

Ms. Robin Futch  
Georgia Department of Natural Resources  
Environmental Protection Division  
Hazardous Sites Response Program  
2 Martin Luther King Jr. Drive; Suite 1054  
Atlanta, GA 30334

**RE:           2016 ANNUAL GROUNDWATER MONITORING REPORT  
FORMER CAROLINA COMMERCIAL HEAT TREAT  
FORMER GEORGIA HSI NO. 10341**

Date 12/11/2016

Dear Ms. Futch:

On behalf of our client, Rexmet Corporation, Ramboll Environ is pleased to submit this 2016 Annual Groundwater Monitoring Report to the Voluntary Remediation Program for the above referenced site. This report presents a summary of the September 2016 groundwater sampling event. Find enclosed one paper copy and two compact discs (electronic copies) of the report.

If you have any questions about the attached report, or any other project matter, please feel free to contact us at any time.

Yours sincerely,



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Enclosure

Cc:       John Rex, Rexmet Corporation *via email*  
          John Spinrad, Arnall Golden Gregory LLP. *via email*

Intended for:  
**Carolina Commercial Heat Treat**  
**1690 Highway 138**  
**Conyers, Georgia**  
**HSI No. 10341**

On behalf of:  
**Rexmet Corporation**  
**Lansdale, PA**

Prepared by:  
**Ramboll Environ US Corporation**  
**Atlanta, Georgia**

Date:  
**December 2016**

Project Number:  
**07-21924M**

## **Carolina Commercial Heat Treat**

## **Annual VRP Status Report**

## Groundwater Scientist Statement

I certify that I am a qualified groundwater scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that the groundwater portions of this report were prepared by myself and appropriately qualified subordinates working under my direction.

  
Robert G. Patchett, P.G.

Registration No. 1639



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## Acronyms and Abbreviations

CAP	Corrective Action Plan
CCHT	Carolina Commercial Heat Treat
11DCE	1,1-dichloroethene
c12DCE	cis-1,2-dichloroethene
t12DCE	trans-1,2-dichloroethene
ENVIRON	ENVIRON International, Inc.
GA EPD	Georgia Environmental Protection Division
HSI	Hazardous Site Inventory
HSRA	Hazardous Site Response Act
ml	milliliter
PCE	tetrachloroethene
PDB	passive diffusion bag
SVE	soil vapor extraction
TCE	trichloroethene
VOCs	volatile organic compounds
VRP	Voluntary Remediation Plan
ug/L	microgram per liter

## 1 Introduction

The Carolina Commercial Heat Treat (CCHT) site is located at 1690 Highway 138 NE in Conyers, Georgia (**Figure 1**), and is owned by Rexmet Corporation (Rexmet). Prior to April 2016, the site consisted of a 1.7 acre parcel on which a single story metal building was located. On April 27, 2015, a fire damaged most of the former CCHT building. As a result of the fire, the building was demolished and the site was regraded the week of August 23, 2016. The Rexmet property is currently a vacant lot.

The Georgia Environmental Protection Division (GA EPD) listed the property on the Georgia Hazardous Site Inventory (HSI) on July 1, 1995, as Number 10341, due to a historic release of perchloroethylene (PCE) to soil. In addition to PCE in the soil, PCE and its breakdown products trichloroethylene (TCE); cis-1,2-dichloroethene (c12DCE); and, 1,1-dichloroethene (11DCE) have been detected in the groundwater associated with the site. The groundwater impacts extend east-southeast from the CCHT property across Highway 138. The GA EPD determined that clean up levels have been met for the source materials and soil, as stated in a March 2001 letter. Therefore, subsequent investigation and corrective actions have focused on groundwater impacts east-southeast of Highway 138.

Rexmet submitted a Voluntary Remediation Plan (VRP) application in July 2013. The VRP application was approved by the GA EPD in a letter dated November 22, 2013. The first Groundwater Monitoring report was submitted to the GA EPD on May 21, 2014. In October 2014 Environ, on behalf of Rexmet, requested to reduce the number of wells in the monitoring well network and reduce the sampling frequency to annually. The GA EPD approved the sampling program modifications in an email dated October 8, 2014.

This report summarizes the activities that have taken place since the last Annual VRP Status Report (December 2015), including the results of the annual groundwater monitoring event conducted on September 28, 2016.

## 2 Site Background

The former CCHT property is located approximately 1.3 miles north of Interstate 20 (I-20). According to the Rockdale County Board of Assessors, the 1.7 acre property is identified as Tax Parcel ID 069001003L. An asphalt parking lot exists on the south and southwest portions of the property. The former CCHT building was demolished in August 2016 following a fire that damaged the building. Residential properties are located north and west (hydrogeologically upgradient) of the site, and commercial/industrial properties are located south and east of the property. The topography southeast of Highway 138 consists of a steep grass slope and wooded area that leads to a drainage swale. This intermittent storm water drainage swale also flows on the southern portion of the site to a retention pond. This drainage swale conveys precipitation run-off from along Highway 138 to the pond. **Figure 2** shows the subject property as well as surrounding properties.

### 2.1 Historic Activities

The initial investigative activities associated with the site culminated with the submittal of a Corrective Action Plan (CAP) in January 2001, which was approved by GA EPD in March 2001. Based on the approved CAP, an air sparge/soil vapor extraction (SVE) remediation system was installed in 2001 to treat groundwater south of Highway 138. Additionally, an aggressive groundwater remedial action was conducted in early 2005 in the source area located at the front of the former CCHT building. A series of six multi-phase extraction (MPE) events were performed to remediate the groundwater in this area.

Active remediation via the air sparge system was suspended in June 2009, while the SVE portion of the system remained in operation. The air sparge system remained off to further evaluate the rebounding effect and the aquifer response in the remediation area. In September 2010, a mechanical failure of the SVE system caused a complete shutdown of the system. The remediation system has remained shut down as natural attenuation of the groundwater impacts is monitored.

In order to monitor the natural attenuation of the groundwater impacts, the groundwater was sampled semi-annually from 2009 to 2014, and annually since then. Additionally, to evaluate possible groundwater impact on the intermittent drainage swale and retention pond, two surface water samples were collected from the confluence of the drainage swale and pond. During the monitoring period after the groundwater remediation system was shut down, groundwater concentrations have decreased by approximately an order of magnitude. In addition, to assess the bedrock groundwater conditions and vertically delineate the groundwater impacts, deep groundwater monitoring wells were installed in 2012 and 2013.

### 2.2 Site Geology

The geology at the site and surrounding properties is variable, and this variability has controlled the migration of the groundwater contaminants. Specifically, a localized bedrock high area has been identified immediately northwest (upgradient) of the site, while a steep drop and localized bedrock low area has been identified to the southeast (downgradient).

Shallow bedrock observed north of the drainage swale (adjacent to the east side of the former Carpenter Insulation building) is likely limiting groundwater migration to the east, as groundwater is not present in the overburden in this area. Numerous attempts to install shallow overburden wells northeast and southeast of the building were performed in 2006 and 2011. In all cases, bedrock was encountered above the water table; therefore, the shallow overburden monitoring wells could not be installed. Additionally, bedrock is at the ground surface on the northeast side of the building, confirming the shallow rock presence along the east side of the groundwater plume.

### 2.3 Property Transactions

In order to control the property impacted by the groundwater plume, Rexmet purchased a 1-acre portion of the Stone Mountain Industrial Park (SMIP) property south of Highway 138 and west of the drainage swale (shown on **Figure 2**). Rexmet is currently in negotiations with the owners of the former Carpenter Insulation property located southeast (downgradient) of the site to place environmental covenants on the property deed. Once the negotiations are completed, an environmental covenant will be executed for the site in conformance with O.C.G.A. 44-61-1, et seq., the "Georgia Uniform Environmental Covenants Act." This covenant will require that no drinking water wells will be installed on the site.

