	271.10	24.33	-	NS	267.49	9.55	276.46	7.62	270.72	30.27	270.31	13.11	270.64	22.26
9/20/2011	274.86	9.74	270.32	25.23	270.31	25.12	-	NS	266.62	10.42	275.75	8.33	269.66	31.33	269.49	13.93	269.79	23.11
12/27/2011	275.44	9.16	271.04	24.51	271.03	24.40	-	NS	268.38	8.66	276.59	7.49	270.62	30.37	270.36	13.06	270.54	22.36
3/20/2012	275.91	8.69	271.53	24.02	271.55	23.88	-	NS	268.68	8.36	276.79	7.29	271.18	29.81	270.88	12.54	271.10	21.80
6/19/2012	275.14	9.46	270.57	24.98	270.59	24.84	-	NS	266.92	10.12	275.83	8.25	270.20	30.79	269.77	13.65	270.06	22.84
9/26/2012	274.63	9.97	270.22	25.33	270.20	25.23	-	NS	266.37	10.67	276.36	7.72	269.75	31.24	269.33	14.09	269.69	23.21
12/18/2012	275.04	9.56	270.64	24.91	270.64	24.79	-	NS	267.25	9.79	275.48	8.60	270.24	30.75	269.90	13.52	270.17	22.73
3/12/2013	275.95	8.65	271.64	23.91	271.65	23.78	-	NS	269.03	8.01	276.80	7.28	271.25	29.74	270.97	12.45	271.33	21.57
6/25/2013	276.05	8.55	271.61	23.94	271.54	23.89	-	NS	268.12	8.92	276.72	7.36	271.25	29.74	270.88	12.54	271.18	21.72
9/16/2013	275.10	9.50	270.72	24.83	270.69	24.74	-	NS	266.78	10.26	275.74	8.34	270.32	30.67	269.81	13.61	270.21	22.69
12/16/2013	275.69	8.91	271.46	24.09	271.20	24.23	-	-	268.72	8.32	276.56	7.52	270.95	30.04	270.70	12.72	270.88	22.02
3/17/2014	274.00	10.60	271.95	23.60	271.76	23.67	-	-	-	-	276.96	7.12	271.37	29.62	271.05	12.37	271.37	21.53
6/24/2014	276.20	8.40	271.64	23.91	271.63	23.80	-	-	268.50	8.54	276.84	7.24	271.31	29.68	270.91	12.51	271.22	21.68
9/9/2014	275.59	9.01	270.93	24.62	270.91	24.52	-	-	267.06	9.98	276.05	8.03	270.58	30.41	270.10	13.32	270.45	22.45
3/25/2015	277.07	7.53	274.11	21.44	274.67	20.76	-	-	269.46	7.58	275.53	8.55	271.42	29.57	271.85	11.57	272.54	20.36

Water Valley, Mississippi

WELL ID	MW-45	MW-46	MW-47	MW-48	PZ-1	PZ-2
WELL DEPTH FROM TOC	52.03	35.74	39.00	40.00	35.00	35.00
TOC ELEVATION	276.61	270.84	277.25	270.78	271.96	271.33

DATE	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW
9/18/2006	269.29	7.32	262.10	8.74	-	-	-	-	0.00	0.00	0.00	0.00
12/18/2006	269.71	6.90	262.43	8.41	-	-	-	-	0.00	0.00	0.00	0.00
3/27/2007	269.99	6.62	262.04	8.80	-	-	-	-	0.00	0.00	0.00	0.00
6/19/2007	269.42	7.19	261.92	8.92	-	-	-	-	0.00	0.00	0.00	0.00
9/7/2007	269.16	7.45	261.64	9.20	-	-	-	-	0.00	0.00	0.00	0.00
12/7/2007	269.27	7.34	262.31	8.53	-	-	-	-	0.00	0.00	0.00	0.00
3/10/2008	270.28	6.33	264.38	6.46	-	-	-	-	0.00	0.00	0.00	0.00
6/16/2008	270.06	6.55	263.39	7.45	-	-	-	-	0.00	0.00	0.00	0.00
9/16/2008	269.22	7.39	262.22	8.62	-	-	-	-	259.00	12.96	259.28	12.05
12/2/2008	269.20	7.41	262.45	8.39	-	-	-	-	0.00	0.00	0.00	0.00
3/23/2009	270.28	6.33	263.70	7.14	-	-	-	-	0.00	0.00	0.00	0.00
6/15/2009	270.55	6.06	263.29	7.55	-	-	-	-	0.00	0.00	0.00	0.00
9/28/2009	269.69	6.92	263.70	7.14	-	-	-	-	0.00	0.00	0.00	0.00
12/14/2009	270.66	5.95	264.61	6.23	-	-	-	-	0.00	0.00	0.00	0.00
3/23/2010	271.11	5.50	265.68	5.16	-	-	-	-	0.00	0.00	0.00	0.00
7/27/2010	269.50	7.11	262.39	8.45	-	-	-	-	0.00	0.00	0.00	0.00
9/21/2010	269.05	7.56	261.71	9.13	-	-	-	-	0.00	0.00	0.00	0.00
12/13/2010	269.16	7.45	262.24	8.60	-	-	-	-	0.00	0.00	0.00	0.00
3/29/2011	270.14	6.47	265.19	5.65	-	-	-	-	0.00	0.00	0.00	0.00
6/14/2011	269.52	7.09	262.74	8.10	-	-	-	-	0.00	0.00	0.00	0.00
9/20/2011	268.85	7.76	262.06	8.78	-	-	-	-	0.00	0.00	0.00	0.00
12/27/2011	269.70	6.91	267.35	3.49	-	-	-	-	0.00	0.00	0.00	0.00
3/20/2012	270.16	6.45	264.17	6.67	-	-	-	-	0.00	0.00	0.00	0.00
6/19/2012	269.06	7.55	262.00	8.84	-	-	-	-	0.00	0.00	0.00	0.00
9/26/2012	268.66	7.95	261.67	9.17	-	-	-	-	0.00	0.00	0.00	0.00
12/18/2012	269.13	7.48	262.66	8.18	-	-	-	-	0.00	0.00	0.00	0.00
3/12/2013	270.29	6.32	265.99	4.85	-	-	-	-	0.00	0.00	0.00	0.00
6/25/2013	270.04	6.57	263.46	7.38	-	-	-	-	0.00	0.00	0.00	0.00
9/16/2013	272.21	4.40	261.97	8.87	-	-	-	-	0.00	0.00	0.00	0.00
12/16/2013	270.66	5.95	264.19	6.65	-	-	-	-	-	-	-	-
3/17/2014	270.31	6.30	264.62	6.22	-	-	-	-	-	-	-	-
6/24/2014	270.13	6.48	263.78	7.06	270.84	6.41	261.13	9.65	-	-	-	-
9/9/2014	269.34	7.27	262.27	8.57	270.25	7.00	259.94	10.84	-	-	-	-
3/25/2015	-	-	-	-	271.57	5.68	262.94	7.84	-	-	-	-

Key:

TOC = Top of Casing

ELEV = Water Table Elevation, NGVD

NGVD = National Geodetic Vertical Datum, 1929

Shaded = Shallow wells

-- = Casing damaged

- = Not measured

Water Valley, Mississippi

March 23, 24 2015

Water Valley, Mississippi

March 23, 24 2015

Well Number	Time	Temp (°C)	Conductivity (µS/cm)	Dissolved oxygen (%)	pH (Sus)	ORP (mV)	Turbidity (NTUs)	Volume Purged (gal.)							
MW-34	1510	16.90	42.10	6.91	5.12	-49.30	6.70	1.00							
	1515	16.90	41.70	0.82	5.16	-78.10	4.52	2.00							
	1520	16.90	41.50	0.78	5.10	-72.40	3.71	3.00							
	1525	Samples collected													
MW-35	1020	16.40	71.80	2.30	5.22	-18.70	6.78	1.00							
	1025	16.30	73.40	2.49	5.28	-7.60	5.42	2.00							
	1030	16.40	72.60	0.71	5.24	-5.70	4.02	3.00							
	1035	16.50	73.40	0.60	5.28	-7.50	3.20	4.00							
	1040	16.50	72.70	0.56	5.28	-7.80	3.46	5.00							
	1045	Samples collected, FD													
MW-37	1145	19.80	170.00	3.89	5.92	-57.20	12.10	1.00							
	1150	20.00	170.00	3.79	5.74	-51.30	4.52	2.00							
	1155	20.10	170.80	4.16	5.64	-51.60	1.96	3.00							
	1200	20.30	171.00	3.63	5.58	-47.10	2.12	4.00							
	1205	Samples collected													
MW-38S	1010	18.20	122.00	4.40	5.53	-46.50	17.60	1.00							
	1015	18.20	125.00	3.67	5.54	-60.40	12.10	2.00							
	1020	18.20	127.00	3.94	5.55	-61.00	9.64	3.00							
	1025	18.20	127.00	4.02	5.59	-58.80	7.24	4.00							
	1030	Samples collected													
MW-38	1040	19.30	70.40	2.52	6.14	-63.60	24.60	1.00							
	1045	18.40	72.00	2.26	6.10	-63.60	9.72	2.00							
	1050	18.50	72.20	2.22	6.05	-67.00	6.52	3.00							
	1055	18.50	72.40	2.06	6.07	-60.10	5.91	4.00							
	1100	Samples collected													
MW-41	1435	18.40	40.80	7.83	5.22	-38.20	4.91	1.00							
	1440	18.30	40.20	7.26	5.26	-57.30	1.42	2.00							
	1445	18.40	40.40	7.24	5.26	-59.10	0.98	3.00							
	1450	18.40	40.30	7.20	5.26	-58.20	0.76	4.00							
	1455	Samples collected													
MW-44	1550	18.20	52.70	7.28	5.34	-19.30	7.98	1.00							
	1555	18.30	52.40	5.39	5.34	-53.80	4.32	2.00							
	1600	18.30	52.80	4.92	5.37	-59.60	2.61	3.00							
	1605	18.40	51.90	5.01	5.37	-60.40	2.21	4.00							
	1610	Samples collected													
MW-45	Well area flooded. No access.														
MW-46	Well area flooded. No access.														
MW-47	920	16.40	133.00	2.20	5.91	-16.80	32.00	1.00							
	925	16.50	125.00	1.46	5.87	-45.90	76.00	2.00							
	930	16.20	112.00	1.99	5.85	-56.70	12.20	3.00							
	935	16.40	109.00	2.01	5.84	-56.30	13.80	4.00							
	940	16.40	105.00	2.05	5.84	-55.60	12.80	5.00							
MW-48	830	16.80	107.30	0.73	5.28	51.80	8.46	1.00							
	840	16.90	94.20	1.36	5.29	0.90	3.29	2.00							
	845	16.90	92.60	0.66	5.28	-25.40	2.46	3.00							
	850	17.00	91.00	0.58	5.38	-33.10	1.87	4.00							
	855	Samples collected													

Key:

mV= Millivolts

ORP = Oxidation/Reduction Potential

°C = degrees Celsius

µS/cm = MicroSiemens per centimeter

NTU = Nephelometric Turbidity Unit

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-10	3/14/2013	9.7	<1.0	2	<1.0	<1.0
MW-11	9/20/2006	300	<10	<10	<10	<10
	12/19/2006	160	<10	<10	<10	<10
	3/27/2007	230	<5.0	<5.0	<5.0	<5.0
	6/20/2007	210	1.1	<1.0	<1.0	<1.0
	9/8/2007	160	<5.0	<5.0	<5.0	<5.0
	12/5/2007	210	1.9	<1.0	<1.0	<1.0
	3/11/2008	740	5.2	<1.0	<1.0	<1.0
	6/16/2008	620	<10	<10	<10	<10
	9/18/2008	260	<10	<10	<10	<10
	12/4/2008	340	<8.6	<8.6	<8.6	<8.6
Dup	12/4/2008	330	<8.6	<8.6	<8.6	<8.6
	3/25/2009	680	<10	<10	<10	<10
	6/16/2009	850	<10	<10	<10	<10
	9/29/2009	260	<10	<10	<10	<10
	12/15/2009	550	<1.0	<1.0	<1.0	<1.0
	3/24/2010	580	11	<1.0	<1.0	<1.0
	7/28/2010	250	<10	<10	<10	<10
	9/22/2010	300	7.9	<5.0	<5.0	<5.0
	12/14/2010	300	11	<5.0	<5.0	<5.0
	3/30/2011	450	11	<5.0	<5.0	<5.0
	6/15/2011	270	<10	<10	<10	<10
	9/21/2011	270	15	<10	<10	<10
	12/28/2011	430	13	<10	<10	<10
	3/21/2012	610	13	<10	<10	<10
	6/20/2012	320	12	<10	<10	<10
	9/26/2012	250	11	<10	<10	<10
	12/19/2012	320	12	<10	<10	<10
	3/13/2013	730	21	<10	<10	<10
	6/28/2013	590	20	<20	<20	<20
	9/25/2013	310	15	<5.0	<5.0	<5.0
	12/18/2013	560	19	<1.0	<1.0	<1.0
	3/18/2014	950	27	<1.0	<1.0	<1.0
	6/24/2014	630	24	<1.0	<1.0	<1.0
	9/8/2014	330	18	<2.0	<2.0	<2.0
	3/24/2015	1600	57	<20.0	<20.0	<20.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-12	3/14/2013	40	<1.0	<1.0	<1.0	<1.0
MW-14	3/14/2013	<1.0	<1.0	<1.0	<1.0	<1.0
MW-15	3/14/2013	3.7	<1.0	<1.0	<1.0	<1.0
MW-16	3/14/2013	7.4	<1.0	<1.0	<1.0	<1.0
MW-22S*	9/19/2006	4300	130	<1.0	16	<100
Dup	9/19/2006	4100	130	<100	<100	<100
	12/19/2006	3300	170	<100	<100	<100
	3/27/2007	3700	170	<100	<100	<100
	6/20/2007	3200	190	<100	<100	<100
	9/9/2007	2200	160	<100	<100	<100
	12/5/2007	2800	150	<100	<100	<100
	3/11/2008	3300	220	<1.0	<1.0	<1.0
	6/16/2008	4600	290	<50	<50	<50
	9/18/2008	<50	<50	<50	<50	<50
	12/3/2008	<50	<50	<50	<50	<50
	3/25/2009	<50	<50	<50	<50	<50
	6/16/2009	<50	<50	<50	<50	<50
	9/29/2009	<50	<50	<50	<50	<50
	12/15/2009	1200	53	<50	<50	<50
	3/24/2010	1500	78	<50	<50	<50
	7/28/2010	5200	180	<50	<50	<50
	9/22/2010	3200	170	<100	<100	<100
	12/14/2010	3300	220	<100	<100	<100
	3/30/2011	3700	290	<100	<100	<100
	6/15/2011	3000	190	<100	<100	<100
	9/21/2011	2900	220	<50	<50	<50
	12/28/2011	4300	330	<50	<50	<50
	3/21/2012	3200	200	<50	<50	<50
	6/20/2012	2400	170	<50	<50	<50
	9/26/2012	2100	160	<50	<50	<50
	12/19/2012	2800	180	<50	<50	<50
	3/13/2013	2800	180	<50	<50	<50
Dup	3/13/2013	2500	170	<50	<50	<50
	6/28/2013	2100	150	<50	<50	<50
	9/25/2013	2800	220	<50	<50	<50
	12/17/2013	1900	140	<50	<50	<50
	3/18/2014	3600	250	<10	<10	<10
	6/24/2014	2700	160	<10	<10	<10
Dup	6/24/2014	2700	170	<10	<10	<10
Dup	9/8/2014	3100	230	<10	<10	<10
	3/25/2015	2800	190	<50.0	<50.0	<50.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-10	3/14/2013	9.7	<1.0	2	<1.0	<1.0
MW-22D	9/19/2006	860	60	<25	<25	<25
Dup	9/19/2006	900	59	<25	<25	<25
	12/19/2006	490	58	<25	<25	<25
	3/27/2007	510	49	<25	<25	<25
	6/20/2007	830	100	<25	<25	<25
	9/9/2007	640	84	<25	<25	<25
	12/5/2007	590	75	<25	<25	<25
	3/11/2008	640	82	<1.0	<1.0	<1.0
	6/16/2008	1200	150	<10	<10	<10
	9/18/2008	1200	130	<10	<10	<10
	12/3/2008	1000	130	<50	<50	<10
	3/25/2009	1900	250	<50	<50	<50
	6/16/2009	820	85	<50	<50	<50
	9/29/2009	640	65	<50	<50	<50
	12/15/2009	730	86	<50	<50	<50
	3/24/2010	700	73	<50	<50	<50
	7/28/2010	650	75	<50	<50	<50
	9/22/2010	910	75	<10	<10	<10
	12/14/2010	690	76	<10	<10	<10
	3/30/2011	940	100	<10	<10	<10
	6/15/2011	820	84	<10	<10	<10
	9/21/2011	940	110	<50	<50	<50
	12/28/2011	1300	120	<50	<50	<50
	3/21/2012	710	65	<50	<50	<50
	6/20/2012	780	80	<10	<10	<10
	9/26/2012	760	75	<10	<10	<10
	12/19/2012	880	79	<10	<10	<10
	3/13/2013	590	60	<10	<10	<10
	6/28/2013	640	72	<10	<10	<10
	9/25/2013	660	70	<10	<10	<10
	12/17/2013	730	73	<10	<10	<10
	3/18/2014	830	86	<1.0	<1.0	<1.0
	6/24/2014	650	67	<1.0	<1.0	<1.0
	9/8/2014	780	90	<2.0	<2.0	<2.0
	3/25/2015	690	72	<10.0	<10.0	<10.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-25D	9/19/2006	91	<1.0	<1.0	<1.0	<1.0
	12/19/2006	71	1	<1.0	<1.0	<1.0
	3/27/2007	89	5.3	<1.0	<1.05	<1.0
	6/20/2007	93	1.1	<1.0	<1.0	<1.0
	9/9/2007	72	1.4	<1.0	<1.0	<1.0
	12/5/2007	93	1.3	<1.0	<1.0	<1.0
	3/11/2008	65	2.1	<1.0	<1.0	<1.0
	6/16/2008	130	2.6	<1.0	<1.0	<1.0
	9/17/2008	120	<5.0	<1.0	<1.0	<1.0
	12/3/2008	110	<5.0	<5.0	<5.0	<5.0
	3/24/2009	140	<5.0	<5.0	<5.0	<5.0
	6/16/2009	100	<5.0	<5.0	<5.0	<5.0
	9/29/2009	140	<5.0	<5.0	<5.0	<5.0
	12/15/2009	94	<5.0	<5.0	<5.0	<5.0
	3/24/2010	110	<5.0	<5.0	<5.0	<5.0
	7/28/2010	150	<5.0	<5.0	<5.0	<5.0
	9/22/2010	160	<5.0	<5.0	<5.0	<5.0
	12/14/2010	140	<5.0	<5.0	<5.0	<5.0
	3/30/2011	150	6.7	<5.0	<5.0	<5.0
	6/15/2011	160	5.3	<5.0	<5.0	<5.0
	9/21/2011	180	10	<5.0	<5.0	<5.0
	12/28/2011	210	10	<5.0	<5.0	<5.0
	3/21/2012	170	7.3	<5.0	<5.0	<5.0
	6/19/2012	170	9.4	<5.0	<5.0	<5.0
	9/26/2012	170	9.4	<5.0	<5.0	<5.0
	12/19/2012	190	12	<5.0	<5.0	<5.0
Dup	12/19/2012	190	11	<5.0	<5.0	<5.0
	3/13/2013	180	11	<5.0	<5.0	<5.0
	6/28/2013	180	12	<5.0	<5.0	<5.0
	9/25/2013	220	16	<1.0	<1.0	<1.0
	12/17/2013	210	15	<10	<10	<10
Dup	12/17/2013	220	16	<10	<10	<10
	3/18/2014	320	19	<1.0	<1.0	<1.0
	6/24/2014	250	20	<1.0	<1.0	<1.0
	9/8/2014	270	24	<1.0	<1.0	<1.0
	3/24/2015	350	27	<2.0	<2.0	<2.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-27*	9/20/2006	660	320	<25	<25	<25
	12/19/2006	220	140	<10	<10	<10
	3/27/2007	700	490	<10	14	<10
	6/21/2007	520	440	<10	16	14
	9/9/2007	550	250	<10	<10	<10
	12/5/2007	350	190	<10	<10	<10
	3/12/2008	1200	190	1.7	3.7	1.6
	6/16/2008	1300	340	<20	<20	<20
	9/18/2008	1100	290	<20	<20	<20
	12/4/2008	1200	200	<17	<17	<17
	3/25/2009	940	380	<50	<50	<50
	6/16/2009	740	260	<50	<50	<50
	9/29/2009	640	100	<50	<50	<50
	12/16/2009	590	64	<50	<50	<50
	3/24/2010	600	170	<50	<50	<50
	7/28/2010	870	170	<50	<50	<50
	9/22/2010	750	170	<20	<20	<20
	12/14/2010	410	37	<20	<20	<20
	3/30/2011	450	83	<1.0	2.1	1.8
	6/16/2011	900	170	1.5	4.1	1.3
	9/21/2011	760	120	<50	<50	<50
	12/28/2011	1200	130	<50	<50	<50
	3/21/2012	720	160	<50	<50	<50
	6/20/2012	740	160	<20	<20	<20
	9/26/2012	650	140	<20	<20	<20
	12/19/2012	810	110	<20	<20	<20
	3/13/2013	470	130	<20	<20	<20
	6/28/2013	750	310	<20	<20	<20
	9/25/2013	1000	200	<20	<20	<20
	12/17/2013	850	100	<20	<20	<20
	3/18/2014	1000	200	3.0	9.7	<2.0
Dup	3/18/2014	940	190	3.1	9.7	2.0
	6/24/2014	950	190	2.9	10	<2.0
	9/9/2014	1200	250	<2.0	9.9	<2.0
	3/24/2015	720	130	<10.0	<10.0	<10.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-28S*	9/19/2006	<1.0	<1.0	<1.0	<1.0	<1.0
	12/18/2006	1.2	<1.0	<1.0	<1.0	<1.0
	3/27/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	6/19/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	12/4/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	3/10/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	6/16/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	9/17/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	12/3/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	3/24/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	6/16/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	9/29/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	12/15/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	3/23/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	7/27/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	9/21/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	12/13/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	3/29/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	6/15/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	9/20/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	12/27/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	3/20/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	6/19/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	9/26/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	12/19/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	3/13/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	6/28/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	9/25/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	12/17/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	3/18/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	6/24/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	3/23/2015	<1.0	<1.0	<1.0	<1.0	<1.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-30S*	9/18/2006	<1.0	<1.0	<1.0	<1.0	<1.0
	12/18/2006	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	12/4/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	3/10/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	6/16/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	9/16/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	12/2/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	3/24/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	6/15/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	9/28/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	3/23/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	7/27/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	9/21/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	12/13/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	3/29/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	6/14/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	9/20/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	12/27/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	3/20/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	6/19/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	9/26/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	12/19/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	3/12/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	6/28/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	9/25/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	3/18/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	6/24/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	3/23/2015	<1.0	<1.0	<1.0	<1.0	<1.0
Dup	3/23/2015	<1.0	<1.0	<1.0	<1.0	<1.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-30D	9/18/2006	<1.0	<1.0	<1.0	<1.0	<1.0
	12/18/2006	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	12/4/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	3/10/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	6/16/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	9/16/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	12/2/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	3/24/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	6/15/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	9/28/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	3/23/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	7/27/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	9/21/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	12/13/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	3/29/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	6/14/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	9/20/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	12/27/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	3/20/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	6/19/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	9/26/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	12/19/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	3/12/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	6/28/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	9/25/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	3/18/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	6/24/2014	1.2	<1.0	<1.0	<1.0	<1.0
	9/8/2014	2.1	<1.0	<1.0	<1.0	<1.0
	3/23/2015	3.1	<1.0	<1.0	<1.0	<1.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-31S*	9/18/2006	<1.0	<1.0	<1.0	<1.0	<1.0
	12/18/2006	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	6/19/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	12/4/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	3/10/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	6/16/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	9/16/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	12/3/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	3/24/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	6/15/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	9/28/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	3/23/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	7/27/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	9/21/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	12/13/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	3/29/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	6/14/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	9/20/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	12/27/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	3/20/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	6/19/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	9/26/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	12/19/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	3/12/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	6/28/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	9/25/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	3/18/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	3/23/2015	<1.0	<1.0	<1.0	<1.0	<1.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-31D	9/18/2006	1.3	<1.0	<1.0	<1.0	<1.0
	12/18/2006	1.3	<1.0	<1.0	<1.0	<1.0
	3/26/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	6/19/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	12/4/2007	1.1	<1.0	<1.0	<1.0	<1.0
	3/10/2008	3.6	<1.0	<1.0	<1.0	<1.0
	6/16/2008	5.9	<1.0	<1.0	<1.0	<1.0
	9/16/2008	5.5	<1.0	<1.0	<1.0	<1.0
	12/3/2008	6.3	<1.0	<1.0	<1.0	<1.0
	3/24/2009	7.9	1.2	<1.0	<1.0	<1.0
	6/15/2009	8.8	1.3	<1.0	<1.0	<1.0
	9/29/2009	14	2.3	<1.0	<1.0	<1.0
	12/14/2009	12	2.5	<1.0	<1.0	<1.0
	3/23/2010	18	3.4	<1.0	<1.0	<1.0
	7/27/2010	24	5.2	<1.0	<1.0	<1.0
	9/21/2010	38	8.4	<1.0	<1.0	<1.0
	12/13/2010	43	6.8	<1.0	<1.0	<1.0
	3/29/2011	38	7.9	<1.0	<1.0	<1.0
	6/14/2011	31	5.8	<1.0	<1.0	<1.0
	9/20/2011	42	7.6	<1.0	<1.0	<1.0
	12/27/2011	75	16	<1.0	<1.0	<1.0
	3/20/2012	31	7.2	<1.0	<1.0	<1.0
	6/19/2012	38	9.1	<1.0	<1.0	<1.0
	9/26/2012	58	13	<1.0	<1.0	<1.0
	12/19/2012	72	14	<1.0	<1.0	<1.0
	3/12/2013	60	12	<1.0	<1.0	<1.0
	6/28/2013	39	10	<1.0	<1.0	<1.0
	9/25/2013	62	14	<1.0	<1.0	<1.0
	12/16/2013	92	19	<1.0	<1.0	<1.0
	3/18/2014	95	14	<1.0	<1.0	<1.0
	3/23/2015	58	13	<1.0	<1.0	<1.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-34	9/19/2006	90	4.4	<1.0	<1.0	<1.0
	12/19/2006	19	<1.0	<1.0	<1.0	<1.0
Dup	12/19/2006	19	<1.0	<1.0	<1.0	<1.0
	3/27/2007	7.6	<1.0	<1.0	<1.0	<1.0
	6/19/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	12/5/2007	22	1.1	<1.0	<1.0	<1.0
	3/11/2008	48	1.3	<1.0	<1.0	<1.0
	6/16/2008	44	1.6	<1.0	<1.0	<1.0
	9/17/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	9/18/2008	<1.0	<1.1	<1.0	<1.0	<1.0
	3/24/2009	<1.0	<1.2	<1.0	<1.0	<1.0
	6/16/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	9/29/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	12/15/2009	1.6	<1.0	<1.0	<1.0	<1.0
	3/24/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	7/27/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	9/22/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	3/30/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	6/15/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	9/21/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	12/28/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	3/21/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	6/20/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	9/26/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	12/19/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	3/14/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	6/28/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	9/25/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	12/17/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	3/18/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	6/24/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	3/23/2015	<1.0	<1.0	<1.0	<1.0	<1.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL (µg/L)	5	70	7	100	2
	AWQC (µg/L)	2.5	-	330	140	0.025
MW-35*	9/18/2006	27	<1.0	<1.0	<1.0	<1.0
	12/18/2006	14	<1.0	<1.0	<1.0	<1.0
	3/26/2007	23	<1.0	<1.0	<1.0	<1.1
	6/19/2007	22	<1.0	<1.0	<1.0	<1.0
	9/8/2007	24	<1.0	<1.0	<1.0	<1.0
	12/4/2007	25	<1.0	<1.0	<1.0	<1.0
	3/10/2008	28	<1.0	<1.0	<1.0	<1.0
	6/16/2008	63	<1.0	<1.0	<1.0	<1.0
	9/16/2008	56	<1.0	<1.0	<1.0	<1.0
	12/2/2008	59	<1.0	<1.0	<1.0	<1.0
	3/24/2009	74	<1.0	<1.0	<1.0	<1.0
	6/15/2009	70	<1.0	<1.0	<1.0	<1.0
	9/28/2009	83	<1.0	<1.0	<1.0	<1.0
	12/14/2009	78	<5.0	<5.0	<5.0	<5.0
	3/23/2010	89	<1.0	<1.0	<1.0	<1.0
	7/27/2010	58	<1.0	<1.0	<1.0	<1.0
	9/21/2010	84	<2.0	<2.0	<2.0	<2.0
	12/13/2010	88	<1.0	<1.0	<1.0	<1.0
	3/29/2011	130	<2.0	<2.0	<2.0	<2.0
	6/14/2011	98	<2.0	<2.0	<2.0	<2.0
	9/20/2011	230	3	<2.0	<2.0	<2.0
	12/27/2011	330	<10	<10	<10	<10
	3/20/2012	170	<10	<10	<10	<10
	6/19/2012	220	<5.0	<5.0	<5.0	<5.0
	9/26/2012	170	<5.0	<5.0	<5.0	<5.0
	12/19/2012	310	4.2	<5.0	<5.0	<5.0
	3/12/2013	290	<5.0	>5.0	>5.0	>5.0
	6/28/2013	260	<10	<10	<10	<10
	9/25/2013	240	4.7	<1.0	<1.0	<1.0
	12/26/2013	260	5.2	<1.0	<1.0	<1.0
	3/18/2014	320	4.3	<1.0	<1.0	<1.0
	6/24/2014	240	4.6	<1.0	<1.0	<1.0
	9/8/2014	310	6.1	<1.0	<1.0	<1.0
	3/23/2015	230	4.4	<2.0	<2.0	<2.0
Dup	3/23/2015	230	4.3	<2.0	<2.0	<2.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL (µg/L)	5	70	7	100	2
	AWQC (µg/L)	2.5	-	330	140	0.025
MW-37*	9/20/2006	880	60	<50	<50	<50
	12/19/2006	490	59	<20	<20	<20
	3/27/2007	440	44	<20	<20	<20
	6/21/2007	580	62	<20	<20	<20
	9/8/2007	680	74	<20	<20	<20
	12/5/2007	810	79	<20	<20	<20
	3/12/2008	940	96	<1.0	<1.0	<1.0
	6/16/2008	1100	110	<20	<20	<20
	9/18/2008	590	60	<20	<20	<20
	12/4/2008	890	99	<17	<17	<17
	3/25/2009	460	41	<10	<10	<10
	6/17/2009	820	89	<10	<10	<10
	9/29/2009	600	55	<10	<10	<10
	12/16/2009	590	59	<10	<10	<10
	3/24/2010	720	63	<10	<10	<10
	7/28/2010	690	64	<10	<10	<10
	9/22/2010	740	69	<10	<10	<10
	12/14/2010	760	79	<10	<10	<10
	3/30/2011	980	100	<10	<10	<10
	6/16/2011	900	100	<10	<10	<10
	9/21/2011	720	66	<10	<10	<10
	12/28/2011	890	100	<10	<10	<10
Dup	12/28/2011	840	91	<10	<10	<10
	3/21/2012	830	88	<10	<10	<10
	6/20/2012	590	64	<20	<20	<20
	9/26/2012	500	50	<20	<20	<20
	12/19/2012	670	69	<20	<20	<20
	3/13/2013	960	100	<20	<20	<20
	6/28/2013	660	78	<20	<20	<20
	9/25/2013	720	83	<20	<20	<20
	12/17/2013	620	66	<20	<20	<20
	3/18/2014	790	99	<2.0	2.0	<2.0
	6/25/2014	650	78	<2.0	<2.0	<2.0
	9/9/2014	700	87	<2.0	<2.0	<2.0
DUP	9/9/2014	700	86	<2.0	<2.0	<2.0
	3/24/2015	790	88	<10.0	<10.0	<10.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL (µg/L)	5	70	7	100	2
	AWQC (µg/L)	2.5	-	330	140	0.025
MW-38	9/20/2006	1.8	<1.0	<1.0	<1.0	<1.0
	12/19/2006	9.1	<10	<1.0	<1.0	<1.0
	3/27/2007	6.2	1	<1.0	<1.0	<1.0
	6/20/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2007	12	1	<1.0	<1.0	<1.0
	12/6/2007	9.1	<1.0	<1.0	<1.0	<1.0
	3/12/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	6/16/2008	16	<1.0	<1.0	<1.0	<1.0
	9/17/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	12/4/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2009	25	<1.0	<1.0	<1.0	<1.0
	6/17/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	9/30/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2009	NA	NA	NA	NA	NA
	3/24/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	7/28/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	9/22/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	3/30/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	6/15/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	9/21/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	12/28/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	3/21/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	6/20/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	9/26/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	12/19/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	3/13/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	6/28/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	9/25/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	12/17/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	3/18/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	6/24/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	3/24/2015	<1.0	<1.0	<1.0	<1.0	<1.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL (µg/L)	5	70	7	100	2
	AWQC (µg/L)	2.5	-	330	140	0.025
MW-38S*	9/20/2006	35	1.5	<1.0	<1.0	<1.0
	12/19/2006	16	<1.0	<1.0	<1.0	<1.0
	3/27/2007	15	1.6	<1.0	<1.0	<1.0
	6/20/2007	14	<1.0	<1.0	<1.0	<1.0
	9/9/2007	30	1.8	<1.0	<1.0	<1.0
Dup	9/9/2007	32	1.8	<1.0	<1.0	<1.0
	12/6/2007	13	<1.0	<1.0	<1.0	<1.0
	3/12/2008	5.4	<1.0	<1.0	<1.0	<1.0
	6/16/2008	20	1.1	<1.0	<1.0	<1.0
	9/16/2008	2.7	1.1	<1.0	<1.0	<1.0
	12/4/2008	3.4	<1.0	<1.0	<1.0	<1.0
	3/26/2009	84	<1.0	<1.0	<1.0	<1.0
	6/17/2009	3.5	<1.0	<1.0	<1.0	<1.0
	9/30/2009	4.5	<1.0	<1.0	<1.0	<1.0
	12/16/2009	2.7	<1.0	<1.0	<1.0	<1.0
	3/24/2010	2.8	<1.0	<1.0	<1.0	<1.0
	7/28/2010	15	<1.0	<1.0	<1.0	<1.0
	9/22/2010	10	<1.0	<1.0	<1.0	<1.0
	12/14/2010	2.2	<1.0	<1.0	<1.0	<1.0
	3/30/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	6/15/2011	4.7	<1.0	<1.0	<1.0	<1.0
	9/21/2011	6.1	<1.0	<1.0	<1.0	<1.0
	12/28/2011	3.7	<1.0	<1.0	<1.0	<1.0
	3/21/2012	3.4	<1.0	<1.0	<1.0	<1.0
	6/20/2012	9.6	<1.0	<1.0	<1.0	<1.0
	9/26/2012	2.5	<1.0	<1.0	<1.0	<1.0
	12/19/2012	1.2	<1.0	<1.0	<1.0	<1.0
	3/13/2013	1.7	<1.0	<1.0	<1.0	<1.0
	6/28/2013	9.6	<1.0	<1.0	<1.0	<1.0
	9/25/2013	14	<1.0	<1.0	<1.0	<1.0
	12/17/2013	2.6	<1.0	<1.0	<1.0	<1.0
	3/18/2014	3.9	<1.0	<1.0	<1.0	<1.0
	6/24/2014	7.5	<1.0	<1.0	<1.0	<1.0
	9/9/2014	12	<1.0	<1.0	<1.0	<1.0
	3/24/2015	1.1	<1.0	<1.0	<1.0	<1.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-41	12/19/2006	170	17	<10	<10	<10
	3/27/2007	250	16	<5	<5	<5
	3/27/2007	240	16	<5	<5	<5
Dup	6/20/2007	240	25	<1.0	<1.0	<1.0
	9/8/2007	200	20	<5.0	<5.0	<5.0
	12/4/2007	240	21	<5.0	<5.0	<5.0
	3/11/2008	250	35	<1.0	<1.0	<1.0
	6/16/2008	400	44	<1.0	<1.0	<1.0
	9/17/2008	460	38	<1.0	<1.0	<1.0
	12/3/2008	450	43	<10	<10	<10
	3/24/2009	620	75	<10	<10	<10
	6/16/2009	520	39	<10	<10	<10
	9/29/2009	390	34	<1.0	<1.0	<1.0
	12/15/2009	400	37	<10	<10	<10
	3/24/2010	390	33	<10	<10	<10
	7/28/2010	490	47	<10	<10	<10
	9/22/2010	570	64	<10	<10	<10
	12/14/2010	480	46	<20	<20	<20
	3/30/2011	600	61	<20	<20	<20
	6/15/2011	500	46	<20	<20	<20
	9/21/2011	560	51	<10	<10	<10
	12/28/2011	720	83	<20	<20	<20
	3/21/2012	550	51	<20	<20	<20
	6/19/2012	480	53	<20	<20	<20
	9/26/2012	450	45	<20	<20	<20
	12/19/2012	550	57	<20	<20	<20
	3/3/2013	540	57	<20	<20	<20
	6/28/2013	530	57	<10	<10	<10
	9/25/2013	630	65	<20	<20	<20
	12/17/2013	540	58	<10	<10	<10
	3/18/2014	1000	82	<1.0	<1.0	<1.0
	6/24/2014	540	55	<1.0	<1.0	<1.0
	9/8/2014	590	70	<2.0	<2.0	<2.0
	3/24/2015	620	66	<10.0	<10.0	<10.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-43	6/20/2012	600	<10	<10	<10	<10
MW-44	9/20/2006	400	<10	<10	<10	<10
	12/20/2006	370	<10	<10	<10	<10
	12/20/2006	350	<10	<10	<10	<10
Dup	3/28/2007	350	<10	<10	<10	<10
	6/20/2007	510	<10	<10	<10	<10
	9/9/2007	410	<10	<10	<10	<10
	12/6/2007	690	<10	<10	<10	<10
	3/11/2008	1000	<1.0	<1.0	<1.0	<1.0
	6/16/2008	1100	<20	<20	<20	<20
	9/18/2008	1000	<20	<20	<20	<20
	12/4/2008	1400	<17	<17	<17	<17
	3/26/2009	2100	<50	<50	<50	<50
	6/17/2009	2100	<50	<50	<50	<50
	9/30/2009	2200	<50	<50	<50	<50
	12/16/2009	3500	<50	<50	<50	<50
	3/24/2010	2600	<50	<50	<50	<50
	7/28/2010	2800	<50	<50	<50	<50
	9/22/2010	2100	<50	<50	<50	<50
	12/15/2010	2700	<50	<50	<50	<50
	3/30/2011	3200	<50	<50	<50	<50
	6/16/2011	3400	<50	<50	<50	<50
	9/21/2011	3000	<50	<50	<50	<50
	12/29/2011	4300	<50	<50	<50	<50
	3/21/2012	3500	<50	<50	<50	<50
Dup	3/21/2012	3300	<50	<50	<50	<50
	6/20/2012	3500	<500	<500	<500	<500
	6/20/2012	2700	<50	<50	<50	<50
	9/26/2012	3100	<100	<100	<100	<100
Dup	9/26/2012	3100	<100	<100	<100	<100
	12/19/2012	3500	<100	<100	<100	<100
	3/13/2013	3000	<100	<100	<100	<100
	6/28/2013	3300	<100	<100	<100	<100
	9/25/2013	3200	<100	<100	<100	<100
	12/17/2013	3300	<100	<100	<100	<100
	3/18/2014	3100	68	<10	<10	<10
	6/24/2014	2300	75	<1.0	<1.0	<1.0
	9/9/2014	2700	86	<5.0	<5.0	<5.0
	3/24/2015	2500	74	<50.0	<50.0	<50.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL (µg/L)	5	70	7	100	2
	AWQC (µg/L)	2.5	-	330	140	0.025
MW-45	12/20/2006	9.1	<1.0	<1.0	<1.0	<1.0
	3/28/2007	9.6	<1.0	<1.0	<1.0	<1.0
	6/20/2007	6.5	<1.0	<1.0	<1.0	<1.0
	9/9/2007	14	<1.0	<1.0	<1.0	<1.0
	12/6/2007	18	<1.0	<1.0	<1.0	<1.0
	3/12/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	6/16/2008	31	<1.0	<1.0	<1.0	<1.0
	9/17/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	12/4/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	3/25/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	6/17/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	9/30/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	3/24/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	7/28/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	9/22/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	12/15/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	3/31/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	6/15/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	9/21/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	12/29/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	3/21/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	6/20/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	9/26/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	12/19/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	3/13/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	6/28/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	9/25/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	12/18/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	3/18/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	6/24/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	3/24/2015	NS	NS	NS	NS	NS