## 3 Annual Groundwater Monitoring

The VRP specifies that the groundwater from 14 select wells at the site is to be sampled semi-annually for two years. However, GA EPD later authorized annual sampling from a sub-set of the wells originally approved in the VRP Application. The wells are MW-15, MW-19, MW-21, MW-25D, and MW-27. Groundwater samples from the specified wells were collected in September 2016.

The sampling methodology and results for the annual sampling events are presented in the following subsections.

### 3.1 Assessment Methodology

After completing the June 2016 groundwater sampling, a passive diffusion bag (PDB) sampler filled with deionized water was installed in each of the 5 wells remaining in the monitoring network, as approved by the EPD in an email dated May 18, 2015. The PDB samplers rely on advection for the free movement of groundwater through the well screen. As the groundwater flows through the well screen, VOCs diffuse across the bag material until constituent concentrations within the bag reach equilibrium with concentrations in the surrounding groundwater. During the following sampling events the bags are retrieved, a groundwater sample is collected from each PDB, and a new PDB is installed.

Prior to sampling, each monitoring well was opened and allowed to equilibrate. An electronic water-level meter was used to measure the static water level in the existing monitoring wells associated with the site. After the well was gauged, the PDB was retrieved and a sample was collected directly from the PDB. After sampling, a new PDB was installed in each well. Details for the September 2016 sampling event are presented below.

The electronic water level meter was decontaminated prior to its initial use and after use at each well by cleaning with a Liquinox and distilled water mixture and then rinsing with distilled water.

### 3.2 September 2016 Sampling Event

Groundwater samples were collected on September 28, 2016, from the 5 groundwater wells in the approved monitoring network and analyzed for VOCs. A duplicate sample from MW-19 was also collected and analyzed for VOCs.

Prior to collecting groundwater samples, water levels in 14 existing monitoring wells associated with the site were gauged. Groundwater elevations indicated that the water levels in the wells at the site were similar to those observed during the previous sampling event in October 2015.

Groundwater samples were collected from the PDBs in each well and placed into clean, laboratory provided, 40-milliliter glass vials preserved with hydrochloric acid. Following collection, the samples were placed on ice prior to delivery under chain-of-custody protocol to Gulf Coast Analytical Laboratory, LLC (GCAL) in Baton Rouge, Louisiana. The sample containers for each well were handled using new, disposable nitrile gloves. The samples

were analyzed for VOCs using U.S. EPA SW-846 Method 8260B. For quality assurance and control a duplicate sample was collected. A trip blank accompanied the groundwater samples, and was analyzed for the same parameters. In addition, the laboratory produced method blanks, laboratory control spikes, matrix spikes, and matrix spike duplicates.

### 3.3 Groundwater Flow Direction

The depth to groundwater was measured in each of the existing monitoring wells during the September 2016 annual monitoring event. These measurements, in conjunction with the surveyed elevation of the reference point for each monitoring well (the top of well casing), were used to calculate the elevation of the water table at each monitoring well. Depth to groundwater measurements and corresponding groundwater elevations are presented in **Table 1**. Graphical representations of groundwater elevation changes for the monitoring wells are included in the PCE concentration trend charts located in **Appendix A**.

A groundwater potentiometric surface map was prepared for the September 2016 event using the groundwater elevation data to estimate groundwater flow direction and horizontal hydraulic gradients for the surficial aquifer (**Figure 3**). Based on the potentiometric maps, groundwater flow at the site is generally toward the east-southeast.

### 3.4 Analytical Results

PCE was detected in four of the five monitoring wells sampled in September 2016, with the detected concentrations ranging from 99.5 µg/L in MW-27D to 353 µg/L in MW-15. The concentrations of PCE have remained relatively constant since the previous sampling event in October 2015. PCE was not detected in MW-21. In addition, several breakdown products of PCE (TCE and c12DCE) were detected in MW-21, which is also consistent with historical results. A summary of the analytical results are presented in **Table 2**, and PCE concentrations in the groundwater are shown in **Figure 4**. Trend charts showing the VOC concentrations detected in the five wells sampled in September 2016 and the depth to groundwater are provided in **Appendix A**, and laboratory reports are provided in **Appendix B**.

## 4 Summary and Conclusions

Site activities conducted during this period included annual groundwater sampling on September 28, 2016. The results of the annual groundwater sampling activities indicate that:

- PCE is present in four of the five wells sampled in 2016, which is an improvement from the previous sampling event;
- PCE concentrations have remained relatively consistent with previous sampling events in the other wells; and,
- PCE was not detected in the downgradient monitoring well MW-21; however, PCE breakdown products TCE and c12DCE were detected in that well.

A portion of the SMIP property previously impacted by the groundwater plume has been purchased by Rexmet. Negotiations continue with the owners of the former Carpenter Insulation property to place deed restrictions on that property. This will facilitate control of the property impacted by the groundwater plume.

As stated in the VRP, with later modifications approved by the GAEPD, groundwater monitoring at the site will continue on an annual basis. The next annual sampling event will be scheduled for October 2017, with an annual report submittal in November 2017.

## Tables

**Table 1 - Water Elevation Data**  
**CCHT - HSI No. 10341**  
**Conyers, Georgia**

Well IDs	Date of Installation	Top of Casing Elevation	DTW 10/7/2013	Elevation 10/7/2013	DTW 4/24/2014	Elevation 4/24/2014	DTW 10/30/2014	Elevation 10/30/2014	DTW 10/8/2015	Elevation 10/8/2015	DTW 9/28/2016	Elevation 9/28/2016
MW-1 <sup>(1)</sup>	10/15/1993	865.81	24.20	841.61	23.12	842.69	26.72	839.09	--	--	--	--
MW-3 <sup>(1)</sup>	3/28/1995	866.61	17.72	848.89	16.02	850.59	19.73	846.88	--	--	--	--
MW-4 <sup>(1)</sup>	3/28/1995	874.16	28.26	845.90	27.07	847.09	NM	NM	--	--	--	--
MW-5 <sup>(1)(2)</sup>	3/29/1995	873.58	11.87	861.71	10.73	862.85	NM	NM	--	--	--	--
MW-6 <sup>(1)</sup>	11/28/1995	868.76	24.61	844.15	23.55	845.21	27.82	840.94	--	--	--	--
MW-7 <sup>(1)</sup>	11/29/1995	863.60	22.09	841.51	20.97	842.63	NM	NM	--	--	--	--
MW-8	3/1/1999	861.89	--	--	--	--	--	--	--	--	--	--
MW-8R <sup>(1)(3)(4)</sup>	9/6/2006	863.25	21.96	841.29	20.71	842.54	24.43	838.82	--	--	--	--
MW-9	3/2/1999	856.32	--	--	--	--	--	--	--	--	--	--
MW-9R <sup>(1)(3)(5)</sup>	9/6/2006	857.14	18.85	838.29	18.10	839.04	20.89	836.25	--	--	--	--
MW-10 <sup>(9)</sup>	6/18/1999	866.14	24.56	841.58	23.43	842.71	26.50	839.64	--	--	--	--
MW-11	12/27/1999	847.53	12.80	834.73	12.85	834.68	NM	NM	15.28	832.25	16.58	830.95
MW-12	12/27/1999	846.59	15.67	830.92	14.02	832.57	17.34	829.25	15.90	830.69	17.19	829.40
MW-13 <sup>(1)</sup>	3/27/2000	866.00	23.91	842.09	22.72	843.28	27.07	838.93	--	--	--	--
MW-14	7/7/2000	842.24	19.27	822.97	18.55	823.69	20.65	821.59	20.51	821.73	20.04	822.20
MW-15	7/7/2000	843.25	15.56	827.69	13.96	829.29	17.35	825.90	15.62	827.63	17.06	826.19
MW-16	7/26/2000	830.18	11.66	818.52	10.19	819.99	NM	NM	NM	NM	NM	NM
MW-17	7/26/2000	826.35	16.57	809.78	15.69	810.66	NM	NM	18.22	808.13	18.54	807.81
MW-18 <sup>(1)(6)</sup>	9/6/2006	861.56	20.65	840.91	19.53	842.03	22.96	838.60	--	--	--	--
MW-19	9/7/2006	836.42	18.20	818.22	16.14	820.28	18.86	817.56	18.74	817.68	19.04	817.38
MW-20	9/7/2006	841.37	16.43	824.94	14.74	826.63	17.69	823.68	16.64	824.73	17.93	823.44
MW-21	9/7/2006	838.58	18.52	820.06	16.73	821.85	18.91	819.67	18.72	819.86	18.86	819.72
MW-22	6/12/2007	854.34	22.65	831.69	21.38	832.96	NM	NM	23.31	831.03	24.08	830.26
MW-23	6/12/2007	841.56	12.43	829.13	10.86	830.70	13.86	827.70	12.49	829.07	13.99	827.57
MW-24	6/12/2007	847.36	23.13	824.23	22.41	824.95	24.60	822.76	24.15	823.21	23.96	823.40
MW-25D <sup>(7)</sup>	6/12/2007	850.17	18.30	831.87	16.67	833.50	20.29	829.88	18.73	831.44	19.90	830.27
MW-26D <sup>(1)(8)</sup>	6/12/2007	861.26	21.17	840.09	19.66	841.60	23.47	837.79	--	--	--	--
MW-27D	5/18/2012	834.31	6.02	828.29	6.41	827.90	7.56	826.75	6.24	828.07	7.67	826.64
MW-28D	5/18/2012	834.18	14.60	819.58	4.47	829.71	NM	NM	6.52	827.66	6.12	828.06
MW-29D <sup>(9)</sup>	5/3/2013	NA	15.90	NA	15.03	NA	NM	NM	16.33	NA	15.75	NA

Notes:

- (1) Well was abandoned on June 29, 2015.
  - (2) Well was resurveyed on June 8, 2003. Historic elevation was 874.66 ft amsl.
  - (3) Well is a replacement well installed on September 6, 2006.
  - (4) Well was resurveyed on May 22, 2012. Historic elevation was 863.24 ft amsl.
  - (5) Well was resurveyed on May 22, 2012. Historic elevation was 857.16 ft amsl.
  - (6) Well was resurveyed on May 22, 2012. Historic elevation was 861.56 ft amsl.
  - (7) Well was resurveyed on May 22, 2012. Historic elevation was 850.19 ft amsl.
  - (8) Well was resurveyed on May 22, 2012. Historic elevation was 857.18 ft amsl. The apparent inconsistency between current and historic casing elevations for MW-26D is due to the mislabeling of a survey ID point on June 28, 2007.
  - (9) Well was not surveyed.
- NA Not Available  
DTW Depth to Water  
NM Not Measured  
-- Monitoring well has been abandoned

**Table 2 - Summary of Groundwater Results**  
**CCHT - Conyers, Georgia**  
**September 2016**

		Analyte CAS No. RRS	1,1-DCE 75-35-4 4,000	Chloroform 67-66-3 80	Chloromethane 74-87-3	c12DCE 156-59-2 70	PCE 127-18-4 5	TCE 79-01-6 5	Vinyl Chloride 75-01-4 2
Location	Date Sampled	Units							
MW-06	12/1/2009	ug/l	< 5	< 5	< 5	< 5	<b>17.9</b>	< 5	< 2
	9/20/2010	ug/l	< 5	< 5	< 5	< 5	<b>5.03</b>	< 5	< 2
	3/23/2011	ug/l	< 5	< 5	< 5	< 5	<b>7.97</b>	< 5	< 2
	9/28/2011	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	5/2/2013	ug/l	< 5	< 5	< 5	< 5	<b>13.2</b>	< 5	< 5
	10/7/2013	ug/l	< 5	< 5	< 5	< 5	<b>8.72</b>	< 5	< 5
	4/24/2014	ug/l	< 5	< 5	< 5	< 5	<b>7.44</b>	< 5	< 2
	10/30/2014	ug/l	< 5	< 5	< 5	< 5	<b>7.86</b>	< 5	< 5
	6/29/2015						Monitoring Well Abandoned		
MW-08R	12/1/2009	ug/l	< 5	7.89	< 5	< 5	<b>19.8</b>	< 5	< 2
	9/20/2010	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	3/23/2011	ug/l	< 5	6.08	< 5	< 5	<b>19.7</b>	< 5	< 2
	9/27/2011	ug/l	< 5	5.23	< 5	< 5	<b>15.3</b>	< 5	< 2
	2/2/2012	ug/l	< 5	6.86	< 5	< 5	<b>31</b>	< 5	< 5
	9/18/2012	ug/l	< 5	< 5	< 5	< 5	<b>11.1</b>	< 5	< 5
DUP-02	9/18/2012	ug/l	< 5	< 5	< 5	< 5	<b>9.55</b>	< 5	< 5
	5/1/2013	ug/l	< 5	< 5	< 5	< 5	<b>16.7</b>	< 5	< 5
	5/3/2013	ug/l	< 5	< 5	< 5	< 5	<b>15.6</b>	< 5	< 5
	10/7/2013	ug/l	< 5	< 5	< 5	< 5	<b>10.9</b>	< 5	< 5
DUP-01	4/24/2014	ug/l	< 5	< 5	< 5	< 5	<b>9.96</b>	< 5	< 2
	10/30/2014	ug/l	< 5	< 5	< 5	< 5	<b>15.5</b>	< 5	< 5
	6/29/2015						Monitoring Well Abandoned		
MW-12	12/3/2009	ug/l	< 5	< 5	< 5	< 5	<b>12.6</b>	< 5	< 2
	9/21/2010	ug/l	< 5	< 5	< 5	< 5	<b>8.9</b>	< 5	< 2
	3/24/2011	ug/l	< 5	< 5	< 5	< 5	<b>5.71</b>	< 5	< 2
	9/27/2011	ug/l	< 5	< 5	8.35	< 5	<b>9.36</b>	< 5	< 2
	1/31/2012	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/18/2012	ug/l	< 5	< 5	< 5	< 5	<b>6.68</b>	< 5	< 5
	5/2/2013	ug/l	< 5	< 5	< 5	< 5	<b>5.27</b>	< 5	< 5
	10/8/2013	ug/l	< 5	< 5	< 5	< 5	<b>7.75</b>	< 5	< 5
	4/25/2014	ug/l	< 5	< 5	< 5	< 5	<b>7.95</b>	< 5	< 2
	10/30/2014	ug/l	< 5	< 5	< 5	< 5	<b>8.75</b>	< 5	< 5