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
MW-46	9/21/2006	36	<1.0	<1.0	<1.0	<1.0
Dup	12/20/2006	32	<1.0	<1.0	<1.0	<1.0
	3/28/2007	49	<1.0	<1.0	<1.0	<1.0
	6/20/2007	39	<1.0	<1.0	<1.0	<1.0
	9/9/2007	39	<1.0	<1.0	<1.0	<1.0
	12/6/2007	36	<1.0	<1.0	<1.0	<1.0
	3/12/2008	64	<1.0	<1.0	<1.0	<1.0
	6/16/2008	63	1.4	<1.0	<1.0	<1.0
	9/17/2008	30	17	<1.0	<1.0	<1.0
	12/4/2008	40	13	<1.0	<1.0	<1.0
	3/25/2009	63	4.2	<1.0	<1.0	<1.0
	6/17/2009	50	7.7	<1.0	<1.0	<1.0
	9/30/2009	69	8.0	<1.0	<1.0	<1.0
	12/16/2009	64	2.2	<1.0	<1.0	<1.0
	3/24/2010	25	<1.0	<1.0	<1.0	<1.0
	7/28/2010	68	4.5	<1.0	<1.0	<1.0
	9/22/2010	87	5	<1.0	<1.0	<1.0
	12/15/2010	75	5	<1.0	<1.0	<1.0
	3/31/2011	3	<1.0	<1.0	<1.0	<1.0
	6/16/2011	55	2.6	<1.0	<1.0	<1.0
	9/21/2011	44	2.8	<1.0	<1.0	<1.0
	12/29/2011	14	1.6	<1.0	<1.0	<1.0
	3/21/2012	59	3.1	<1.0	<1.0	<1.0
	6/20/2012	86	8.8	<1.0	<1.0	<1.0
	9/26/2012	88	18	<1.0	<1.0	<1.0
	12/19/2012	96	16	<1.0	<1.0	<1.0
	3/13/2013	25	3.4	<1.0	<1.0	<1.0
	6/28/2013	62	30	<1.0	<1.0	<1.0
	9/25/2013	74	54	<1.0	<1.0	<1.0
	12/18/2013	78	31	<1.0	<1.0	<1.0
	3/18/2014	110	18	<1.0	<1.0	<1.0
	6/24/2014	130	13	<1.0	<1.0	<1.0
	9/9/2014	190	12	<1.0	<1.0	<1.0
	3/24/2015	NS	NS	NS	NS	NS

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL (µg/L)	5	70	7	100	2
	AWQC (µg/L)	2.5	-	330	140	0.025
MW-47*	3/18/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	6/24/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	3/24/2015	<1.0	<1.0	<1.0	<1.0	<1.0
MW-48*	3/18/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	6/24/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2014	1.0	<1.0	<1.0	<1.0	<1.0
	3/24/2015	<1.0	<1.0	<1.0	<1.0	<1.0
CS-1	6/20/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	12/6/2007	1.2	<1.0	<1.0	<1.0	<1.0
	3/12/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	6/16/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	9/18/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	12/4/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	3/25/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	6/17/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	9/30/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	3/24/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	7/28/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	9/22/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	12/15/2010	4.1	<1.0	<1.0	<1.0	<4.1
	3/31/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	6/16/2011	3.1	<1.0	<1.0	<1.0	<1.0
	9/21/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	12/28/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	3/21/2012	2.3	<1.0	<1.0	<1.0	<1.0
	6/20/2012	1.0	<1.0	<1.0	<1.0	<1.0
	9/26/2012	5.8	<1.0	<1.0	<1.0	<1.0
	12/19/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	3/12/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	6/28/2013	2.9	<1.0	<1.0	<1.0	<1.0
	9/25/2013	2.1	<1.0	<1.0	<1.0	<1.0
	12/17/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	3/18/2014	5.3	<1.0	<1.0	<1.0	<1.0
	6/24/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	3/25/2015	<1.0	<1.0	<1.0	<1.0	<1.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
CS-2	6/20/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	12/6/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	3/12/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	6/16/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	9/18/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	12/4/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	3/25/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	6/17/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	9/30/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	3/24/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	7/28/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	9/22/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	12/15/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	3/31/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	6/16/2011	4.5	<1.0	<1.0	<1.0	<1.0
	9/21/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	12/28/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	3/21/2012	2.4	<1.0	<1.0	<1.0	<1.0
	6/20/2012	2.9	<1.0	<1.0	<1.0	<1.0
	9/26/2012	4.8	<1.0	<1.0	<1.0	<1.0
	12/19/2012	<1.0	<1.0	<1.0	<1.0	<1.0
	3/12/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	6/28/2013	2.9	<1.0	<1.0	<1.0	<1.0
	9/25/2013	2.9	1.2	<1.0	<1.0	<1.0
	12/17/2013	1.1	<1.0	<1.0	<1.0	<1.0
	3/18/2014	4.9	<1.0	<1.0	<1.0	<1.0
	6/24/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	3/25/2015	<1.0	<1.0	<1.0	<1.0	<1.0

Well No.	Date	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
	MCL ($\mu\text{g/L}$)	5	70	7	100	2
	AWQC ($\mu\text{g/L}$)	2.5	-	330	140	0.025
CS-3	6/20/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	12/6/2007	<1.0	<1.0	<1.0	<1.0	<1.0
	3/12/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	6/16/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	9/18/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	12/4/2008	<1.0	<1.0	<1.0	<1.0	<1.0
	3/25/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	6/17/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	9/30/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2009	<1.0	<1.0	<1.0	<1.0	<1.0
	3/24/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	7/28/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	9/22/2010	<1.0	<1.0	<1.0	<1.0	<1.0
	12/15/2010	2.8	<1.0	<1.0	<1.0	<2.8
	3/31/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	6/16/2011	4.9	<1.0	<1.0	<1.0	<1.0
	9/21/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	12/28/2011	<1.0	<1.0	<1.0	<1.0	<1.0
	3/21/2012	2.3	<1.0	<1.0	<1.0	<1.0
	6/20/2012	3.5	<1.0	<1.0	<1.0	<1.0
	9/26/2012	5.5	<1.0	<1.0	<1.0	<1.0
	12/19/2012	1	<1.0	<1.0	<1.0	<1.0
	3/12/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	6/28/2013	2.7	<1.0	<1.0	<1.0	<1.0
	9/25/2013	1.5	<1.0	<1.0	<1.0	<1.0
	12/17/2013	<1.0	<1.0	<1.0	<1.0	<1.0
	3/18/2014	7.5	<1.0	<1.0	<1.0	<1.0
	6/24/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2014	<1.0	<1.0	<1.0	<1.0	<1.0
	3/25/2015	<1.0	<1.0	<1.0	<1.0	<1.0
RW-2	3/14/2013	91	6.6	<1.0	<1.0	<1.0
RW-3	3/14/2013	1.2	<1.0	<1.0	<1.0	<1.0

Note: All results in micrograms per liter ($\mu\text{g/L}$)

Key:

Dup = Duplicate sample results

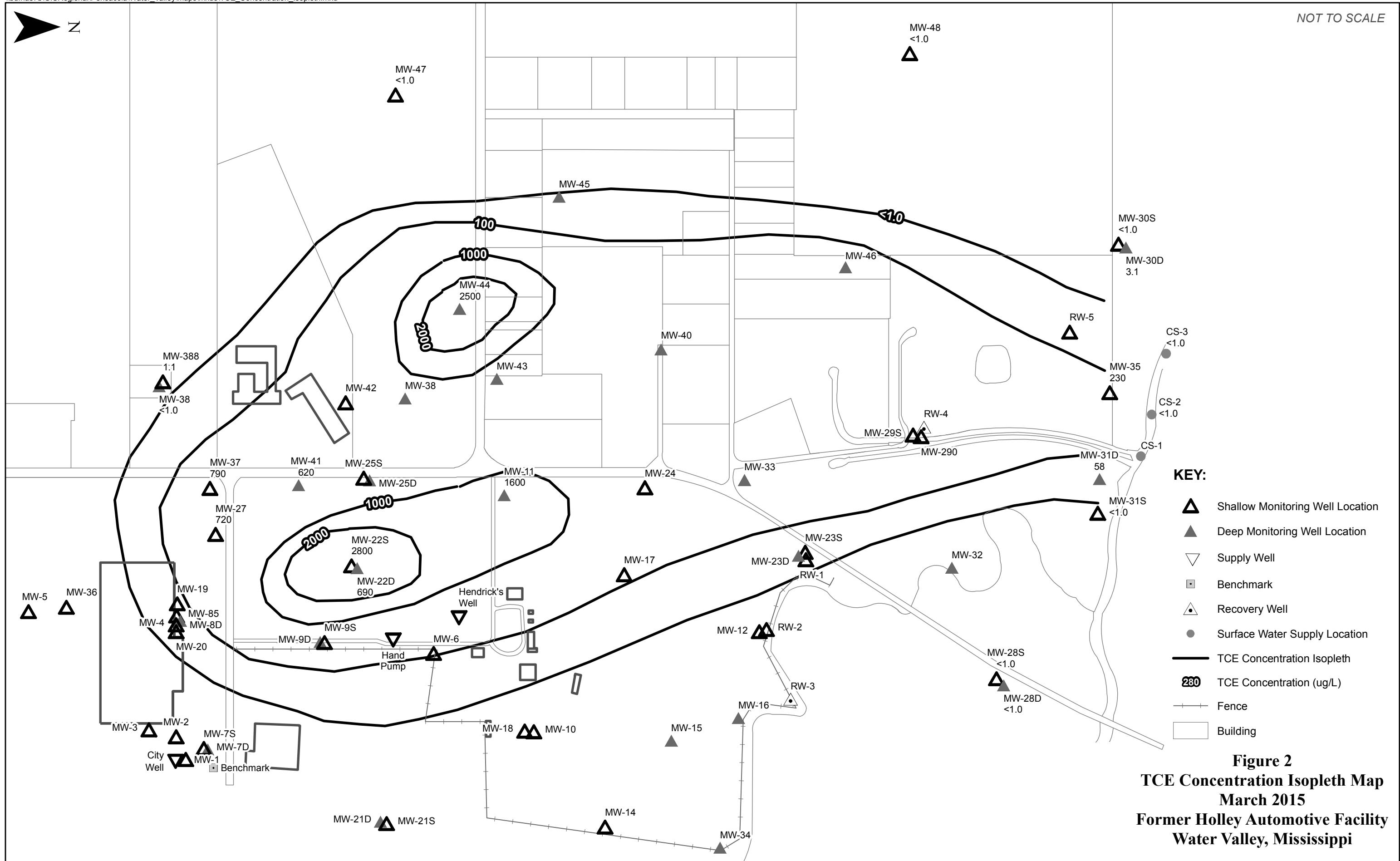
NA = Not analyzed

Bold = Above Maximum Contaminant Level (MCL)

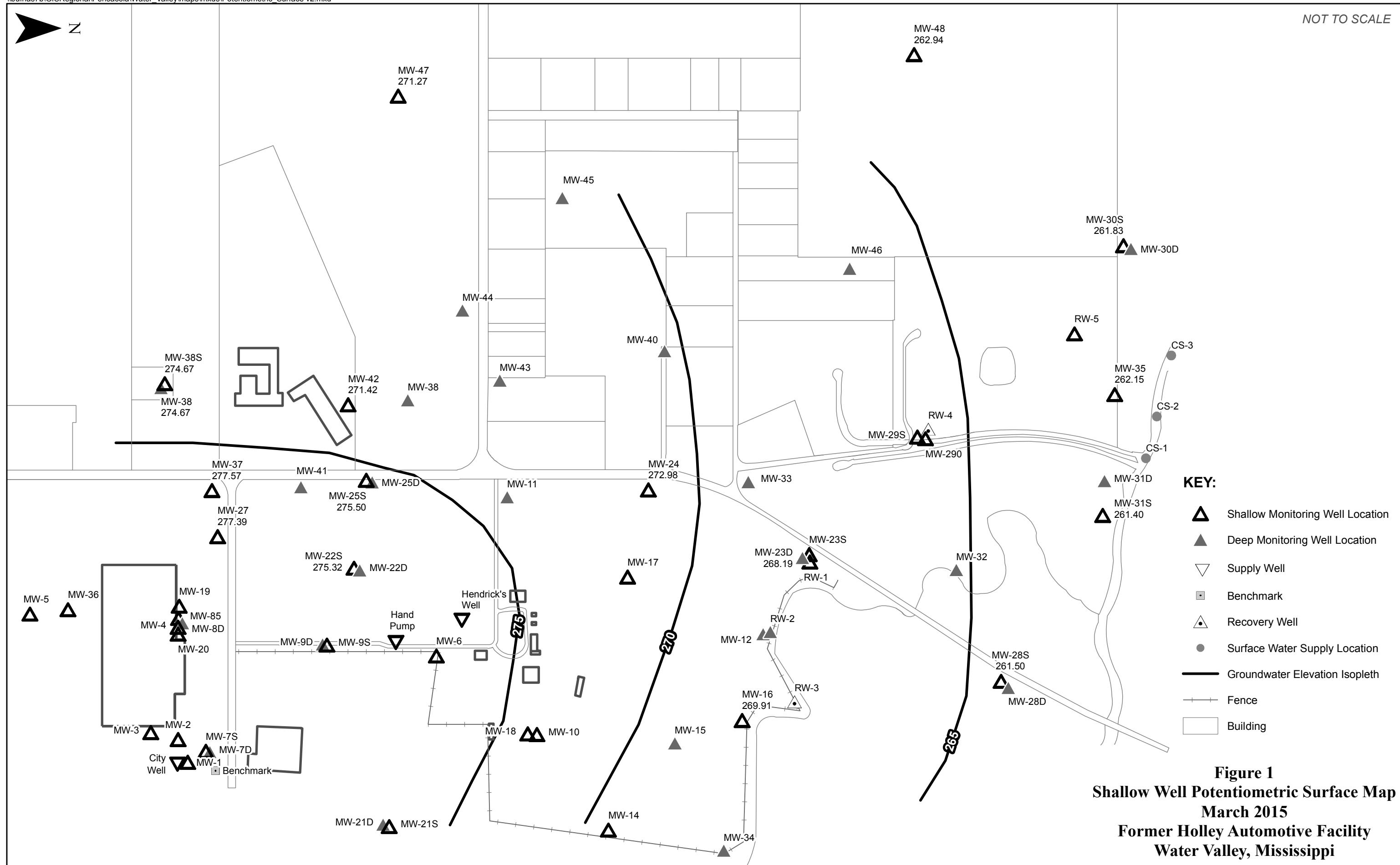
Italic = Laboratory Reporting Limit above MCL