**Table 2 - Summary of Groundwater Results**  
**CCHT - Conyers, Georgia**  
**September 2016**

		Analyte CAS No. RRS	1,1-DCE 75-35-4 4,000	Chloroform 67-66-3 80	Chloromethane 74-87-3	c12DCE 156-59-2 70	PCE 127-18-4 5	TCE 79-01-6 5	Vinyl Chloride 75-01-4 2
Location	Date Sampled	Units	< 5	< 5	< 5	< 5	<b>28.9</b>	< 5	< 2
MW-14	12/1/2009	ug/l	< 5	< 5	< 5	< 5	<b>28.9</b>	< 5	< 2
	9/21/2010	ug/l	< 5	< 5	< 5	< 5	<b>21.8</b>	< 5	< 2
	3/24/2011	ug/l	< 5	< 5	< 5	< 5	<b>22.6</b>	< 5	< 2
	9/28/2011	ug/l	< 5	< 5	25	< 5	<b>16.9</b>	< 5	< 2
	2/1/2012	ug/l	< 5	< 5	< 5	< 5	<b>26</b>	< 5	< 5
	9/17/2012	ug/l	< 5	< 5	< 5	< 5	<b>22.1</b>	< 5	< 5
	5/2/2013	ug/l	< 5	< 5	< 5	< 5	<b>17.3</b>	< 5	< 5
	10/8/2013	ug/l	< 5	< 5	< 5	< 5	<b>17.1</b>	< 5	< 5
	4/25/2014	ug/l	< 5	< 5	< 5	< 5	<b>17.4</b>	< 5	< 2
	10/30/2014	ug/l	< 5	< 5	< 5	< 5	<b>12.3</b>	< 5	< 5
MW-15	12/3/2009	ug/l	<b>5.59</b>	< 5	< 5	< 5	<b>100</b>	< 5	< 2
	DUP-02	ug/l	< 5	< 5	< 5	< 5	<b>110</b>	< 5	< 2
		ug/l	<b>14.6</b>	< 5	< 5	6.87	<b>406</b>	< 5	< 2
	9/21/2010	ug/l	< 5	< 5	< 5	< 5	<b>91.7</b>	< 5	< 2
	3/24/2011	ug/l	< 5	< 5	< 5	< 5	<b>693</b>	< 5	< 2
	9/28/2011	ug/l	<b>17.9</b>	< 5	26	13.6	<b>82.2</b>	< 5	< 5
	2/1/2012	ug/l	< 5	< 5	< 5	< 5	<b>88.8</b>	< 5	< 5
	2/1/2012	ug/l	< 5	< 5	< 5	< 5	<b>606 D</b>	< 25 D	< 25 D
	9/17/2012	ug/l	< 25 D	< 25 D	< 25 D	< 25 D	<b>171</b>	< 5	< 5
	5/2/2013	ug/l	< 5	< 5	< 5	< 5	<b>353</b>	< 25	< 25
DUP-01	10/8/2013	ug/l	< 25	< 25	< 25	< 25	<b>456</b>	< 25	< 25
	10/8/2013	ug/l	< 25	< 25	< 25	< 25	<b>148</b>	< 5	< 2
	4/25/2014	ug/l	< 5	< 5	< 5	< 5	<b>114</b>	< 5	< 2
	4/25/2014	ug/l	< 5	< 5	< 5	< 5	<b>493</b>	< 25	< 25
DUP-01	10/30/2014	ug/l	< 25	< 25	< 25	< 25	<b>324</b>	< 25	< 10
	10/8/2015	ug/l	< 25	< 25	< 25	< 25	<b>353</b>	< 5	< 2
	9/28/2016	ug/l	< 5	< 5	< 5	< 5			
MW-18	12/3/2009	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	9/20/2010	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	3/23/2011	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	9/27/2011	ug/l	< 5	< 5	<b>5.72</b>	< 5	< 5	< 5	< 2
	2/1/2012	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/18/2012	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/1/2013	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/7/2013	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/24/2014	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	10/30/2014	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	6/29/2015						Monitoring Well Abandoned		

**Table 2 - Summary of Groundwater Results**  
**CCHT - Conyers, Georgia**  
**September 2016**

		Analyte CAS No. RRS	1,1-DCE 75-35-4 4,000	Chloroform 67-66-3 80	Chloromethane 74-87-3	c12DCE 156-59-2 70	PCE 127-18-4 5	TCE 79-01-6 5	Vinyl Chloride 75-01-4 2
Location	Date Sampled	Units							
MW-19	12/3/2009	ug/l	6.17	< 5	< 5	< 5	<b>355</b>	< 5	< 2
	3/5/2010	ug/l	< 5	< 5	< 5	9.66	<b>38.9</b>	< 5	< 2
	9/21/2010	ug/l	< 5	< 5	< 5	106	<b>20.9</b>	<b>18.9</b>	<b>2.76</b>
	3/24/2011	ug/l	< 5	< 5	< 5	< 5	<b>99.1</b>	< 5	< 2
	9/28/2011	ug/l	5.37	< 5	< 5	77.5	<b>62.8</b>	<b>8.82</b>	< 2
	1/31/2012	ug/l	7.14	< 5	< 5	< 5	<b>230 D</b>	< 5	< 5
	9/18/2012	ug/l	5.18	< 5	< 5	< 5	<b>150</b>	< 5	< 5
	5/2/2013	ug/l	5.81	< 5	< 5	< 5	<b>183</b>	< 5	< 5
	10/8/2013	ug/l	< 5	< 5	< 5	< 5	<b>86.2</b>	< 5	< 5
	4/25/2014	ug/l	5.15	< 5	< 5	< 5	<b>154</b>	< 5	< 2
	10/30/2014	ug/l	< 5	< 5	< 5	< 5	<b>43.9</b>	< 5	< 5
	10/30/2014	ug/l	< 10	< 10	< 10	< 10	<b>183</b>	< 10	< 10
DUP-01	10/8/2015	ug/l	< 25	< 25	< 25	< 25	<b>164</b>	< 25	< 10
	9/28/2016	ug/l	< 5	< 5	< 5	< 5	<b>161</b>	< 5	< 2
	9/28/2016	ug/l	< 5	< 5	< 5	< 5	<b>168</b>	< 5	< 2
MW-20	12/3/2009	ug/l	< 5	< 5	< 5	< 5	<b>15.2</b>	< 5	< 2
	9/21/2010	ug/l	< 5	< 5	< 5	< 5	<b>21</b>	< 5	< 2
	3/24/2011	ug/l	< 5	< 5	< 5	< 5	<b>9.57</b>	< 5	< 2
	9/28/2011	ug/l	< 5	< 5	<b>28.2</b>	< 5	<b>12.8</b>	< 5	< 2
	2/1/2012	ug/l	< 5	< 5	< 5	< 5	<b>19.5</b>	< 5	< 5
	9/17/2012	ug/l	< 5	< 5	< 5	< 5	<b>19.7</b>	< 5	< 5
	5/2/2013	ug/l	< 5	< 5	< 5	< 5	<b>12.7</b>	< 5	< 5
	10/8/2013	ug/l	< 5	< 5	< 5	< 5	<b>17.3</b>	< 5	< 5
	4/25/2014	ug/l	< 5	< 5	< 5	< 5	<b>5.25</b>	< 5	< 2
	10/30/2014	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/30/2014	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	DUP-01								
MW-21	12/3/2009	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	3/5/2010	ug/l	< 5	< 5	< 5	< 5	<b>131</b>	< 5	< 2
	9/21/2010	ug/l	< 5	< 5	< 5	< 5	<b>117</b>	< 5	< 2
	3/24/2011	ug/l	< 5	< 5	< 5	<b>25.1</b>	< 5	< 5	<b>4.75</b>
	9/28/2011	ug/l	5.47	< 5	< 5	< 5	<b>107</b>	< 5	< 2
	1/31/2012	ug/l	< 5	< 5	< 5	9.95	<b>22.8</b>	< 5	< 5
	9/17/2012	ug/l	< 5	< 5	< 5	40.5	<b>50.6</b>	<b>14.1</b>	< 5
	5/2/2013	ug/l	< 5	< 5	< 5	< 5	<b>44.8</b>	< 5	< 5
	10/8/2013	ug/l	< 5	< 5	< 5	17	<b>63.9</b>	<b>11.2</b>	< 5
	4/25/2014	ug/l	< 5	< 5	< 5	< 5	<b>45.2</b>	< 5	< 2
	10/30/2014	ug/l	5.51	< 5	< 5	37.2	<b>88.9</b>	<b>39.2</b>	< 5
	10/30/2014	ug/l	< 5	< 5	< 5	37	<b>46.8</b>	<b>26.9</b>	< 5
	10/8/2015	ug/l	< 5	< 5	< 5	20.8	<b>24.3</b>	<b>10.8</b>	< 2
	9/28/2016	ug/l	< 5	< 5	< 5	54.5	< 5.00	<b>19.7</b>	< 2

**Table 2 - Summary of Groundwater Results**  
**CCHT - Conyers, Georgia**  
**September 2016**

		Analyte CAS No. RRS	1,1-DCE 75-35-4 4,000	Chloroform 67-66-3 80	Chloromethane 74-87-3	c12DCE 156-59-2 70	PCE 127-18-4 5	TCE 79-01-6 5	Vinyl Chloride 75-01-4 2
Location	Date Sampled	Units							
MW-23	12/3/2009	ug/l	58.1	< 5	< 5	10.9	<b>1730</b>	<b>31.8</b>	< 2
	9/21/2010	ug/l	< 5	< 5	< 5	< 5	<b>135</b>	< 5	< 2
DUP-02	9/21/2010	ug/l	< 5	< 5	< 5	< 5	<b>140</b>	< 5	< 2
	3/24/2011	ug/l	< 5	< 5	< 5	< 5	<b>123</b>	< 5	< 2
DUP-01	3/24/2011	ug/l	< 5	< 5	< 5	< 5	<b>121</b>	< 5	< 2
	9/27/2011	ug/l	< 5	< 5	17.7	< 5	<b>121</b>	< 5	< 2
DUP-02	9/27/2011	ug/l	< 5	< 5	25.7	< 5	<b>92.6</b>	< 5	< 2
	1/31/2012	ug/l	< 5	< 5	< 5	< 5	<b>77.7</b>	< 5	< 5
MW-23	9/18/2012	ug/l	< 5	< 5	< 5	< 5	<b>63.9</b>	< 5	< 5
	5/3/2013	ug/l	< 5	< 5	< 5	< 5	<b>51.7</b>	< 5	< 5
MW-24	10/24/2013	ug/l	< 5	5.72	< 5	< 5	<b>69.9</b>	< 5	< 5
	4/25/2014	ug/l	< 5	8.73	< 5	< 5	<b>59.6</b>	< 5	< 2
MW-24	10/30/2014	ug/l	< 5	11.2	< 5	< 5	<b>159</b>	< 5	< 5
	12/3/2009	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 2
MW-25D	9/21/2010	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	3/24/2011	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 2
DUP-02	9/28/2011	ug/l	< 5	< 5	<b>14.4</b>	< 5	<b>6.87</b>	< 5	< 2
	2/1/2012	ug/l	< 5	< 5	< 5	< 5	<b>10.2</b>	< 5	< 5
DUP-01	9/17/2012	ug/l	< 5	< 5	< 5	< 5	<b>6.75</b>	< 5	< 5
	5/2/2013	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 5
DUP-02	10/8/2013	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/24/2014	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 2
DUP-01	10/30/2014	ug/l	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	12/3/2009	ug/l	< 5	< 5	< 5	< 5	<b>296</b>	< 5	< 2
DUP-02	9/21/2010	ug/l	< 5	< 5	< 5	< 5	<b>532</b>	< 5	< 2
	3/24/2011	ug/l	< 5	< 5	< 5	< 5	<b>146</b>	< 5	< 2
DUP-01	3/24/2011	ug/l	< 5	< 5	< 5	< 5	<b>93.8</b>	< 5	< 2
	9/27/2011	ug/l	< 5	< 5	< 5	< 5	<b>103</b>	< 5	< 2
DUP-02	9/27/2011	ug/l	< 5	< 5	<b>15.8</b>	< 5	<b>107</b>	< 5	< 2
	2/2/2012	ug/l	< 5	< 5	< 5	< 5	<b>355 D</b>	< 5	< 5
DUP-01	2/2/2012	ug/l	< 5	5	< 5	< 5	<b>274 D</b>	< 5	< 5
	9/18/2012	ug/l	< 25 D	< 25 D	< 25 D	< 25 D	<b>370 D</b>	< 25 D	< 25 D
DUP-02	9/18/2012	ug/l	< 25 D	< 25 D	< 25 D	< 25 D	<b>280 D</b>	< 25 D	< 25 D
	5/2/2013	ug/l	< 25	< 25	< 25	< 25	<b>318</b>	< 25	< 25
DUP-02	10/8/2013	ug/l	< 10	< 10	< 10	< 10	<b>317</b>	< 10	< 10
	10/8/2013	ug/l	< 25	< 25	< 25	< 25	<b>375</b>	< 25	< 25
DUP-02	4/25/2014	ug/l	< 5	< 5	< 5	< 5	<b>293</b>	< 5	< 2
	4/25/2014	ug/l	< 25	< 25	< 25	< 25	<b>369</b>	< 25	< 25
DUP-02	10/30/2014	ug/l	< 10	< 10	< 10	< 10.0	<b>330</b>	< 10	< 10
	10/30/2014	ug/l	< 10	< 10	< 10	< 10	<b>322</b>	< 10	< 10
DUP-02	10/8/2015	ug/l	< 25	< 25	< 25	< 25	<b>222</b>	< 25	< 10
	9/28/2016	ug/l	< 5	< 5	< 5	< 5	<b>259</b>	< 5	< 2

**Table 2 - Summary of Groundwater Results**  
**CCHT - Conyers, Georgia**  
**September 2016**

		Analyte CAS No. RRS	1,1-DCE 75-35-4 4,000	Chloroform 67-66-3 80	Chloromethane 74-87-3	c12DCE 156-59-2 70	PCE 127-18-4 5	TCE 79-01-6 5	Vinyl Chloride 75-01-4 2
Location	Date Sampled	Units							
MW-26D	12/3/2009	ug/l	< 5	< 5	< 5	< 5	<b>391</b>	< 5	< 2
DUP-01	12/3/2009	ug/l	56.6	< 5	< 5	11.2	<b>1900</b>	<b>31.9</b>	< 2
DUP-01	9/20/2010	ug/l	38.7	< 5	< 5	5.59	<b>922</b>	<b>17.8</b>	< 2
DUP-01	9/20/2010	ug/l	38.4	< 5	< 5	5.69	<b>934</b>	<b>16.1</b>	< 2
DUP-02	3/23/2011	ug/l	< 5	< 5	< 5	< 5	<b>7.71</b>	< 5	< 2
DUP-02	9/27/2011	ug/l	< 5	< 5	5.38	< 5	<b>49.5</b>	< 5	< 2
DUP-02	2/1/2012	ug/l	< 5	< 5	< 5	< 5	<b>7.68</b>	< 5	< 5
DUP-02	9/18/2012	ug/l	< 5	< 5	< 5	< 5	<b>20.9</b>	< 5	< 5
DUP-02	5/1/2013	ug/l	< 5	< 5	< 5	< 5	<b>5.45</b>	< 5	< 5
DUP-02	5/3/2013	ug/l	< 5	< 5	< 5	< 5	<b>5.05</b>	< 5	< 5
DUP-02	10/7/2013	ug/l	< 5	< 5	< 5	< 5	<b>10.4</b>	< 5	< 5
DUP-02	4/24/2014	ug/l	< 5	< 5	< 5	< 5	<b>11.2</b>	< 5	< 2
DUP-02	10/30/2014	ug/l	< 5	< 5	< 5	< 5	<b>31.6</b>	< 5	< 5
DUP-02	6/29/2015						Monitoring Well Abandoned		
MW-27D	5/18/2012	ug/l	< 5	14.4	< 5	< 5	<b>120</b>	< 5	< 5
MW-27D	9/17/2012	ug/l	< 5	5.49	< 5	< 5	<b>114</b>	< 5	< 5
MW-27D	5/3/2013	ug/l	< 5	5	< 5	< 5	<b>89.5</b>	< 5	< 5
MW-27D	10/8/2013	ug/l	< 5	5.13	< 5	< 5	<b>96.2</b>	< 5	< 5
MW-27D	4/25/2014	ug/l	< 5	< 5	< 5	< 5	<b>69.3</b>	< 5	< 2
MW-27D	10/30/2014	ug/l	< 5	< 5	< 5	< 5	<b>106</b>	< 5	< 5
MW-27D	10/8/2015	ug/l	< 5	< 5	< 5	< 5	<b>64.3</b>	< 5	< 2
MW-27D	9/28/2016	ug/l	< 5	< 5	< 5	< 5	<b>99.5</b>	< 5	< 2

Notes:

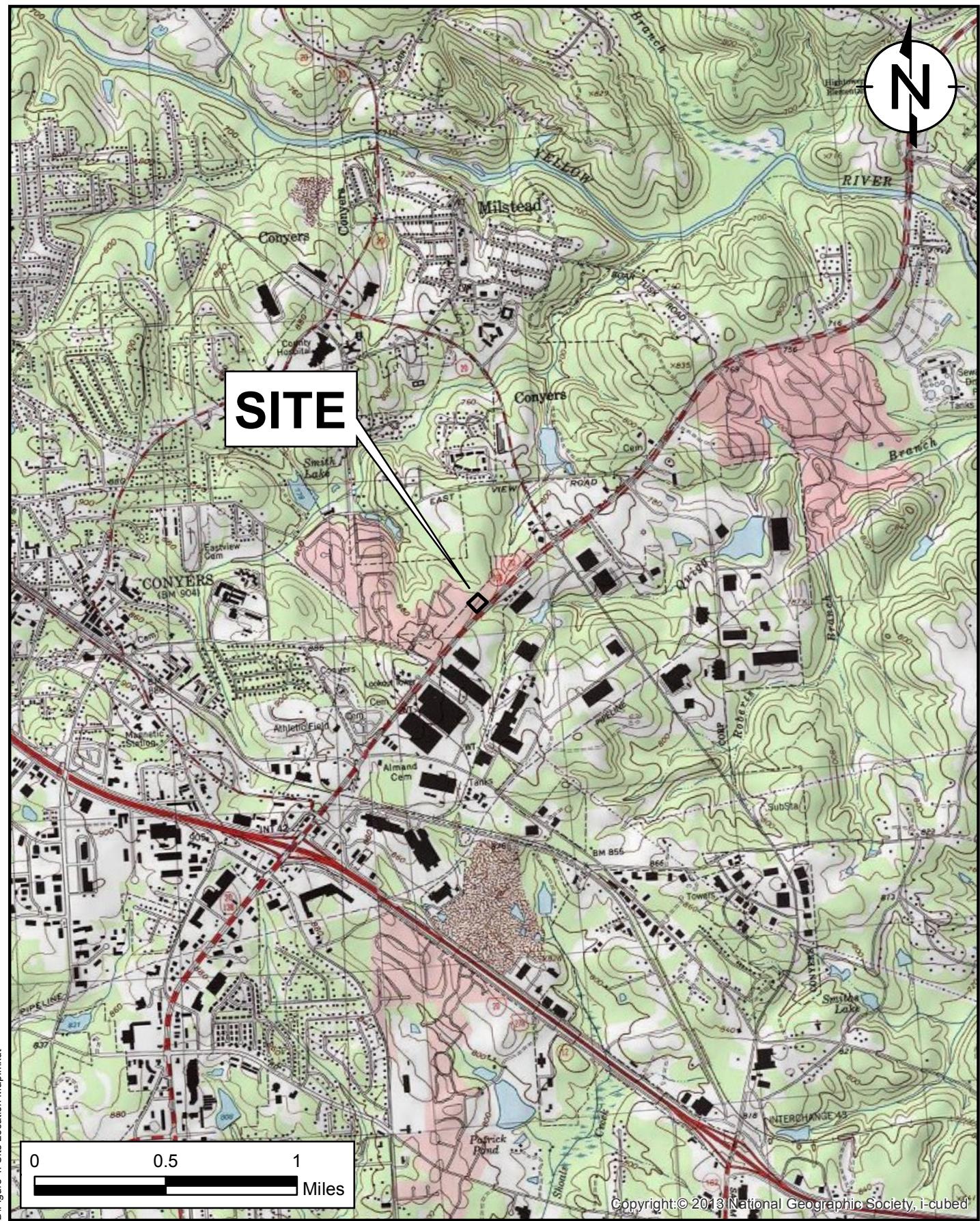
ug/l -- Micrograms per liter (parts per billion)

**Bolded** values exceed the Type 1/3 RRS

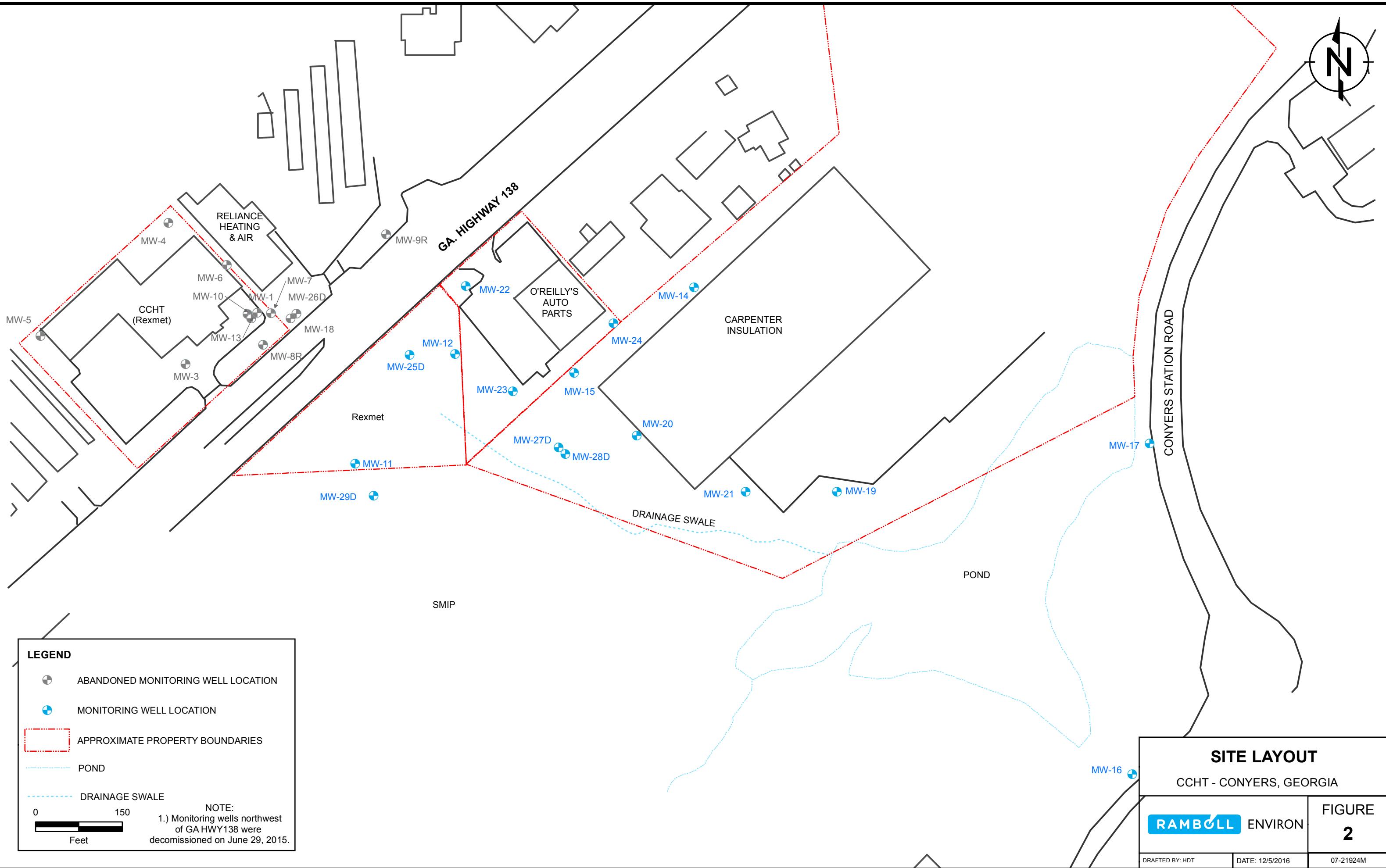
< Analyte was not detected at the laboratory reporting limit indicated