* = Shallow wells

CS = Creek Sample

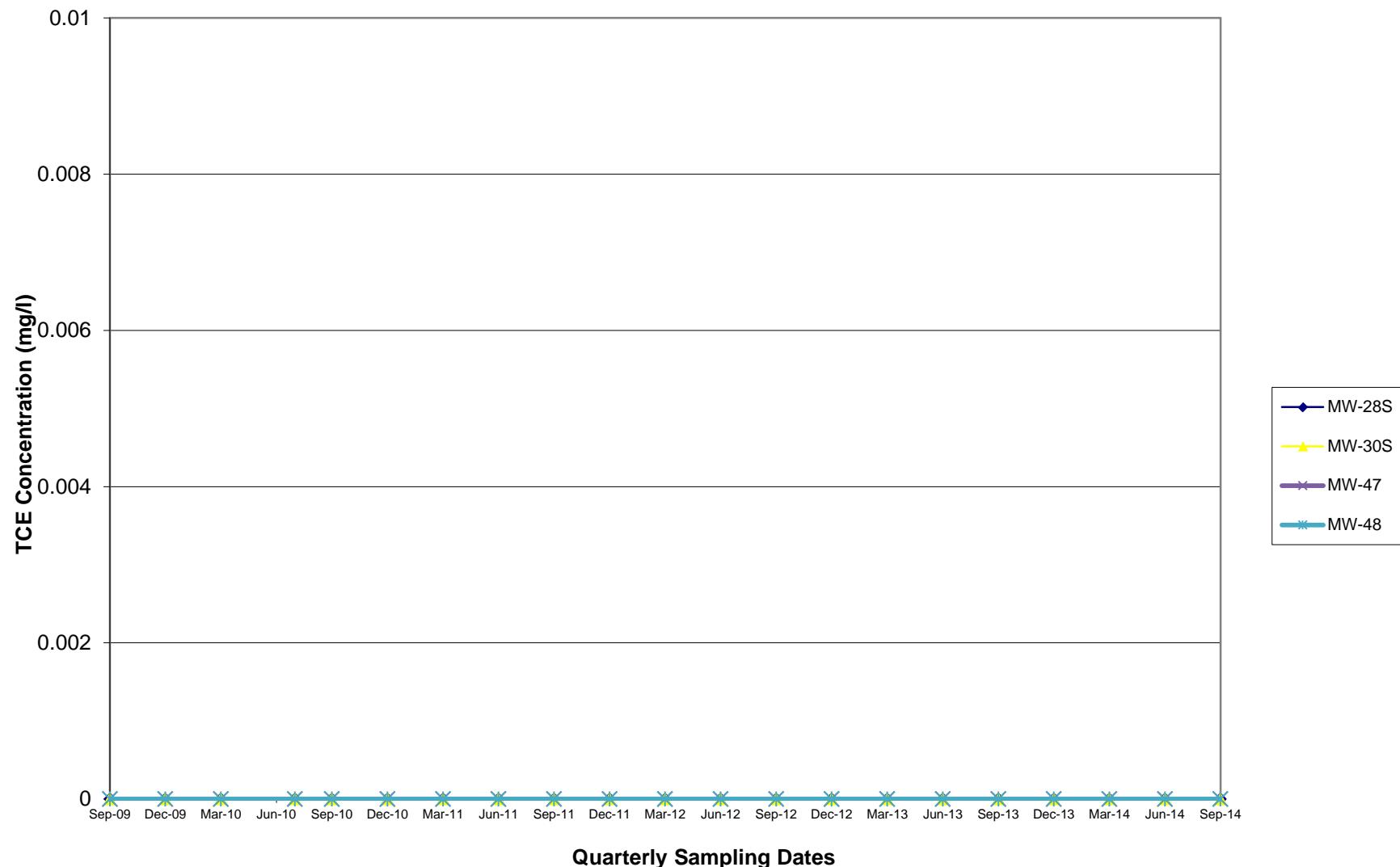


NOT TO SCALE

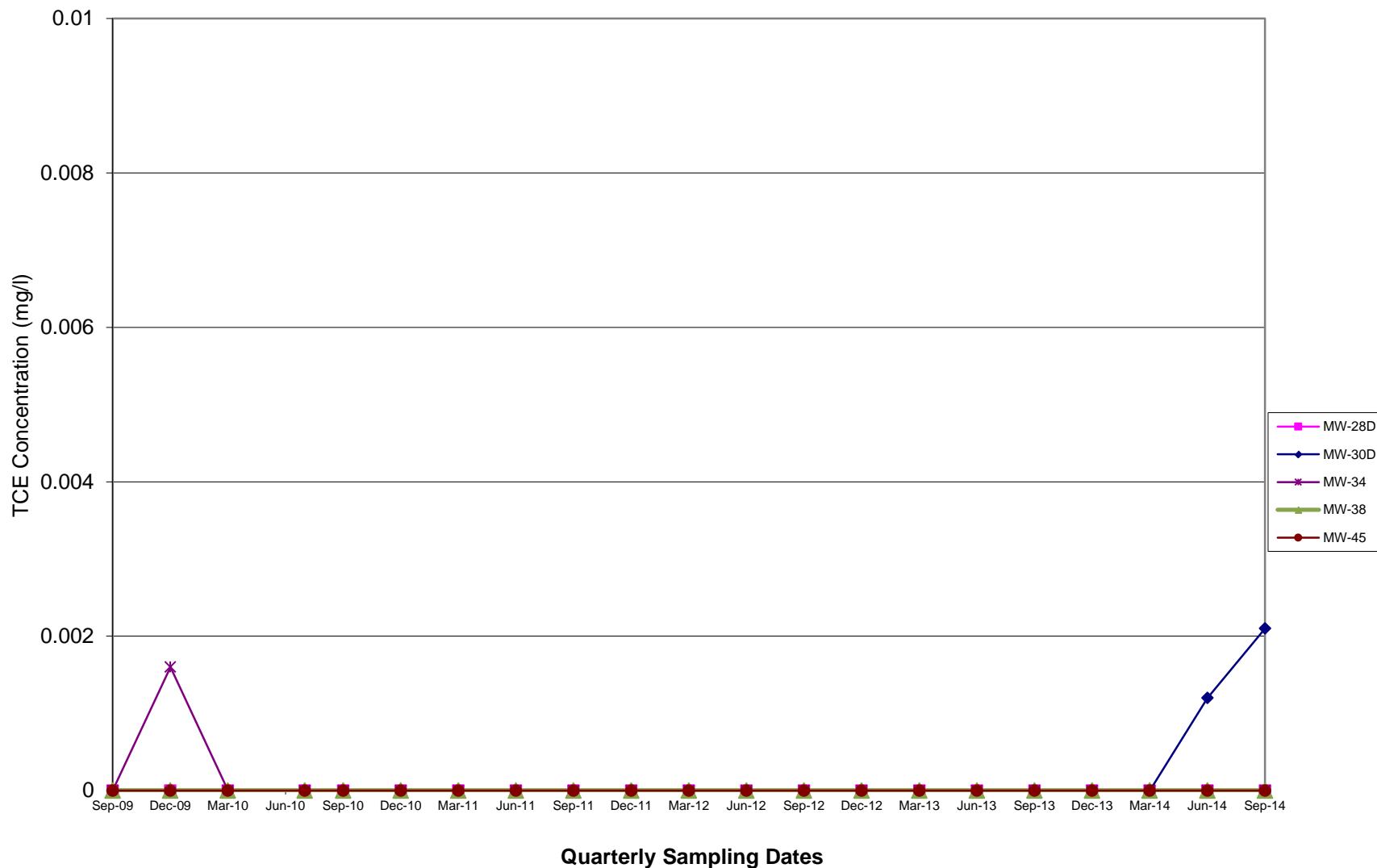


ATTACHMENT A

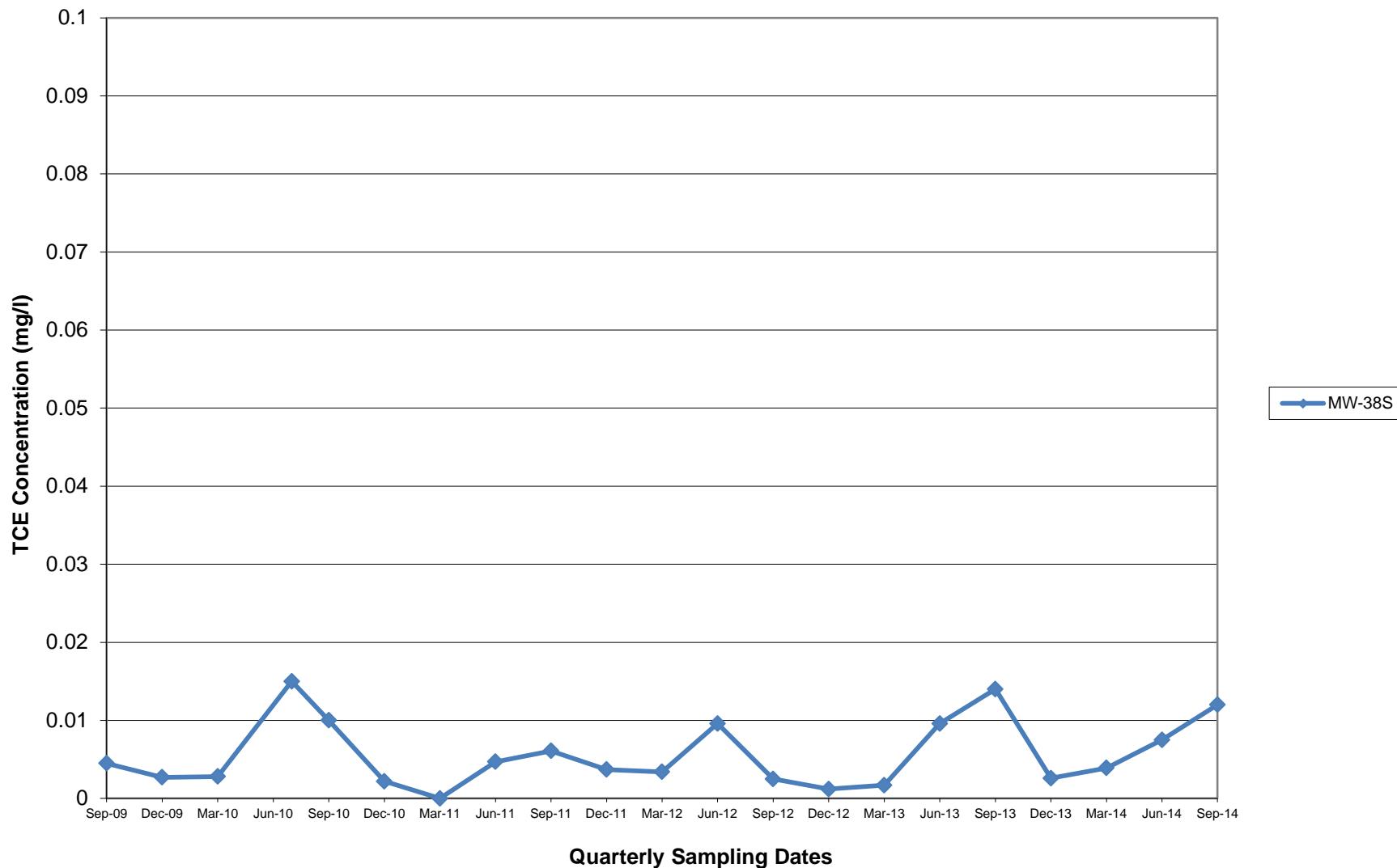
Former Holley Automotive TCE Concentrations
(Five Year Trend - Shallow Wells: Non-Detect to 0.10 mg/L)



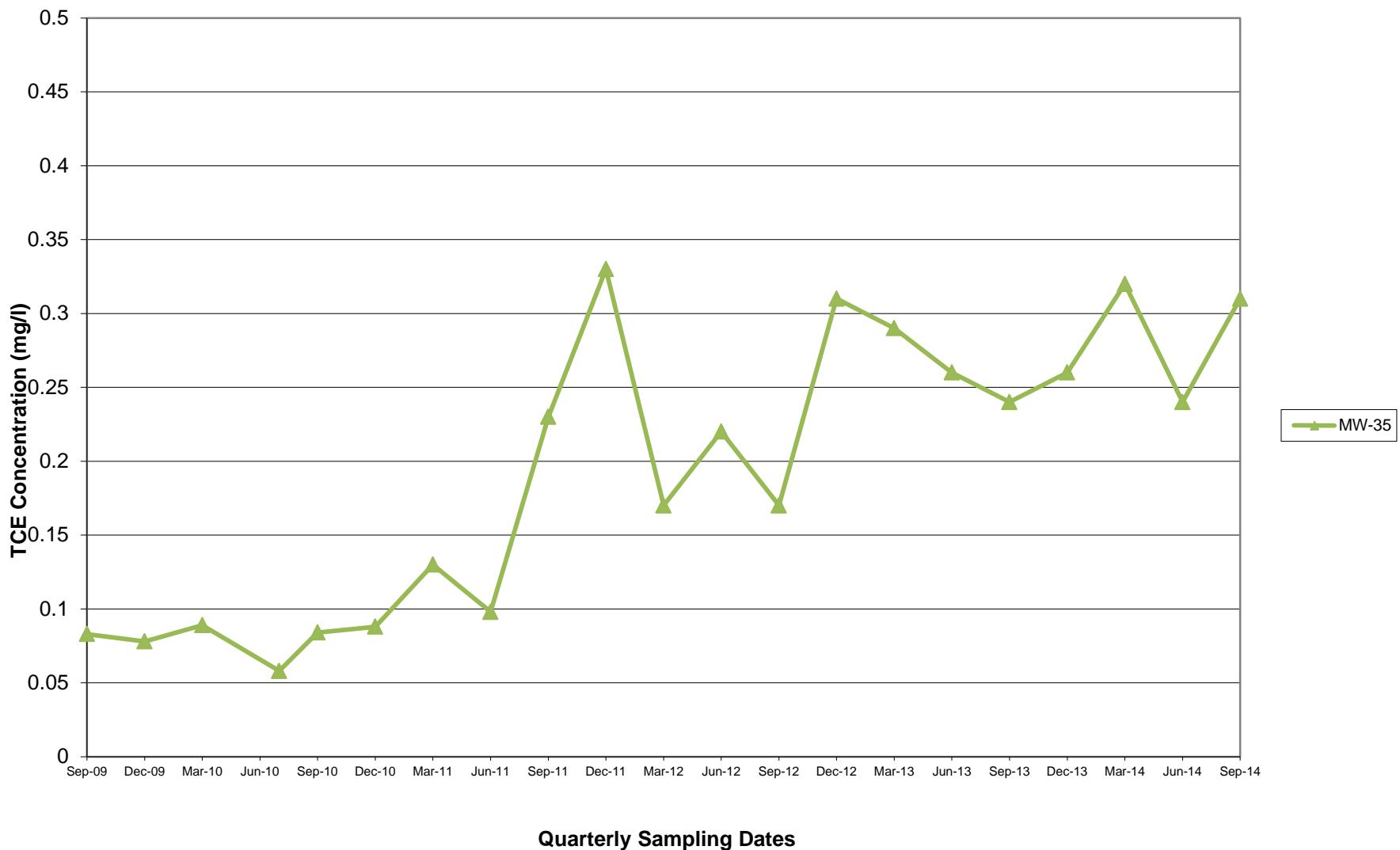
Former Holley Automotive TCE Concentrations
(Five Year Trend - Deep Wells: Non Detect to 0.01 mg/L)



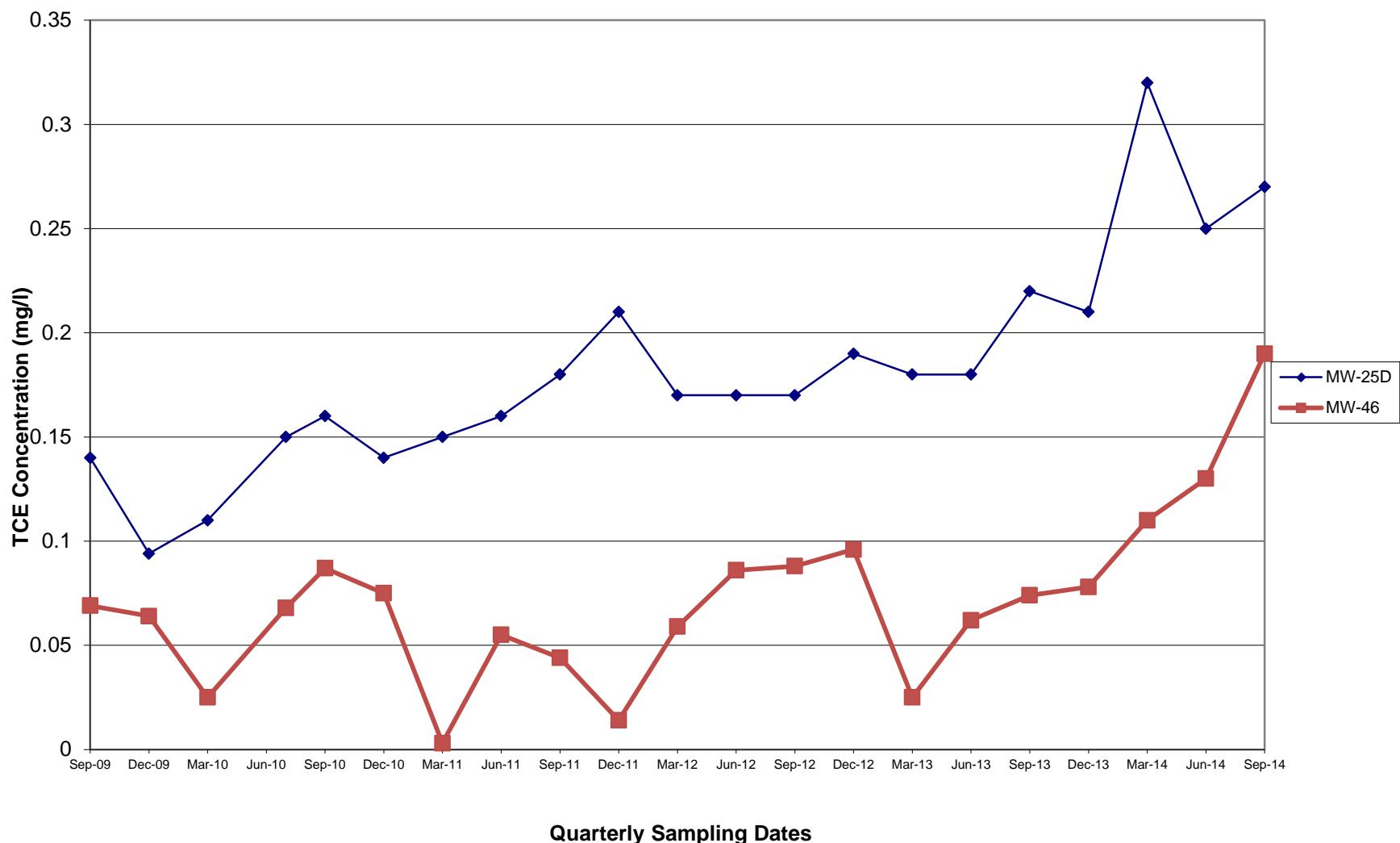
Former Holley Automotive TCE Concentrations
(Five Year Trend - Shallow Wells: 0.01 mg/L to 0.10 mg/L)