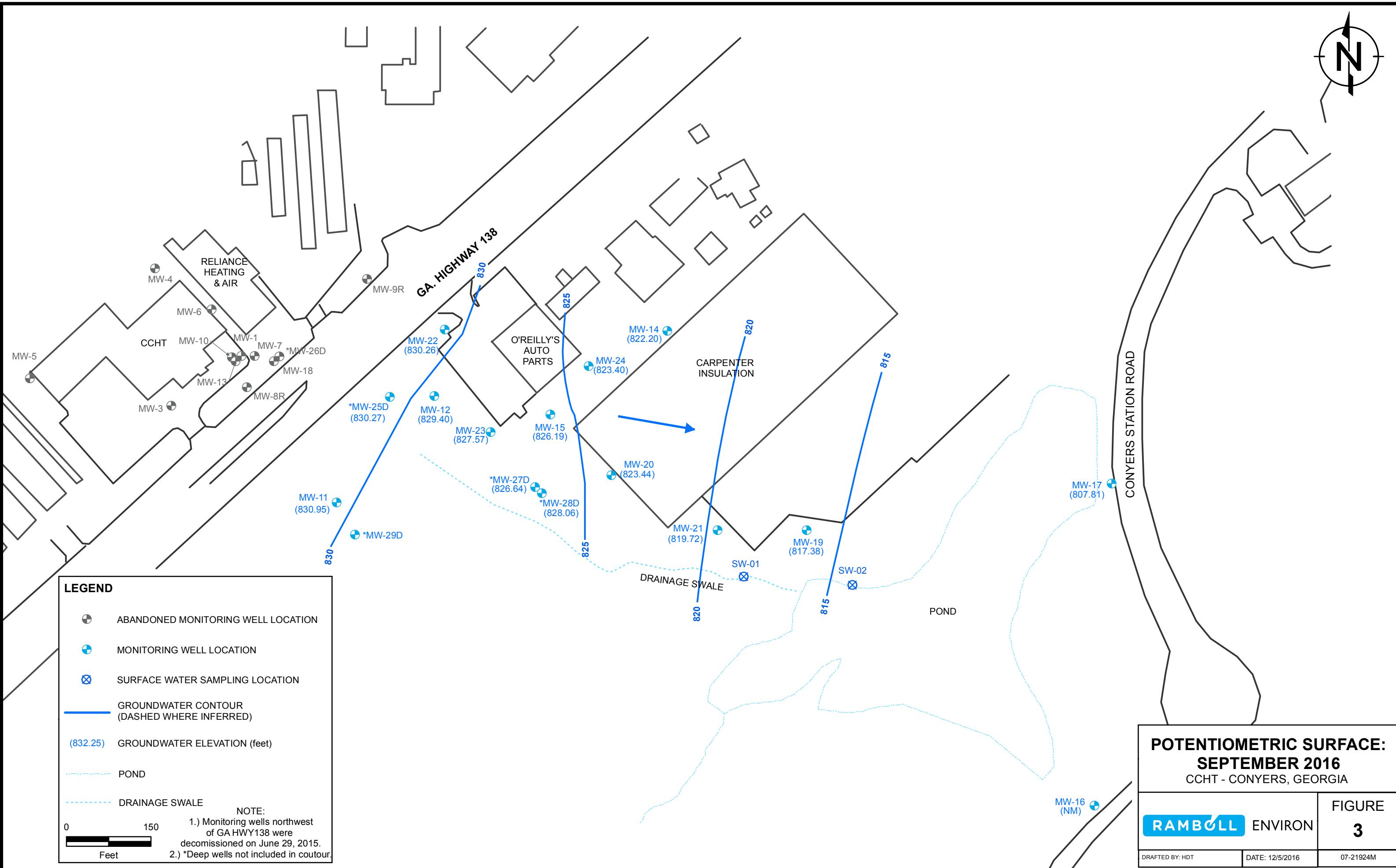
J -- Concentration is greater than the method detection limit but less than the laboratory reporting limit

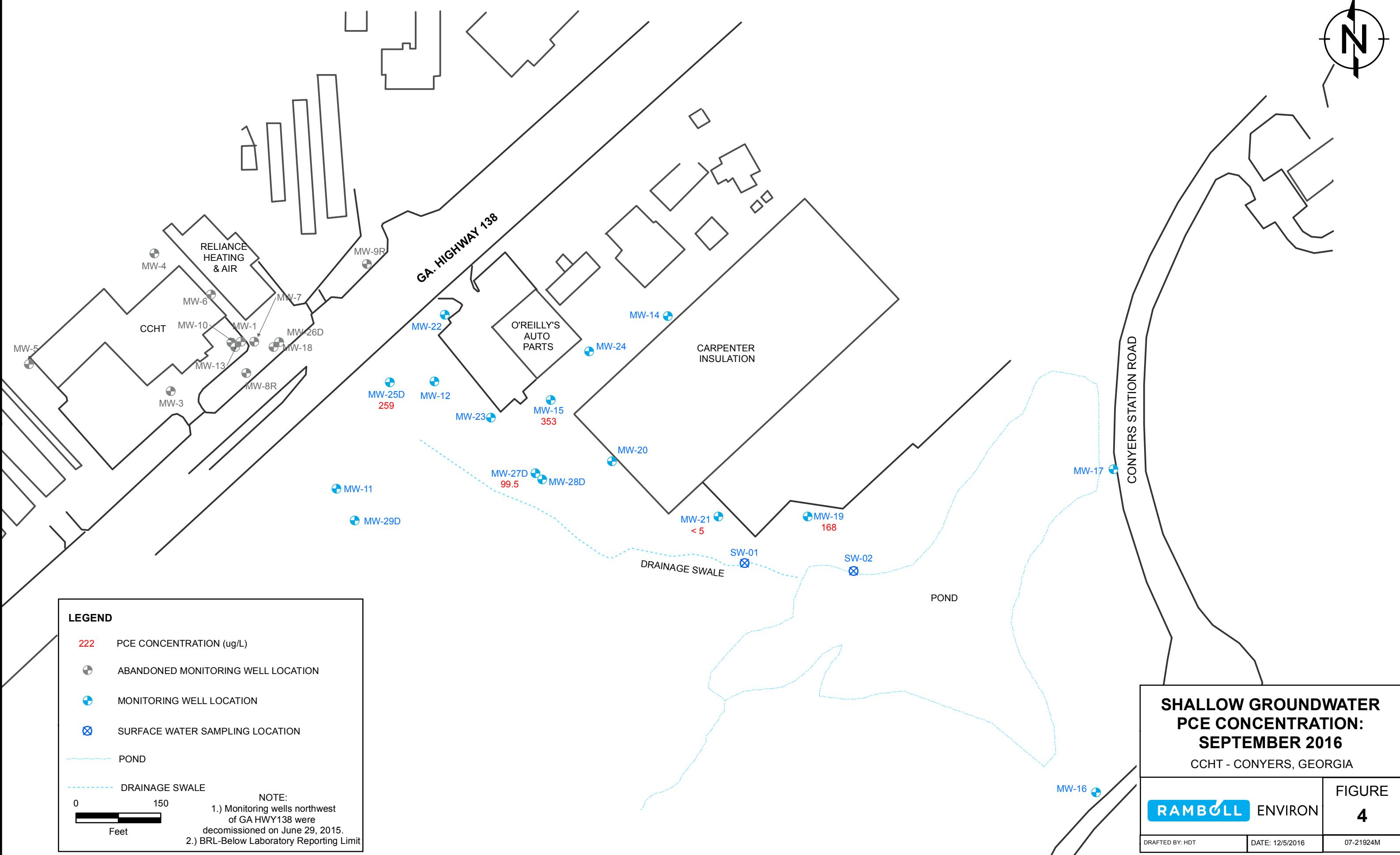
## Figures



<b>RAMBOLL ENVIRON</b>	<b>SITE LOCATION</b> CCHT - CONYERS, GEORGIA	<b>Figure 1</b> 07-21924K
DRAFTED BY: HDT	DATE: 12/5/2016	