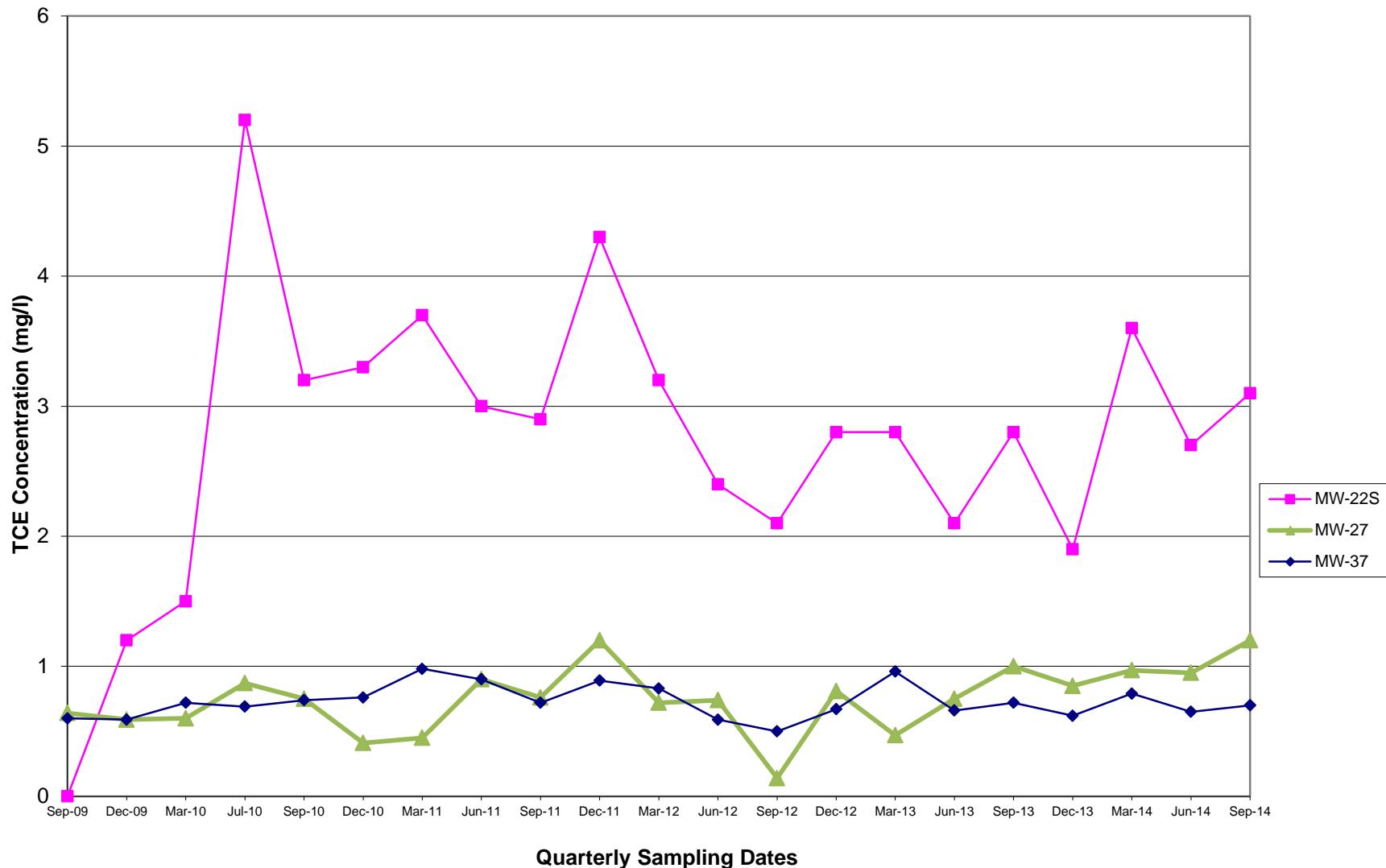
Former Holley Automotive TCE Concentrations
(Five Year Trend - Shallow Wells: 0.10 mg/L to 0.50 mg/L)



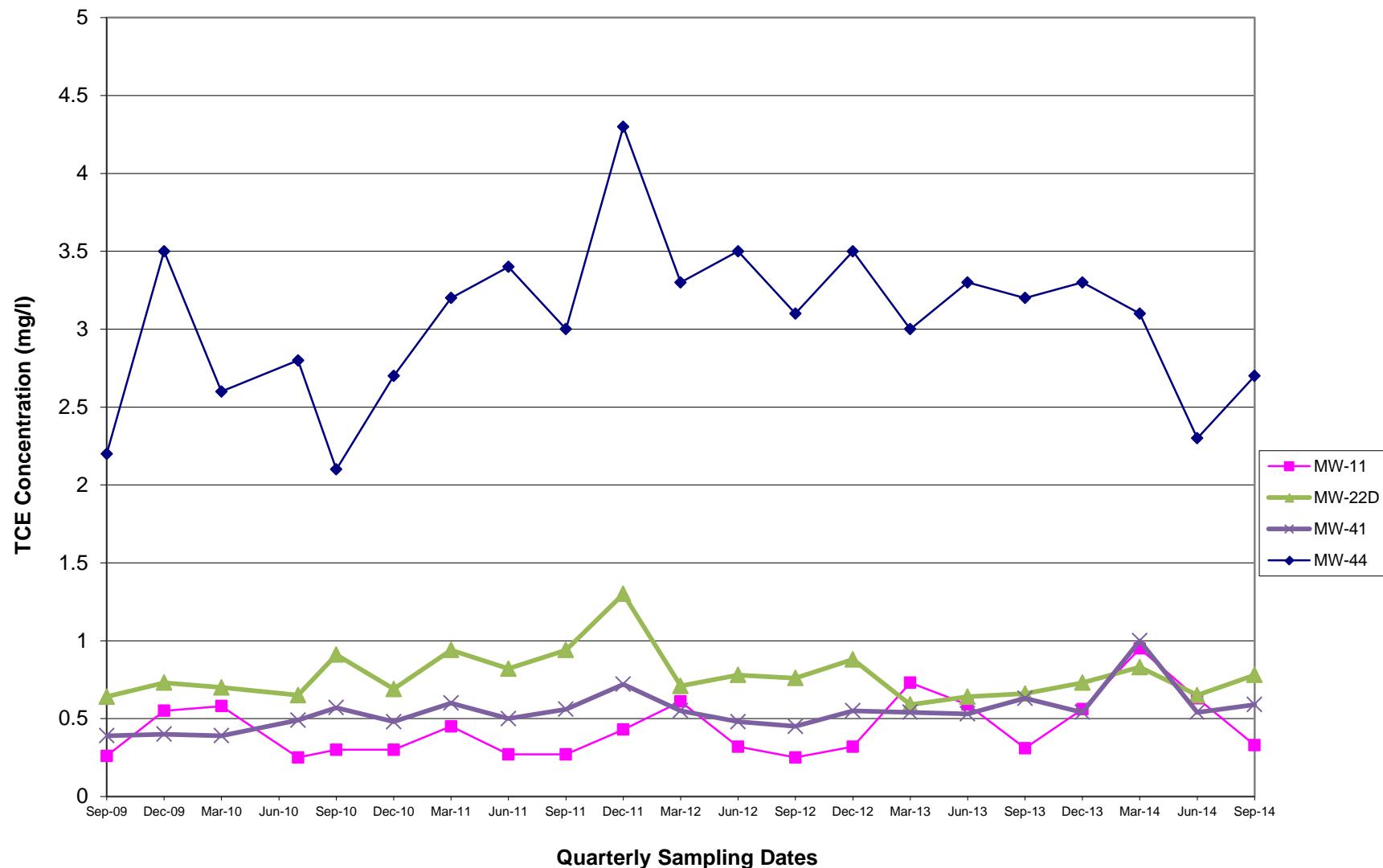
Former Holley Automotive TCE Concentrations
(Five Year Trend - Deep Wells: 0.10 mg/L to 0.50 mg/L)



Former Holley Automotive TCE Concentrations
(Five Year Trend - Shallow Wells >0.50 mg/L)



Former Holley Automotive TCE Concentrations
(Five Year Trend - Deep Wells >0.50 mg/L)



ATTACHMENT B

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Tallahassee

2846 Industrial Plaza Drive

Tallahassee, FL 32301

Tel: (850)878-3994

TestAmerica Job ID: 640-50814-1

Client Project/Site: Water Valley Mississippi, Former Holley

For:

Ecology and Environment, Inc.

700 South Palafox

Suite 100

Pensacola, Florida 32502

Attn: Mr. Andrew M Hill



Authorized for release by:

4/6/2015 10:35:56 AM

Matt Jones, Project Management Assistant I

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

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

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

Table of Contents

Cover Page	1
Table of Contents	2
Definitions	3
Case Narrative	4
Detection Summary	5
Client Sample Results	6
Surrogate Summary	12
QC Sample Results	13
QC Association	15
Chronicle	16
Certification Summary	17
Method Summary	18
Sample Summary	19
Chain of Custody	20

Definitions/Glossary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50814-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	3
□	Listed under the "D" column to designate that the result is reported on a dry weight basis	4
%R	Percent Recovery	5
CFL	Contains Free Liquid	6
CNF	Contains no Free Liquid	7
DER	Duplicate error ratio (normalized absolute difference)	8
Dil Fac	Dilution Factor	9
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	10
DLC	Decision level concentration	11
MDA	Minimum detectable activity	12
EDL	Estimated Detection Limit	13
MDC	Minimum detectable concentration	14
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
NC	Not Calculated	
ND	Not detected at the reporting limit (or MDL or EDL if shown)	
PQL	Practical Quantitation Limit	
QC	Quality Control	
RER	Relative error ratio	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50814-1

Job ID: 640-50814-1

Laboratory: TestAmerica Tallahassee

Narrative

Job Narrative 640-50814-1

Comments

No additional comments.

Receipt

The samples were received on 3/26/2015 at 9:27 AM. The samples arrived in good condition, properly preserved, and on ice. The temperature of the cooler at receipt was 4.8° C.

GC/MS VOA

Method 8260B: Insufficient sample volume was available to perform batch matrix spike (MS) and matrix spike duplicate (MSD) associated with batch 376981. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50814-1

Client Sample ID: MW-22S

Lab Sample ID: 640-50814-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	190		50		ug/L	50		8260B	Total/NA
Trichloroethene	2800		50		ug/L	50		8260B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 640-50814-2

No Detections.

Client Sample ID: MW-22D

Lab Sample ID: 640-50814-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	72		10		ug/L	10		8260B	Total/NA
Trichloroethene	690		10		ug/L	10		8260B	Total/NA

Client Sample ID: CS-1

Lab Sample ID: 640-50814-4

No Detections.

Client Sample ID: CS-2

Lab Sample ID: 640-50814-5

No Detections.

Client Sample ID: CS-3

Lab Sample ID: 640-50814-6

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50814-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-22S

Lab Sample ID: 640-50814-1

Matrix: Water

Date Collected: 03/25/15 09:05

Date Received: 03/26/15 09:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	190		50		ug/L			04/01/15 19:16	50
1,1-Dichloroethene	<50		50		ug/L			04/01/15 19:16	50
Tetrachloroethene	<50		50		ug/L			04/01/15 19:16	50
trans-1,2-Dichloroethene	<50		50		ug/L			04/01/15 19:16	50
Trichloroethene	2800		50		ug/L			04/01/15 19:16	50
Vinyl chloride	<50		50		ug/L			04/01/15 19:16	50
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Toluene-d8 (Surrogate)	102			70 - 130				04/01/15 19:16	50
Dibromofluoromethane (Surrogate)	102			70 - 130				04/01/15 19:16	50
4-Bromofluorobenzene (Surrogate)	104			70 - 130				04/01/15 19:16	50

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50814-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: Trip Blank

Lab Sample ID: 640-50814-2

Matrix: Water

Date Collected: 03/25/15 08:30

Date Received: 03/26/15 09:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 18:53	1
1,1-Dichloroethene	<1.0		1.0		ug/L			04/01/15 18:53	1
Tetrachloroethene	<1.0		1.0		ug/L			04/01/15 18:53	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 18:53	1
Trichloroethene	<1.0		1.0		ug/L			04/01/15 18:53	1
Vinyl chloride	<1.0		1.0		ug/L			04/01/15 18:53	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	105		70 - 130		04/01/15 18:53	1
Dibromofluoromethane (Surr)	99		70 - 130		04/01/15 18:53	1
4-Bromofluorobenzene (Surr)	104		70 - 130		04/01/15 18:53	1

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50814-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-22D

Lab Sample ID: 640-50814-3

Matrix: Water

Date Collected: 03/25/15 09:30

Date Received: 03/26/15 09:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	72		10		ug/L			04/01/15 19:39	10
1,1-Dichloroethene	<10		10		ug/L			04/01/15 19:39	10
Tetrachloroethene	<10		10		ug/L			04/01/15 19:39	10
trans-1,2-Dichloroethene	<10		10		ug/L			04/01/15 19:39	10
Trichloroethene	690		10		ug/L			04/01/15 19:39	10
Vinyl chloride	<10		10		ug/L			04/01/15 19:39	10
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99			70 - 130				04/01/15 19:39	10
Dibromofluoromethane (Surr)	107			70 - 130				04/01/15 19:39	10
4-Bromofluorobenzene (Surr)	102			70 - 130				04/01/15 19:39	10

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50814-1

Client Sample ID: CS-1

Date Collected: 03/25/15 10:45

Date Received: 03/26/15 09:27

Lab Sample ID: 640-50814-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 20:02	1
1,1-Dichloroethene	<1.0		1.0		ug/L			04/01/15 20:02	1
Tetrachloroethene	<1.0		1.0		ug/L			04/01/15 20:02	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 20:02	1
Trichloroethene	<1.0		1.0		ug/L			04/01/15 20:02	1
Vinyl chloride	<1.0		1.0		ug/L			04/01/15 20:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	105		70 - 130		04/01/15 20:02	1
Dibromofluoromethane (Surr)	99		70 - 130		04/01/15 20:02	1
4-Bromofluorobenzene (Surr)	105		70 - 130		04/01/15 20:02	1

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50814-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: CS-2

Lab Sample ID: 640-50814-5

Date Collected: 03/25/15 10:55

Matrix: Water

Date Received: 03/26/15 09:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 20:25	1
1,1-Dichloroethene	<1.0		1.0		ug/L			04/01/15 20:25	1
Tetrachloroethene	<1.0		1.0		ug/L			04/01/15 20:25	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 20:25	1
Trichloroethene	<1.0		1.0		ug/L			04/01/15 20:25	1
Vinyl chloride	<1.0		1.0		ug/L			04/01/15 20:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		70 - 130					04/01/15 20:25	1
Dibromofluoromethane (Surr)	99		70 - 130					04/01/15 20:25	1
4-Bromofluorobenzene (Surr)	104		70 - 130					04/01/15 20:25	1

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50814-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: CS-3

Lab Sample ID: 640-50814-6

Matrix: Water

Date Collected: 03/25/15 11:05

Date Received: 03/26/15 09:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			04/02/15 12:15	1
1,1-Dichloroethene	<1.0		1.0		ug/L			04/02/15 12:15	1
Tetrachloroethene	<1.0		1.0		ug/L			04/02/15 12:15	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			04/02/15 12:15	1
Trichloroethene	<1.0		1.0		ug/L			04/02/15 12:15	1
Vinyl chloride	<1.0		1.0		ug/L			04/02/15 12:15	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		70 - 130		04/02/15 12:15	1
Dibromofluoromethane (Surr)	99		70 - 130		04/02/15 12:15	1
4-Bromofluorobenzene (Surr)	104		70 - 130		04/02/15 12:15	1

TestAmerica Tallahassee

Surrogate Summary

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50814-1

Project/Site: Water Valley Mississippi, Former Holley

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (70-130)	DBFM (70-130)	BFB (70-130)
640-50814-1	MW-22S	102	102	104
640-50814-2	Trip Blank	105	99	104
640-50814-3	MW-22D	99	107	102
640-50814-4	CS-1	105	99	105
640-50814-5	CS-2	104	99	104
640-50814-6	CS-3	104	99	104
LCS 680-376981/4	Lab Control Sample	96	102	101
LCS 680-377160/3	Lab Control Sample	103	105	109
LCSD 680-376981/5	Lab Control Sample Dup	99	96	101
LCSD 680-377160/4	Lab Control Sample Dup	96	96	99
MB 680-376981/9	Method Blank	104	100	102
MB 680-377160/8	Method Blank	104	99	104

Surrogate Legend

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TestAmerica Tallahassee

QC Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50814-1

Project/Site: Water Valley Mississippi, Former Holley

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

Lab Sample ID: MB 680-376981/9

Matrix: Water

Analysis Batch: 376981

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 11:41	1
1,1-Dichloroethene	<1.0		1.0		ug/L			04/01/15 11:41	1
Tetrachloroethene	<1.0		1.0		ug/L			04/01/15 11:41	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 11:41	1
Trichloroethene	<1.0		1.0		ug/L			04/01/15 11:41	1
Vinyl chloride	<1.0		1.0		ug/L			04/01/15 11:41	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	104		70 - 130		04/01/15 11:41	1
Dibromofluoromethane (Surr)	100		70 - 130		04/01/15 11:41	1
4-Bromofluorobenzene (Surr)	102		70 - 130		04/01/15 11:41	1

Lab Sample ID: LCS 680-376981/4

Matrix: Water

Analysis Batch: 376981

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

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
	Added								
cis-1,2-Dichloroethene	50.0		51.9		ug/L		104	80 - 122	
1,1-Dichloroethene	50.0		48.9		ug/L		98	74 - 125	
Tetrachloroethene	50.0		49.5		ug/L		99	77 - 123	
trans-1,2-Dichloroethene	50.0		49.0		ug/L		98	78 - 123	
Trichloroethene	50.0		50.8		ug/L		102	80 - 123	
Vinyl chloride	50.0		49.6		ug/L		99	68 - 132	

Surrogate	LCS		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	96		70 - 130			
Dibromofluoromethane (Surr)	102		70 - 130			
4-Bromofluorobenzene (Surr)	101		70 - 130			

Lab Sample ID: LCSD 680-376981/5

Matrix: Water

Analysis Batch: 376981

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

Analyte	Spike		LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added									
cis-1,2-Dichloroethene	50.0		50.6		ug/L		101	80 - 122	3	20
1,1-Dichloroethene	50.0		51.8		ug/L		104	74 - 125	6	20
Tetrachloroethene	50.0		51.0		ug/L		102	77 - 123	3	20
trans-1,2-Dichloroethene	50.0		49.4		ug/L		99	78 - 123	1	20
Trichloroethene	50.0		51.0		ug/L		102	80 - 123	0	20
Vinyl chloride	50.0		53.0		ug/L		106	68 - 132	7	30

Surrogate	LCSD		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	99		70 - 130			
Dibromofluoromethane (Surr)	96		70 - 130			
4-Bromofluorobenzene (Surr)	101		70 - 130			

TestAmerica Tallahassee

QC Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50814-1

Project/Site: Water Valley Mississippi, Former Holley

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

Lab Sample ID: MB 680-377160/8

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 377160

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			04/02/15 10:44	1
1,1-Dichloroethene	<1.0		1.0		ug/L			04/02/15 10:44	1
Tetrachloroethene	<1.0		1.0		ug/L			04/02/15 10:44	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			04/02/15 10:44	1
Trichloroethene	<1.0		1.0		ug/L			04/02/15 10:44	1
Vinyl chloride	<1.0		1.0		ug/L			04/02/15 10:44	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	104		70 - 130		04/02/15 10:44	1
Dibromofluoromethane (Surr)	99		70 - 130		04/02/15 10:44	1
4-Bromofluorobenzene (Surr)	104		70 - 130		04/02/15 10:44	1

Lab Sample ID: LCS 680-377160/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 377160

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
	Added								
cis-1,2-Dichloroethene	50.0		55.4		ug/L		111	80 - 122	
1,1-Dichloroethene	50.0		53.7		ug/L		107	74 - 125	
Tetrachloroethene	50.0		52.7		ug/L		105	77 - 123	
trans-1,2-Dichloroethene	50.0		53.3		ug/L		107	78 - 123	
Trichloroethene	50.0		53.7		ug/L		107	80 - 123	
Vinyl chloride	50.0		54.0		ug/L		108	68 - 132	

Surrogate	LCS		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	103		70 - 130			
Dibromofluoromethane (Surr)	105		70 - 130			
4-Bromofluorobenzene (Surr)	109		70 - 130			

Lab Sample ID: LCSD 680-377160/4

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 377160

Analyte	Spike		LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added									
cis-1,2-Dichloroethene	50.0		50.9		ug/L		102	80 - 122	8	20
1,1-Dichloroethene	50.0		49.8		ug/L		100	74 - 125	8	20
Tetrachloroethene	50.0		49.1		ug/L		98	77 - 123	7	20
trans-1,2-Dichloroethene	50.0		49.8		ug/L		100	78 - 123	7	20
Trichloroethene	50.0		49.5		ug/L		99	80 - 123	8	20
Vinyl chloride	50.0		50.7		ug/L		101	68 - 132	6	30

Surrogate	LCSD		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	96		70 - 130			
Dibromofluoromethane (Surr)	96		70 - 130			
4-Bromofluorobenzene (Surr)	99		70 - 130			

TestAmerica Tallahassee

QC Association Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50814-1

GC/MS VOA

Analysis Batch: 376981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-50814-1	MW-22S	Total/NA	Water	8260B	
640-50814-2	Trip Blank	Total/NA	Water	8260B	
640-50814-3	MW-22D	Total/NA	Water	8260B	
640-50814-4	CS-1	Total/NA	Water	8260B	
640-50814-5	CS-2	Total/NA	Water	8260B	
LCS 680-376981/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-376981/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-376981/9	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 377160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-50814-6	CS-3	Total/NA	Water	8260B	
LCS 680-377160/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-377160/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-377160/8	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50814-1

Client Sample ID: MW-22S

Date Collected: 03/25/15 09:05

Date Received: 03/26/15 09:27

Lab Sample ID: 640-50814-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	376981	04/01/15 19:16	MMT	TAL SAV

Client Sample ID: Trip Blank

Date Collected: 03/25/15 08:30

Date Received: 03/26/15 09:27

Lab Sample ID: 640-50814-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376981	04/01/15 18:53	MMT	TAL SAV

Client Sample ID: MW-22D

Date Collected: 03/25/15 09:30

Date Received: 03/26/15 09:27

Lab Sample ID: 640-50814-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	376981	04/01/15 19:39	MMT	TAL SAV

Client Sample ID: CS-1

Date Collected: 03/25/15 10:45

Date Received: 03/26/15 09:27

Lab Sample ID: 640-50814-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376981	04/01/15 20:02	MMT	TAL SAV

Client Sample ID: CS-2

Date Collected: 03/25/15 10:55

Date Received: 03/26/15 09:27

Lab Sample ID: 640-50814-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376981	04/01/15 20:25	MMT	TAL SAV

Client Sample ID: CS-3

Date Collected: 03/25/15 11:05

Date Received: 03/26/15 09:27

Lab Sample ID: 640-50814-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	377160	04/02/15 12:15	MMT	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Tallahassee

Certification Summary

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50814-1

Project/Site: Water Valley Mississippi, Former Holley

Laboratory: TestAmerica Tallahassee

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E81005	06-30-15
Georgia	State Program	4		06-30-15
Louisiana	NELAP	6	30663	06-30-15
New Jersey	NELAP	2	FL012	06-30-15
Texas	NELAP	6	T104704459-15-7	03-31-16
USDA	Federal		P330-08-00158	10-14-17

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Mississippi	State Program	4	N/A	06-30-15

Method Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50814-1

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

Protocol References:

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

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50814-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
640-50814-1	MW-22S	Water	03/25/15 09:05	03/26/15 09:27
640-50814-2	Trip Blank	Water	03/25/15 08:30	03/26/15 09:27
640-50814-3	MW-22D	Water	03/25/15 09:30	03/26/15 09:27
640-50814-4	CS-1	Water	03/25/15 10:45	03/26/15 09:27
640-50814-5	CS-2	Water	03/25/15 10:55	03/26/15 09:27
640-50814-6	CS-3	Water	03/25/15 11:05	03/26/15 09:27

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TestAmerica Tallahassee

TestAmerica Tallahassee
2846 Industrial Plaza Drive
Tallahassee, FL 32301

2846 Industrial Plaza Drive
Tallahassee FL 32301

Chain of Custody Record

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Tallahassee

2846 Industrial Plaza Drive

Tallahassee, FL 32301

Tel: (850)878-3994

TestAmerica Job ID: 640-50808-1

Client Project/Site: Water Valley Mississippi, Former Holley

For:

Ecology and Environment, Inc.

700 South Palafox

Suite 100

Pensacola, Florida 32502

Attn: Mr. Andrew M Hill



Authorized for release by:

4/6/2015 10:35:41 AM

Matt Jones, Project Management Assistant I

(850)878-3994

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

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

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

Table of Contents

Cover Page	1
Table of Contents	2
Definitions	3
Case Narrative	4
Detection Summary	5
Client Sample Results	7
Surrogate Summary	18
QC Sample Results	19
QC Association	22
Chronicle	23
Certification Summary	25
Method Summary	26
Sample Summary	27
Chain of Custody	28

Definitions/Glossary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50808-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	1
□	Listed under the "D" column to designate that the result is reported on a dry weight basis	2
%R	Percent Recovery	3
CFL	Contains Free Liquid	4
CNF	Contains no Free Liquid	5
DER	Duplicate error ratio (normalized absolute difference)	6
Dil Fac	Dilution Factor	7
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	8
DLC	Decision level concentration	9
MDA	Minimum detectable activity	10
EDL	Estimated Detection Limit	11
MDC	Minimum detectable concentration	12
MDL	Method Detection Limit	13
ML	Minimum Level (Dioxin)	14
NC	Not Calculated	
ND	Not detected at the reporting limit (or MDL or EDL if shown)	
PQL	Practical Quantitation Limit	
QC	Quality Control	
RER	Relative error ratio	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50808-1

Job ID: 640-50808-1

Laboratory: TestAmerica Tallahassee

Narrative

Job Narrative 640-50808-1

Comments

No additional comments.

Receipt

The samples were received on 3/25/2015 at 9:10 AM. The samples arrived in good condition, properly preserved, and on ice. The temperature of the cooler at receipt was 5.0° C.

GC/MS VOA

Method 8260B: Insufficient sample volume was available to perform batch matrix spike (MS) and matrix spike duplicate (MSD) associated with batch 376789. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method 8260B: Insufficient sample volume was available to perform batch matrix spike (MS) and matrix spike duplicate (MSD) associated with batch 376978. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50808-1

Client Sample ID: Trip Blank

Lab Sample ID: 640-50808-1

No Detections.

Client Sample ID: MW-48

Lab Sample ID: 640-50808-2

No Detections.

Client Sample ID: MW-47

Lab Sample ID: 640-50808-3

No Detections.

Client Sample ID: MW-38S

Lab Sample ID: 640-50808-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.1		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: MW-38

Lab Sample ID: 640-50808-5

No Detections.

Client Sample ID: MW-27

Lab Sample ID: 640-50808-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	130		10		ug/L	10		8260B	Total/NA
Trichloroethene	720		10		ug/L	10		8260B	Total/NA

Client Sample ID: MW-37

Lab Sample ID: 640-50808-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	88		10		ug/L	10		8260B	Total/NA
Trichloroethene	790		10		ug/L	10		8260B	Total/NA

Client Sample ID: MW-11

Lab Sample ID: 640-50808-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	57		20		ug/L	20		8260B	Total/NA
Trichloroethene	1600		20		ug/L	20		8260B	Total/NA

Client Sample ID: MW-41

Lab Sample ID: 640-50808-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	66		10		ug/L	10		8260B	Total/NA
Trichloroethene	620		10		ug/L	10		8260B	Total/NA

Client Sample ID: MW-25D

Lab Sample ID: 640-50808-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	27		2.0		ug/L	2		8260B	Total/NA
Trichloroethene	350		2.0		ug/L	2		8260B	Total/NA

Client Sample ID: MW-44

Lab Sample ID: 640-50808-11

This Detection Summary does not include radiochemical test results.

TestAmerica Tallahassee

Detection Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50808-1

Client Sample ID: MW-44 (Continued)

Lab Sample ID: 640-50808-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	74		50		ug/L	50		8260B	Total/NA
Trichloroethene	2500		50		ug/L	50		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: Trip Blank

Lab Sample ID: 640-50808-1

Matrix: Water

Date Collected: 03/24/15 08:30

Date Received: 03/25/15 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 15:30	1
1,1-Dichloroethene	<1.0		1.0		ug/L			04/01/15 15:30	1
Tetrachloroethene	<1.0		1.0		ug/L			04/01/15 15:30	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 15:30	1
Trichloroethene	<1.0		1.0		ug/L			04/01/15 15:30	1
Vinyl chloride	<1.0		1.0		ug/L			04/01/15 15:30	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		70 - 130		04/01/15 15:30	1
Dibromofluoromethane (Surr)	103		70 - 130		04/01/15 15:30	1
4-Bromofluorobenzene (Surr)	93		70 - 130		04/01/15 15:30	1

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-48

Lab Sample ID: 640-50808-2

Matrix: Water

Date Collected: 03/24/15 08:55

Date Received: 03/25/15 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L		03/31/15 14:10		1
1,1-Dichloroethene	<1.0		1.0		ug/L		03/31/15 14:10		1
Tetrachloroethene	<1.0		1.0		ug/L		03/31/15 14:10		1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L		03/31/15 14:10		1
Trichloroethene	<1.0		1.0		ug/L		03/31/15 14:10		1
Vinyl chloride	<1.0		1.0		ug/L		03/31/15 14:10		1

Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		03/31/15 14:10	1
Dibromofluoromethane (Surr)	100		70 - 130		03/31/15 14:10	1
4-Bromofluorobenzene (Surr)	99		70 - 130		03/31/15 14:10	1

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-47

Lab Sample ID: 640-50808-3

Date Collected: 03/24/15 09:45

Matrix: Water

Date Received: 03/25/15 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 14:32	1
1,1-Dichloroethene	<1.0		1.0		ug/L			03/31/15 14:32	1
Tetrachloroethene	<1.0		1.0		ug/L			03/31/15 14:32	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 14:32	1
Trichloroethene	<1.0		1.0		ug/L			03/31/15 14:32	1
Vinyl chloride	<1.0		1.0		ug/L			03/31/15 14:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		03/31/15 14:32	1
Dibromofluoromethane (Surr)	101		70 - 130		03/31/15 14:32	1
4-Bromofluorobenzene (Surr)	94		70 - 130		03/31/15 14:32	1

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-38S

Lab Sample ID: 640-50808-4

Matrix: Water

Date Collected: 03/24/15 10:30

Date Received: 03/25/15 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 14:55	1
1,1-Dichloroethene	<1.0		1.0		ug/L			03/31/15 14:55	1
Tetrachloroethene	<1.0		1.0		ug/L			03/31/15 14:55	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 14:55	1
Trichloroethene	1.1		1.0		ug/L			03/31/15 14:55	1
Vinyl chloride	<1.0		1.0		ug/L			03/31/15 14:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		03/31/15 14:55	1
Dibromofluoromethane (Surr)	101		70 - 130		03/31/15 14:55	1
4-Bromofluorobenzene (Surr)	98		70 - 130		03/31/15 14:55	1

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-38

Lab Sample ID: 640-50808-5

Date Collected: 03/24/15 11:00

Matrix: Water

Date Received: 03/25/15 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 15:17	1
1,1-Dichloroethene	<1.0		1.0		ug/L			03/31/15 15:17	1
Tetrachloroethene	<1.0		1.0		ug/L			03/31/15 15:17	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 15:17	1
Trichloroethene	<1.0		1.0		ug/L			03/31/15 15:17	1
Vinyl chloride	<1.0		1.0		ug/L			03/31/15 15:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130		03/31/15 15:17	1
Dibromofluoromethane (Surr)	99		70 - 130		03/31/15 15:17	1
4-Bromofluorobenzene (Surr)	94		70 - 130		03/31/15 15:17	1

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-27

Lab Sample ID: 640-50808-6

Date Collected: 03/24/15 11:40

Matrix: Water

Date Received: 03/25/15 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	130		10		ug/L		04/01/15 15:53		10
1,1-Dichloroethene	<10		10		ug/L		04/01/15 15:53		10
Tetrachloroethene	<10		10		ug/L		04/01/15 15:53		10
trans-1,2-Dichloroethene	<10		10		ug/L		04/01/15 15:53		10
Trichloroethene	720		10		ug/L		04/01/15 15:53		10
Vinyl chloride	<10		10		ug/L		04/01/15 15:53		10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Toluene-d8 (Surr)	98		70 - 130				04/01/15 15:53		10
Dibromofluoromethane (Surr)	99		70 - 130				04/01/15 15:53		10
4-Bromofluorobenzene (Surr)	90		70 - 130				04/01/15 15:53		10

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-37

Lab Sample ID: 640-50808-7

Date Collected: 03/24/15 12:05

Matrix: Water

Date Received: 03/25/15 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	88		10		ug/L			04/01/15 11:48	10
1,1-Dichloroethene	<10		10		ug/L			04/01/15 11:48	10
Tetrachloroethene	<10		10		ug/L			04/01/15 11:48	10
trans-1,2-Dichloroethene	<10		10		ug/L			04/01/15 11:48	10
Trichloroethene	790		10		ug/L			04/01/15 11:48	10
Vinyl chloride	<10		10		ug/L			04/01/15 11:48	10
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	93			70 - 130				04/01/15 11:48	10
Dibromofluoromethane (Surr)	105			70 - 130				04/01/15 11:48	10
4-Bromofluorobenzene (Surr)	91			70 - 130				04/01/15 11:48	10

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-11

Lab Sample ID: 640-50808-8

Date Collected: 03/24/15 14:20

Matrix: Water

Date Received: 03/25/15 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	57		20		ug/L			03/31/15 17:55	20
1,1-Dichloroethene	<20		20		ug/L			03/31/15 17:55	20
Tetrachloroethene	<20		20		ug/L			03/31/15 17:55	20
trans-1,2-Dichloroethene	<20		20		ug/L			03/31/15 17:55	20
Trichloroethene	1600		20		ug/L			03/31/15 17:55	20
Vinyl chloride	<20		20		ug/L			03/31/15 17:55	20
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95			70 - 130				03/31/15 17:55	20
Dibromofluoromethane (Surr)	106			70 - 130				03/31/15 17:55	20
4-Bromofluorobenzene (Surr)	93			70 - 130				03/31/15 17:55	20

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-41

Lab Sample ID: 640-50808-9

Date Collected: 03/24/15 14:55

Matrix: Water

Date Received: 03/25/15 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	66		10		ug/L			04/01/15 12:10	10
1,1-Dichloroethene	<10		10		ug/L			04/01/15 12:10	10
Tetrachloroethene	<10		10		ug/L			04/01/15 12:10	10
trans-1,2-Dichloroethene	<10		10		ug/L			04/01/15 12:10	10
Trichloroethene	620		10		ug/L			04/01/15 12:10	10
Vinyl chloride	<10		10		ug/L			04/01/15 12:10	10
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	93			70 - 130				04/01/15 12:10	10
Dibromofluoromethane (Surr)	105			70 - 130				04/01/15 12:10	10
4-Bromofluorobenzene (Surr)	92			70 - 130				04/01/15 12:10	10

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-25D

Lab Sample ID: 640-50808-10

Date Collected: 03/24/15 15:30

Matrix: Water

Date Received: 03/25/15 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	27		2.0		ug/L		04/01/15 12:31		2
1,1-Dichloroethene	<2.0		2.0		ug/L		04/01/15 12:31		2
Tetrachloroethene	<2.0		2.0		ug/L		04/01/15 12:31		2
trans-1,2-Dichloroethene	<2.0		2.0		ug/L		04/01/15 12:31		2
Trichloroethene	350		2.0		ug/L		04/01/15 12:31		2
Vinyl chloride	<2.0		2.0		ug/L		04/01/15 12:31		2

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surrogate)	89		70 - 130		04/01/15 12:31	2
Dibromofluoromethane (Surrogate)	111		70 - 130		04/01/15 12:31	2
4-Bromofluorobenzene (Surrogate)	90		70 - 130		04/01/15 12:31	2

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-44

Lab Sample ID: 640-50808-11

Date Collected: 03/24/15 16:10

Matrix: Water

Date Received: 03/25/15 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	74		50		ug/L			03/31/15 19:02	50
1,1-Dichloroethene	<50		50		ug/L			03/31/15 19:02	50
Tetrachloroethene	<50		50		ug/L			03/31/15 19:02	50
trans-1,2-Dichloroethene	<50		50		ug/L			03/31/15 19:02	50
Trichloroethene	2500		50		ug/L			03/31/15 19:02	50
Vinyl chloride	<50		50		ug/L			03/31/15 19:02	50
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97			70 - 130				03/31/15 19:02	50
Dibromofluoromethane (Surr)	102			70 - 130				03/31/15 19:02	50
4-Bromofluorobenzene (Surr)	94			70 - 130				03/31/15 19:02	50

TestAmerica Tallahassee

Surrogate Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50808-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (70-130)	DBFM (70-130)	BFB (70-130)
640-50808-1	Trip Blank	102	103	93
640-50808-2	MW-48	100	100	99
640-50808-3	MW-47	100	101	94
640-50808-4	MW-38S	100	101	98
640-50808-5	MW-38	99	99	94
640-50808-6	MW-27	98	99	90
640-50808-7	MW-37	93	105	91
640-50808-8	MW-11	95	106	93
640-50808-9	MW-41	93	105	92
640-50808-10	MW-25D	89	111	90
640-50808-11	MW-44	97	102	94
LCS 680-376789/4	Lab Control Sample	97	102	94
LCS 680-376973/4	Lab Control Sample	96	101	94
LCS 680-376978/4	Lab Control Sample	94	98	93
LCSD 680-376789/5	Lab Control Sample Dup	97	101	91
LCSD 680-376973/5	Lab Control Sample Dup	94	99	93
LCSD 680-376978/5	Lab Control Sample Dup	94	98	94
MB 680-376789/9	Method Blank	102	98	93
MB 680-376973/9	Method Blank	100	102	91
MB 680-376978/9	Method Blank	102	98	92

Surrogate Legend

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

QC Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

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

Lab Sample ID: MB 680-376789/9

Matrix: Water

Analysis Batch: 376789

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 10:43	1
1,1-Dichloroethene	<1.0		1.0		ug/L			03/31/15 10:43	1
Tetrachloroethene	<1.0		1.0		ug/L			03/31/15 10:43	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 10:43	1
Trichloroethene	<1.0		1.0		ug/L			03/31/15 10:43	1
Vinyl chloride	<1.0		1.0		ug/L			03/31/15 10:43	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	102		70 - 130		03/31/15 10:43	1
Dibromofluoromethane (Surr)	98		70 - 130		03/31/15 10:43	1
4-Bromofluorobenzene (Surr)	93		70 - 130		03/31/15 10:43	1

Lab Sample ID: LCS 680-376789/4

Matrix: Water

Analysis Batch: 376789

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

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
	Added								
cis-1,2-Dichloroethene	50.0		49.1		ug/L		98	80 - 122	
1,1-Dichloroethene	50.0		42.3		ug/L		85	74 - 125	
Tetrachloroethene	50.0		46.7		ug/L		93	77 - 123	
trans-1,2-Dichloroethene	50.0		45.8		ug/L		92	78 - 123	
Trichloroethene	50.0		46.3		ug/L		93	80 - 123	
Vinyl chloride	50.0		50.0		ug/L		100	68 - 132	

Surrogate	LCS		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	97		70 - 130			
Dibromofluoromethane (Surr)	102		70 - 130			
4-Bromofluorobenzene (Surr)	94		70 - 130			

Lab Sample ID: LCSD 680-376789/5

Matrix: Water

Analysis Batch: 376789

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

Analyte	Spike		LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added									
cis-1,2-Dichloroethene	50.0		49.4		ug/L		99	80 - 122	0	20
1,1-Dichloroethene	50.0		46.6		ug/L		93	74 - 125	10	20
Tetrachloroethene	50.0		48.3		ug/L		97	77 - 123	3	20
trans-1,2-Dichloroethene	50.0		47.6		ug/L		95	78 - 123	4	20
Trichloroethene	50.0		47.2		ug/L		94	80 - 123	2	20
Vinyl chloride	50.0		37.6		ug/L		75	68 - 132	28	30

Surrogate	LCSD		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	97		70 - 130			
Dibromofluoromethane (Surr)	101		70 - 130			
4-Bromofluorobenzene (Surr)	91		70 - 130			

TestAmerica Tallahassee

QC Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

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

Lab Sample ID: MB 680-376973/9

Matrix: Water

Analysis Batch: 376973

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 11:02	1
1,1-Dichloroethene	<1.0		1.0		ug/L			04/01/15 11:02	1
Tetrachloroethene	<1.0		1.0		ug/L			04/01/15 11:02	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 11:02	1
Trichloroethene	<1.0		1.0		ug/L			04/01/15 11:02	1
Vinyl chloride	<1.0		1.0		ug/L			04/01/15 11:02	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	100		70 - 130		04/01/15 11:02	1
Dibromofluoromethane (Surr)	102		70 - 130		04/01/15 11:02	1
4-Bromofluorobenzene (Surr)	91		70 - 130		04/01/15 11:02	1

Lab Sample ID: LCS 680-376973/4

Matrix: Water

Analysis Batch: 376973

Analyte	Spike	LCS	LCS	%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec
cis-1,2-Dichloroethene	50.0	50.8		ug/L		102
1,1-Dichloroethene	50.0	46.5		ug/L		93
Tetrachloroethene	50.0	48.3		ug/L		97
trans-1,2-Dichloroethene	50.0	48.6		ug/L		97
Trichloroethene	50.0	46.8		ug/L		94
Vinyl chloride	50.0	43.7		ug/L		87

Surrogate	LCSD	LCSD	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	96		70 - 130			
Dibromofluoromethane (Surr)	101		70 - 130			
4-Bromofluorobenzene (Surr)	94		70 - 130			

Lab Sample ID: LCSD 680-376973/5

Matrix: Water

Analysis Batch: 376973

Analyte	Spike	LCSD	LCSD	%Rec.			RPD	Limit
	Added	Result	Qualifier	Unit	D	%Rec		
cis-1,2-Dichloroethene	50.0	49.6		ug/L		99	80 - 122	2
1,1-Dichloroethene	50.0	47.2		ug/L		94	74 - 125	1
Tetrachloroethene	50.0	48.3		ug/L		97	77 - 123	0
trans-1,2-Dichloroethene	50.0	48.7		ug/L		97	78 - 123	0
Trichloroethene	50.0	47.6		ug/L		95	80 - 123	2
Vinyl chloride	50.0	44.6		ug/L		89	68 - 132	2

Surrogate	LCSD	LCSD	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	94		70 - 130			
Dibromofluoromethane (Surr)	99		70 - 130			
4-Bromofluorobenzene (Surr)	93		70 - 130			

TestAmerica Tallahassee

QC Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

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

Lab Sample ID: MB 680-376978/9

Matrix: Water

Analysis Batch: 376978

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 11:00	1
1,1-Dichloroethene	<1.0		1.0		ug/L			04/01/15 11:00	1
Tetrachloroethene	<1.0		1.0		ug/L			04/01/15 11:00	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			04/01/15 11:00	1
Trichloroethene	<1.0		1.0		ug/L			04/01/15 11:00	1
Vinyl chloride	<1.0		1.0		ug/L			04/01/15 11:00	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	102		70 - 130		04/01/15 11:00	1
Dibromofluoromethane (Surr)	98		70 - 130		04/01/15 11:00	1
4-Bromofluorobenzene (Surr)	92		70 - 130		04/01/15 11:00	1

Lab Sample ID: LCS 680-376978/4

Matrix: Water

Analysis Batch: 376978

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	%Rec.	
	Added	Result	Qualifier						
cis-1,2-Dichloroethene	50.0	47.8		ug/L		96	80 - 122		
1,1-Dichloroethene	50.0	48.6		ug/L		97	74 - 125		
Tetrachloroethene	50.0	48.3		ug/L		97	77 - 123		
trans-1,2-Dichloroethene	50.0	48.5		ug/L		97	78 - 123		
Trichloroethene	50.0	47.7		ug/L		95	80 - 123		
Vinyl chloride	50.0	52.7		ug/L		105	68 - 132		

Surrogate	LCSD	LCSD	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	94		70 - 130			
Dibromofluoromethane (Surr)	98		70 - 130			
4-Bromofluorobenzene (Surr)	93		70 - 130			

Lab Sample ID: LCSD 680-376978/5

Matrix: Water

Analysis Batch: 376978

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	%Rec.	RPD	Limit
	Added	Result	Qualifier							
cis-1,2-Dichloroethene	50.0	47.6		ug/L		95	80 - 122		0	20
1,1-Dichloroethene	50.0	47.9		ug/L		96	74 - 125		1	20
Tetrachloroethene	50.0	47.2		ug/L		94	77 - 123		2	20
trans-1,2-Dichloroethene	50.0	46.9		ug/L		94	78 - 123		3	20
Trichloroethene	50.0	46.4		ug/L		93	80 - 123		3	20
Vinyl chloride	50.0	49.9		ug/L		100	68 - 132		5	30

Surrogate	LCSD	LCSD	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	94		70 - 130			
Dibromofluoromethane (Surr)	98		70 - 130			
4-Bromofluorobenzene (Surr)	94		70 - 130			

TestAmerica Tallahassee

QC Association Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50808-1

GC/MS VOA

Analysis Batch: 376789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-50808-2	MW-48	Total/NA	Water	8260B	5
640-50808-3	MW-47	Total/NA	Water	8260B	6
640-50808-4	MW-38S	Total/NA	Water	8260B	7
640-50808-5	MW-38	Total/NA	Water	8260B	8
640-50808-8	MW-11	Total/NA	Water	8260B	9
640-50808-11	MW-44	Total/NA	Water	8260B	10
LCS 680-376789/4	Lab Control Sample	Total/NA	Water	8260B	11
LCSD 680-376789/5	Lab Control Sample Dup	Total/NA	Water	8260B	12
MB 680-376789/9	Method Blank	Total/NA	Water	8260B	13

Analysis Batch: 376973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-50808-1	Trip Blank	Total/NA	Water	8260B	10
640-50808-6	MW-27	Total/NA	Water	8260B	11
LCS 680-376973/4	Lab Control Sample	Total/NA	Water	8260B	12
LCSD 680-376973/5	Lab Control Sample Dup	Total/NA	Water	8260B	13
MB 680-376973/9	Method Blank	Total/NA	Water	8260B	14

Analysis Batch: 376978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-50808-7	MW-37	Total/NA	Water	8260B	10
640-50808-9	MW-41	Total/NA	Water	8260B	11
640-50808-10	MW-25D	Total/NA	Water	8260B	12
LCS 680-376978/4	Lab Control Sample	Total/NA	Water	8260B	13
LCSD 680-376978/5	Lab Control Sample Dup	Total/NA	Water	8260B	14
MB 680-376978/9	Method Blank	Total/NA	Water	8260B	15

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50808-1

Client Sample ID: Trip Blank

Lab Sample ID: 640-50808-1

Matrix: Water

Date Collected: 03/24/15 08:30
Date Received: 03/25/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376973	04/01/15 15:30	MMT	TAL SAV

Client Sample ID: MW-48

Lab Sample ID: 640-50808-2

Matrix: Water

Date Collected: 03/24/15 08:55
Date Received: 03/25/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376789	03/31/15 14:10	MMT	TAL SAV

Client Sample ID: MW-47

Lab Sample ID: 640-50808-3

Matrix: Water

Date Collected: 03/24/15 09:45
Date Received: 03/25/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376789	03/31/15 14:32	MMT	TAL SAV

Client Sample ID: MW-38S

Lab Sample ID: 640-50808-4

Matrix: Water

Date Collected: 03/24/15 10:30
Date Received: 03/25/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376789	03/31/15 14:55	MMT	TAL SAV

Client Sample ID: MW-38

Lab Sample ID: 640-50808-5

Matrix: Water

Date Collected: 03/24/15 11:00
Date Received: 03/25/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376789	03/31/15 15:17	MMT	TAL SAV

Client Sample ID: MW-27

Lab Sample ID: 640-50808-6

Matrix: Water

Date Collected: 03/24/15 11:40
Date Received: 03/25/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	376973	04/01/15 15:53	MMT	TAL SAV

TestAmerica Tallahassee

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50808-1

Client Sample ID: MW-37

Date Collected: 03/24/15 12:05
Date Received: 03/25/15 09:10

Lab Sample ID: 640-50808-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	376978	04/01/15 11:48	MMT	TAL SAV

Client Sample ID: MW-11

Date Collected: 03/24/15 14:20
Date Received: 03/25/15 09:10

Lab Sample ID: 640-50808-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	376789	03/31/15 17:55	MMT	TAL SAV

Client Sample ID: MW-41

Date Collected: 03/24/15 14:55
Date Received: 03/25/15 09:10

Lab Sample ID: 640-50808-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	376978	04/01/15 12:10	MMT	TAL SAV

Client Sample ID: MW-25D

Date Collected: 03/24/15 15:30
Date Received: 03/25/15 09:10

Lab Sample ID: 640-50808-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	376978	04/01/15 12:31	MMT	TAL SAV

Client Sample ID: MW-44

Date Collected: 03/24/15 16:10
Date Received: 03/25/15 09:10

Lab Sample ID: 640-50808-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	376789	03/31/15 19:02	MMT	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Tallahassee

Certification Summary

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50808-1

Project/Site: Water Valley Mississippi, Former Holley

Laboratory: TestAmerica Tallahassee

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E81005	06-30-15
Georgia	State Program	4		06-30-15
Louisiana	NELAP	6	30663	06-30-15
New Jersey	NELAP	2	FL012	06-30-15
Texas	NELAP	6	T104704459-15-7	03-31-16
USDA	Federal		P330-08-00158	10-14-17

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Mississippi	State Program	4	N/A	06-30-15

Method Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50808-1

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

Protocol References:

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

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50808-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
640-50808-1	Trip Blank	Water	03/24/15 08:30	03/25/15 09:10
640-50808-2	MW-48	Water	03/24/15 08:55	03/25/15 09:10
640-50808-3	MW-47	Water	03/24/15 09:45	03/25/15 09:10
640-50808-4	MW-38S	Water	03/24/15 10:30	03/25/15 09:10
640-50808-5	MW-38	Water	03/24/15 11:00	03/25/15 09:10
640-50808-6	MW-27	Water	03/24/15 11:40	03/25/15 09:10
640-50808-7	MW-37	Water	03/24/15 12:05	03/25/15 09:10
640-50808-8	MW-11	Water	03/24/15 14:20	03/25/15 09:10
640-50808-9	MW-41	Water	03/24/15 14:55	03/25/15 09:10
640-50808-10	MW-25D	Water	03/24/15 15:30	03/25/15 09:10
640-50808-11	MW-44	Water	03/24/15 16:10	03/25/15 09:10

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TestAmerica Tallahassee

1 2 3 4 5 6 7 8 9 10 11 12 13 14

TestAmerica Tallahassee

2846 Industrial Plaza Drive
Tallahassee, FL 32301
Phone (850) 878-3994 Fax (850) 878-9504

Chain of Custody Record

TestAmerica

TESTING LABORATORY FOR SCIENTIFIC ANALYSIS

Client Information		Sampler:	Lab PM:	Carrier Tracking No(s):	O.C.C. No:
		Phone:	Jones, Matt	E-Mail:	640-44123-7296.2
Company:				Page:	
Ecology and Environment, Inc.				Page 2 of 5	
Address:		Due Date Requested:		Job #:	
700 South Palafox Suite 100		TAT Requested (days):			
City: Pensacola					
State, ZIP: FL, 32502					
Phone: 850-435-8925(Tel)		PO#:			
Email: amixon@emc.com		001525.EN05.08			
Project #: Water Valley, Mississippi, Former Holley		WO #:			
Site:		SSOW#:			

Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (H=water, S=solid, O=water/oil, A=air)	Field Filtered Sample (Yes or No)	Preservation Codes:
Trip Blank		3/24/15	0830	G	H	X	A - HCl
MW-48		0855				X	M - Hexane
MW-47		0945				X	B - NaOH
MW-385		1030				X	C - Zn Acetate
MW-38		1100				X	D - Nitric Acid
MW-27		1140				X	E - Na2CO3
MW-37		1205				X	F - MeOH
MW-11		1420				X	G - Ammonium
MW-41		1455				X	H - Ascorbic Acid
MW-25D		1530				X	I - Ice
MW-44		1616				X	J - DI Water
							K - EDTA
							L - EDA
							M - other (specify)
							Other:

Perform MS/MSD (Yes or No)
8260B - Short list

Total Number of containers

Special Instructions/Note:
only 2 vials

2 vials

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Tallahassee

2846 Industrial Plaza Drive

Tallahassee, FL 32301

Tel: (850)878-3994

TestAmerica Job ID: 640-50794-1

Client Project/Site: Water Valley Mississippi, Former Holley

For:

Ecology and Environment, Inc.

700 South Palafox

Suite 100

Pensacola, Florida 32502

Attn: Mr. Andrew M Hill



Authorized for release by:

4/1/2015 9:49:25 AM

Matt Jones, Project Management Assistant I

(850)878-3994

matt.jones@testamericainc.com

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

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

Table of Contents

Cover Page	1
Table of Contents	2
Definitions	3
Case Narrative	4
Detection Summary	5
Client Sample Results	6
Surrogate Summary	16
QC Sample Results	17
QC Association	20
Chronicle	21
Certification Summary	23
Method Summary	24
Sample Summary	25
Chain of Custody	26

Definitions/Glossary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50794-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50794-1

Job ID: 640-50794-1

Laboratory: TestAmerica Tallahassee

Narrative

Job Narrative 640-50794-1

Comments

No additional comments.

Receipt

The samples were received on 3/24/2015 at 9:20 AM. The samples arrived in good condition, properly preserved, and on ice. The temperature of the cooler at receipt was 3.3° C.

GC/MS VOA

Method 8260B: The precision (%RPD) of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with batch 376772 recovered outside control limits for 1,1,-Dichlorethane. Accuracy (%Rec.) for both the LCS and LCSD recovered within limits; therefore, the associated results have been reported and qualified.

Method 8260B: Insufficient sample volume was available to perform batch matrix spike (MS) and matrix spike duplicate (MSD) associated with batch 376787. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50794-1

Client Sample ID: MW-30D

Lab Sample ID: 640-50794-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.1		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: MW-30S

Lab Sample ID: 640-50794-2

No Detections.

Client Sample ID: MW-30S-FD

Lab Sample ID: 640-50794-3

No Detections.

Client Sample ID: MW-35

Lab Sample ID: 640-50794-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.3		2.0		ug/L	2		8260B	Total/NA
Trichloroethene	230		2.0		ug/L	2		8260B	Total/NA

Client Sample ID: MW-35-FD

Lab Sample ID: 640-50794-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.4		2.0		ug/L	2		8260B	Total/NA
Trichloroethene	230		2.0		ug/L	2		8260B	Total/NA

Client Sample ID: MW-31D

Lab Sample ID: 640-50794-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	13		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	58		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: MW-31S

Lab Sample ID: 640-50794-7

No Detections.

Client Sample ID: MW-28S

Lab Sample ID: 640-50794-8

No Detections.

Client Sample ID: MW-28D

Lab Sample ID: 640-50794-9

No Detections.

Client Sample ID: MW-34

Lab Sample ID: 640-50794-10

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-30D

Lab Sample ID: 640-50794-1

Date Collected: 03/23/15 09:15

Matrix: Water

Date Received: 03/24/15 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 00:30	1
1,1-Dichloroethene	<1.0	*	1.0		ug/L			03/31/15 00:30	1
Tetrachloroethene	<1.0		1.0		ug/L			03/31/15 00:30	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 00:30	1
Trichloroethene	3.1		1.0		ug/L			03/31/15 00:30	1
Vinyl chloride	<1.0		1.0		ug/L			03/31/15 00:30	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		03/31/15 00:30	1
Dibromofluoromethane (Surr)	100		70 - 130		03/31/15 00:30	1
4-Bromofluorobenzene (Surr)	112		70 - 130		03/31/15 00:30	1

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-30S

Lab Sample ID: 640-50794-2

Matrix: Water

Date Collected: 03/23/15 09:50

Date Received: 03/24/15 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 00:50	1
1,1-Dichloroethene	<1.0	*	1.0		ug/L			03/31/15 00:50	1
Tetrachloroethene	<1.0		1.0		ug/L			03/31/15 00:50	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 00:50	1
Trichloroethene	<1.0		1.0		ug/L			03/31/15 00:50	1
Vinyl chloride	<1.0		1.0		ug/L			03/31/15 00:50	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surrogate)	100		70 - 130		03/31/15 00:50	1
Dibromofluoromethane (Surrogate)	102		70 - 130		03/31/15 00:50	1
4-Bromofluorobenzene (Surrogate)	112		70 - 130		03/31/15 00:50	1

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-30S-FD

Lab Sample ID: 640-50794-3

Matrix: Water

Date Collected: 03/23/15 09:50

Date Received: 03/24/15 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 01:11	1
1,1-Dichloroethene	<1.0	*	1.0		ug/L			03/31/15 01:11	1
Tetrachloroethene	<1.0		1.0		ug/L			03/31/15 01:11	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 01:11	1
Trichloroethene	<1.0		1.0		ug/L			03/31/15 01:11	1
Vinyl chloride	<1.0		1.0		ug/L			03/31/15 01:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130		03/31/15 01:11	1
Dibromofluoromethane (Surr)	107		70 - 130		03/31/15 01:11	1
4-Bromofluorobenzene (Surr)	120		70 - 130		03/31/15 01:11	1

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-35

Lab Sample ID: 640-50794-4

Matrix: Water

Date Collected: 03/23/15 10:45

Date Received: 03/24/15 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	4.3		2.0		ug/L			03/31/15 13:56	2
1,1-Dichloroethene	<2.0		2.0		ug/L			03/31/15 13:56	2
Tetrachloroethene	<2.0		2.0		ug/L			03/31/15 13:56	2
trans-1,2-Dichloroethene	<2.0		2.0		ug/L			03/31/15 13:56	2
Trichloroethene	230		2.0		ug/L			03/31/15 13:56	2
Vinyl chloride	<2.0		2.0		ug/L			03/31/15 13:56	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		70 - 130		03/31/15 13:56	2
Dibromofluoromethane (Surr)	98		70 - 130		03/31/15 13:56	2
4-Bromofluorobenzene (Surr)	91		70 - 130		03/31/15 13:56	2

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-35-FD

Lab Sample ID: 640-50794-5

Matrix: Water

Date Collected: 03/23/15 10:45

Date Received: 03/24/15 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	4.4		2.0		ug/L			03/31/15 13:11	2
1,1-Dichloroethene	<2.0		2.0		ug/L			03/31/15 13:11	2
Tetrachloroethene	<2.0		2.0		ug/L			03/31/15 13:11	2
trans-1,2-Dichloroethene	<2.0		2.0		ug/L			03/31/15 13:11	2
Trichloroethene	230		2.0		ug/L			03/31/15 13:11	2
Vinyl chloride	<2.0		2.0		ug/L			03/31/15 13:11	2

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		03/31/15 13:11	2
Dibromofluoromethane (Surr)	101		70 - 130		03/31/15 13:11	2
4-Bromofluorobenzene (Surr)	93		70 - 130		03/31/15 13:11	2

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-31D

Lab Sample ID: 640-50794-6

Matrix: Water

Date Collected: 03/23/15 11:30

Date Received: 03/24/15 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	13		1.0		ug/L			03/31/15 02:13	1
1,1-Dichloroethene	<1.0	*	1.0		ug/L			03/31/15 02:13	1
Tetrachloroethene	<1.0		1.0		ug/L			03/31/15 02:13	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 02:13	1
Trichloroethene	58		1.0		ug/L			03/31/15 02:13	1
Vinyl chloride	<1.0		1.0		ug/L			03/31/15 02:13	1
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130					03/31/15 02:13	1
Dibromofluoromethane (Surr)	101		70 - 130					03/31/15 02:13	1
4-Bromofluorobenzene (Surr)	115		70 - 130					03/31/15 02:13	1

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-31S

Lab Sample ID: 640-50794-7

Matrix: Water

Date Collected: 03/23/15 12:10

Date Received: 03/24/15 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 02:33	1
1,1-Dichloroethene	<1.0	*	1.0		ug/L			03/31/15 02:33	1
Tetrachloroethene	<1.0		1.0		ug/L			03/31/15 02:33	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 02:33	1
Trichloroethene	<1.0		1.0		ug/L			03/31/15 02:33	1
Vinyl chloride	<1.0		1.0		ug/L			03/31/15 02:33	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surrogate)	99		70 - 130		03/31/15 02:33	1
Dibromoformmethane (Surrogate)	102		70 - 130		03/31/15 02:33	1
4-Bromofluorobenzene (Surrogate)	117		70 - 130		03/31/15 02:33	1

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-28S

Lab Sample ID: 640-50794-8

Date Collected: 03/23/15 14:10

Matrix: Water

Date Received: 03/24/15 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L		03/31/15 02:54		1
1,1-Dichloroethene	<1.0	*	1.0		ug/L		03/31/15 02:54		1
Tetrachloroethene	<1.0		1.0		ug/L		03/31/15 02:54		1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L		03/31/15 02:54		1
Trichloroethene	<1.0		1.0		ug/L		03/31/15 02:54		1
Vinyl chloride	<1.0		1.0		ug/L		03/31/15 02:54		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surrogate)	101		70 - 130				03/31/15 02:54		1
Dibromofluoromethane (Surrogate)	100		70 - 130				03/31/15 02:54		1
4-Bromofluorobenzene (Surrogate)	111		70 - 130				03/31/15 02:54		1

TestAmerica Tallahassee

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-28D

Lab Sample ID: 640-50794-9

Matrix: Water

Date Collected: 03/23/15 14:40

Date Received: 03/24/15 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 03:15	1
1,1-Dichloroethene	<1.0	*	1.0		ug/L			03/31/15 03:15	1
Tetrachloroethene	<1.0		1.0		ug/L			03/31/15 03:15	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 03:15	1
Trichloroethene	<1.0		1.0		ug/L			03/31/15 03:15	1
Vinyl chloride	<1.0		1.0		ug/L			03/31/15 03:15	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		03/31/15 03:15	1
Dibromoiodomethane (Surr)	101		70 - 130		03/31/15 03:15	1
4-Bromofluorobenzene (Surr)	118		70 - 130		03/31/15 03:15	1

Client Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

Client Sample ID: MW-34

Lab Sample ID: 640-50794-10

Date Collected: 03/23/15 15:25

Matrix: Water

Date Received: 03/24/15 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 15:49	1
1,1-Dichloroethene	<1.0		1.0		ug/L			03/31/15 15:49	1
Tetrachloroethene	<1.0		1.0		ug/L			03/31/15 15:49	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 15:49	1
Trichloroethene	<1.0		1.0		ug/L			03/31/15 15:49	1
Vinyl chloride	<1.0		1.0		ug/L			03/31/15 15:49	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130		03/31/15 15:49	1
Dibromofluoromethane (Surr)	100		70 - 130		03/31/15 15:49	1
4-Bromofluorobenzene (Surr)	92		70 - 130		03/31/15 15:49	1

Surrogate Summary

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (70-130)	DBFM (70-130)	BFB (70-130)
640-50794-1	MW-30D	100	100	112
640-50794-2	MW-30S	100	102	112
640-50794-2 MS	MW-30S	108	102	111
640-50794-2 MSD	MW-30S	107	100	112
640-50794-3	MW-30S-FD	96	107	120
640-50794-4	MW-35	98	98	91
640-50794-5	MW-35-FD	100	101	93
640-50794-6	MW-31D	99	101	115
640-50794-7	MW-31S	99	102	117
640-50794-8	MW-28S	101	100	111
640-50794-9	MW-28D	100	101	118
640-50794-10	MW-34	99	100	92
LCS 680-376772/4	Lab Control Sample	106	95	108
LCS 680-376787/4	Lab Control Sample	95	103	94
LCSD 680-376772/5	Lab Control Sample Dup	105	100	108
LCSD 680-376787/5	Lab Control Sample Dup	95	96	92
MB 680-376772/8	Method Blank	99	98	119
MB 680-376787/9	Method Blank	99	101	91

Surrogate Legend

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TestAmerica Tallahassee

QC Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

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

Lab Sample ID: MB 680-376772/8

Matrix: Water

Analysis Batch: 376772

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/30/15 20:24	1
1,1-Dichloroethene	<1.0		1.0		ug/L			03/30/15 20:24	1
Tetrachloroethene	<1.0		1.0		ug/L			03/30/15 20:24	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/30/15 20:24	1
Trichloroethene	<1.0		1.0		ug/L			03/30/15 20:24	1
Vinyl chloride	<1.0		1.0		ug/L			03/30/15 20:24	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	99		70 - 130		03/30/15 20:24	1
Dibromofluoromethane (Surr)	98		70 - 130		03/30/15 20:24	1
4-Bromofluorobenzene (Surr)	119		70 - 130		03/30/15 20:24	1

Lab Sample ID: LCS 680-376772/4

Matrix: Water

Analysis Batch: 376772

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

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
	Added								
cis-1,2-Dichloroethene	50.0		48.7		ug/L		97	80 - 122	
1,1-Dichloroethene	50.0		49.1		ug/L		98	74 - 125	
Tetrachloroethene	50.0		54.3		ug/L		109	77 - 123	
trans-1,2-Dichloroethene	50.0		47.4		ug/L		95	78 - 123	
Trichloroethene	50.0		48.7		ug/L		97	80 - 123	
Vinyl chloride	50.0		60.0		ug/L		120	68 - 132	

Surrogate	LCS		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	106		70 - 130			
Dibromofluoromethane (Surr)	95		70 - 130			
4-Bromofluorobenzene (Surr)	108		70 - 130			

Lab Sample ID: LCSD 680-376772/5

Matrix: Water

Analysis Batch: 376772

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

Analyte	Spike		LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added									
cis-1,2-Dichloroethene	50.0		49.7	*	ug/L		99	80 - 122	2	20
1,1-Dichloroethene	50.0		60.4	*	ug/L		121	74 - 125	21	20
Tetrachloroethene	50.0		52.2		ug/L		104	77 - 123	4	20
trans-1,2-Dichloroethene	50.0		47.7		ug/L		95	78 - 123	1	20
Trichloroethene	50.0		48.2		ug/L		96	80 - 123	1	20
Vinyl chloride	50.0		57.4		ug/L		115	68 - 132	5	30

Surrogate	LCSD		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	105		70 - 130			
Dibromofluoromethane (Surr)	100		70 - 130			
4-Bromofluorobenzene (Surr)	108		70 - 130			

TestAmerica Tallahassee

QC Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

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

Lab Sample ID: 640-50794-2 MS

Matrix: Water

Analysis Batch: 376772

Client Sample ID: MW-30S

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
cis-1,2-Dichloroethene	<1.0		50.0	50.2		ug/L		100	80 - 122
1,1-Dichloroethene	<1.0 *		50.0	49.5		ug/L		99	74 - 125
Tetrachloroethene	<1.0		50.0	54.0		ug/L		108	77 - 123
trans-1,2-Dichloroethene	<1.0		50.0	48.8		ug/L		98	78 - 123
Trichloroethene	<1.0		50.0	49.3		ug/L		99	80 - 123
Vinyl chloride	<1.0		50.0	58.9		ug/L		118	68 - 132

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	108		70 - 130
Dibromofluoromethane (Surr)	102		70 - 130
4-Bromofluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 640-50794-2 MSD

Matrix: Water

Analysis Batch: 376772

Client Sample ID: MW-30S

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
cis-1,2-Dichloroethene	<1.0		50.0	48.6		ug/L		97	80 - 122
1,1-Dichloroethene	<1.0 *		50.0	46.1		ug/L		92	74 - 125
Tetrachloroethene	<1.0		50.0	53.2		ug/L		106	77 - 123
trans-1,2-Dichloroethene	<1.0		50.0	49.0		ug/L		98	78 - 123
Trichloroethene	<1.0		50.0	49.7		ug/L		99	80 - 123
Vinyl chloride	<1.0		50.0	57.6		ug/L		115	68 - 132

Surrogate	MSD	MSD	Limits	RPD	Limit
	%Recovery	Qualifier			
Toluene-d8 (Surr)	107		70 - 130		
Dibromofluoromethane (Surr)	100		70 - 130		
4-Bromofluorobenzene (Surr)	112		70 - 130		

Lab Sample ID: MB 680-376787/9

Client Sample ID: Method Blank

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 376787

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 10:48	1
1,1-Dichloroethene	<1.0		1.0		ug/L			03/31/15 10:48	1
Tetrachloroethene	<1.0		1.0		ug/L			03/31/15 10:48	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/31/15 10:48	1
Trichloroethene	<1.0		1.0		ug/L			03/31/15 10:48	1
Vinyl chloride	<1.0		1.0		ug/L			03/31/15 10:48	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	99		70 - 130			
Dibromofluoromethane (Surr)	101		70 - 130			
4-Bromofluorobenzene (Surr)	91		70 - 130			

TestAmerica Tallahassee

QC Sample Results

Client: Ecology and Environment, Inc.

TestAmerica Job ID: 640-50794-1

Project/Site: Water Valley Mississippi, Former Holley

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

Lab Sample ID: LCS 680-376787/4

Matrix: Water

Analysis Batch: 376787

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
cis-1,2-Dichloroethene	50.0	50.4		ug/L		101	80 - 122
1,1-Dichloroethene	50.0	44.5		ug/L		89	74 - 125
Tetrachloroethene	50.0	47.1		ug/L		94	77 - 123
trans-1,2-Dichloroethene	50.0	48.0		ug/L		96	78 - 123
Trichloroethene	50.0	46.4		ug/L		93	80 - 123
Vinyl chloride	50.0	42.2		ug/L		84	68 - 132

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	95		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
4-Bromofluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 680-376787/5

Matrix: Water

Analysis Batch: 376787

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Added	Result	Qualifier				Limits		
cis-1,2-Dichloroethene	50.0	49.6		ug/L		99	80 - 122	2	20
1,1-Dichloroethene	50.0	47.9		ug/L		96	74 - 125	7	20
Tetrachloroethene	50.0	49.1		ug/L		98	77 - 123	4	20
trans-1,2-Dichloroethene	50.0	48.5		ug/L		97	78 - 123	1	20
Trichloroethene	50.0	47.2		ug/L		94	80 - 123	2	20
Vinyl chloride	50.0	45.9		ug/L		92	68 - 132	9	30

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	95		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130
4-Bromofluorobenzene (Surr)	92		70 - 130

QC Association Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50794-1

GC/MS VOA

Analysis Batch: 376772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-50794-1	MW-30D	Total/NA	Water	8260B	5
640-50794-2	MW-30S	Total/NA	Water	8260B	5
640-50794-2 MS	MW-30S	Total/NA	Water	8260B	6
640-50794-2 MSD	MW-30S	Total/NA	Water	8260B	6
640-50794-3	MW-30S-FD	Total/NA	Water	8260B	7
640-50794-6	MW-31D	Total/NA	Water	8260B	7
640-50794-7	MW-31S	Total/NA	Water	8260B	8
640-50794-8	MW-28S	Total/NA	Water	8260B	8
640-50794-9	MW-28D	Total/NA	Water	8260B	9
LCS 680-376772/4	Lab Control Sample	Total/NA	Water	8260B	9
LCSD 680-376772/5	Lab Control Sample Dup	Total/NA	Water	8260B	10
MB 680-376772/8	Method Blank	Total/NA	Water	8260B	10

Analysis Batch: 376787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-50794-4	MW-35	Total/NA	Water	8260B	12
640-50794-5	MW-35-FD	Total/NA	Water	8260B	12
640-50794-10	MW-34	Total/NA	Water	8260B	13
LCS 680-376787/4	Lab Control Sample	Total/NA	Water	8260B	13
LCSD 680-376787/5	Lab Control Sample Dup	Total/NA	Water	8260B	14
MB 680-376787/9	Method Blank	Total/NA	Water	8260B	14

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50794-1

Client Sample ID: MW-30D

Date Collected: 03/23/15 09:15
Date Received: 03/24/15 09:20

Lab Sample ID: 640-50794-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376772	03/31/15 00:30	JD1	TAL SAV

Client Sample ID: MW-30S

Date Collected: 03/23/15 09:50
Date Received: 03/24/15 09:20

Lab Sample ID: 640-50794-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376772	03/31/15 00:50	JD1	TAL SAV

Client Sample ID: MW-30S-FD

Date Collected: 03/23/15 09:50
Date Received: 03/24/15 09:20

Lab Sample ID: 640-50794-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376772	03/31/15 01:11	JD1	TAL SAV

Client Sample ID: MW-35

Date Collected: 03/23/15 10:45
Date Received: 03/24/15 09:20

Lab Sample ID: 640-50794-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	376787	03/31/15 13:56	MMT	TAL SAV

Client Sample ID: MW-35-FD

Date Collected: 03/23/15 10:45
Date Received: 03/24/15 09:20

Lab Sample ID: 640-50794-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	376787	03/31/15 13:11	MMT	TAL SAV

Client Sample ID: MW-31D

Date Collected: 03/23/15 11:30
Date Received: 03/24/15 09:20

Lab Sample ID: 640-50794-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376772	03/31/15 02:13	JD1	TAL SAV

TestAmerica Tallahassee

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50794-1

Client Sample ID: MW-31S

Date Collected: 03/23/15 12:10
Date Received: 03/24/15 09:20

Lab Sample ID: 640-50794-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376772	03/31/15 02:33	JD1	TAL SAV

Client Sample ID: MW-28S

Date Collected: 03/23/15 14:10
Date Received: 03/24/15 09:20

Lab Sample ID: 640-50794-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376772	03/31/15 02:54	JD1	TAL SAV

Client Sample ID: MW-28D

Date Collected: 03/23/15 14:40
Date Received: 03/24/15 09:20

Lab Sample ID: 640-50794-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376772	03/31/15 03:15	JD1	TAL SAV

Client Sample ID: MW-34

Date Collected: 03/23/15 15:25
Date Received: 03/24/15 09:20

Lab Sample ID: 640-50794-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	376787	03/31/15 15:49	MMT	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Tallahassee

Certification Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50794-1

Laboratory: TestAmerica Tallahassee

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E81005	06-30-15

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E87052	06-30-15

Method Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50794-1

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

Protocol References:

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

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

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TestAmerica Tallahassee

Sample Summary

Client: Ecology and Environment, Inc.

Project/Site: Water Valley Mississippi, Former Holley

TestAmerica Job ID: 640-50794-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
640-50794-1	MW-30D	Water	03/23/15 09:15	03/24/15 09:20
640-50794-2	MW-30S	Water	03/23/15 09:50	03/24/15 09:20
640-50794-3	MW-30S-FD	Water	03/23/15 09:50	03/24/15 09:20
640-50794-4	MW-35	Water	03/23/15 10:45	03/24/15 09:20
640-50794-5	MW-35-FD	Water	03/23/15 10:45	03/24/15 09:20
640-50794-6	MW-31D	Water	03/23/15 11:30	03/24/15 09:20
640-50794-7	MW-31S	Water	03/23/15 12:10	03/24/15 09:20
640-50794-8	MW-28S	Water	03/23/15 14:10	03/24/15 09:20
640-50794-9	MW-28D	Water	03/23/15 14:40	03/24/15 09:20
640-50794-10	MW-34	Water	03/23/15 15:25	03/24/15 09:20

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TestAmerica Tallahassee

TestAmerica Tallahassee

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Tallahassee, FL 32301
Phone (850) 878-3994 Fax (850) 878-9504

Chain of Custody Record

TestAmerica

4/1/2015