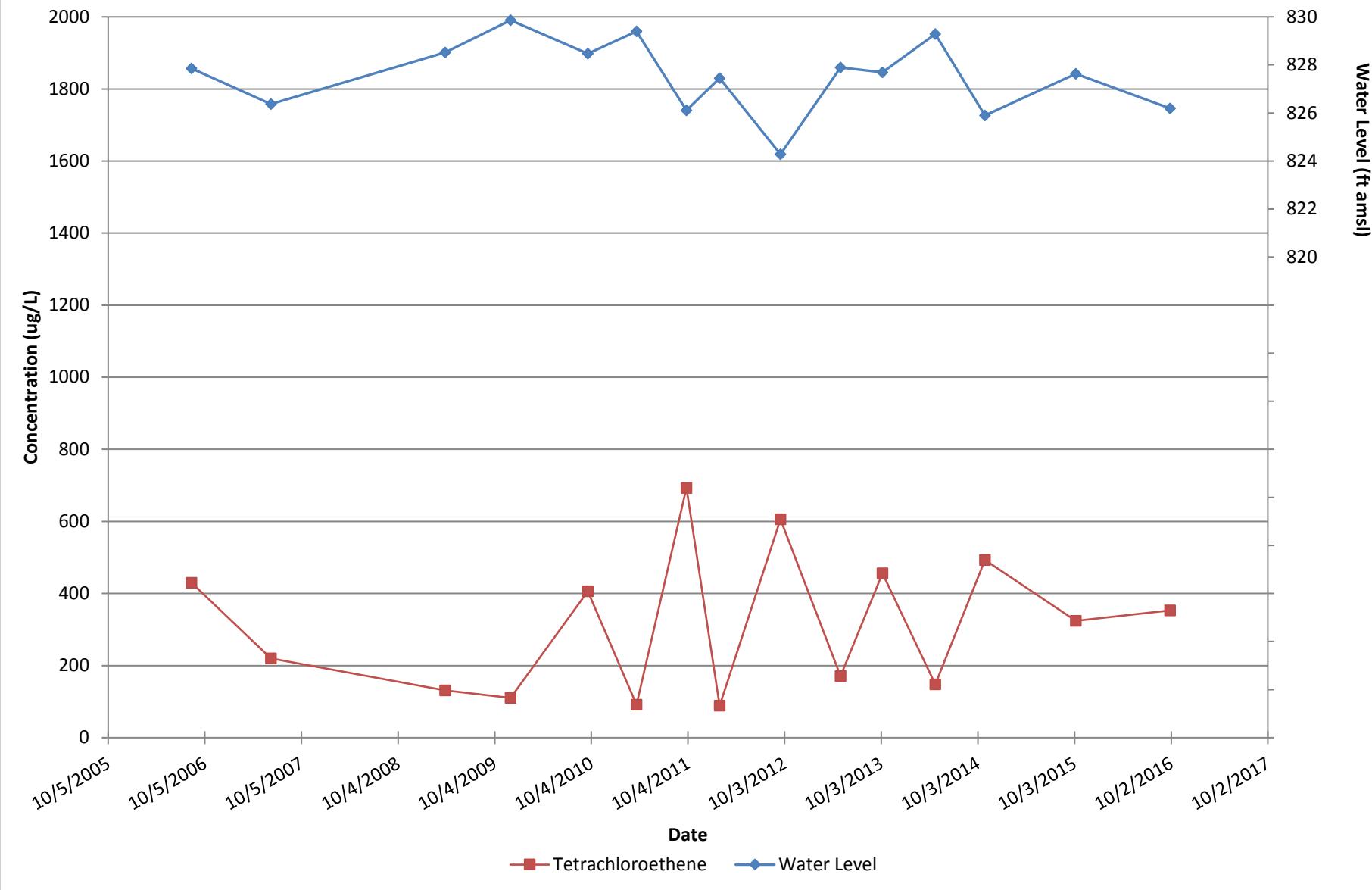




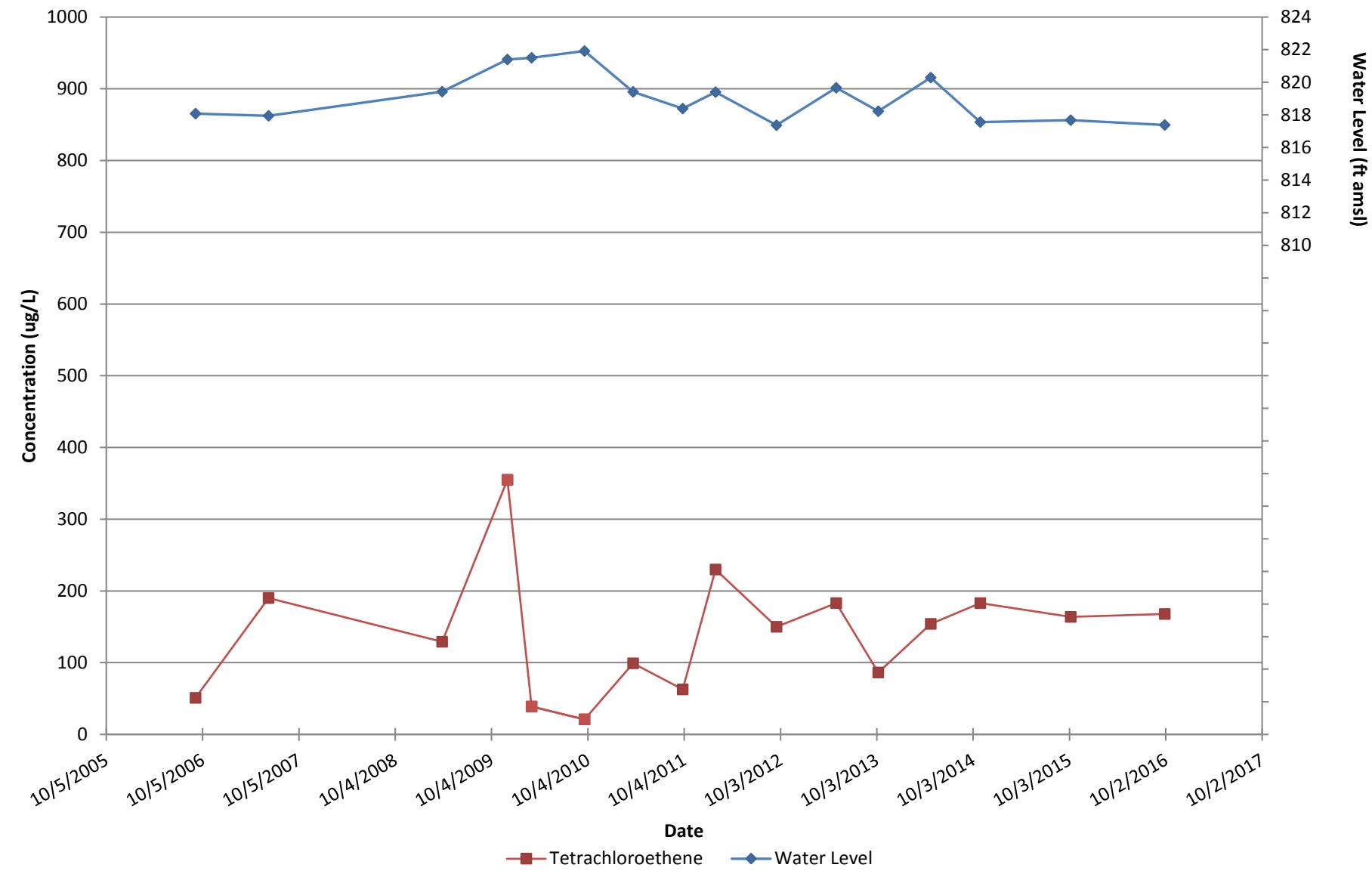


**Appendix A**  
**Groundwater Trend Charts**

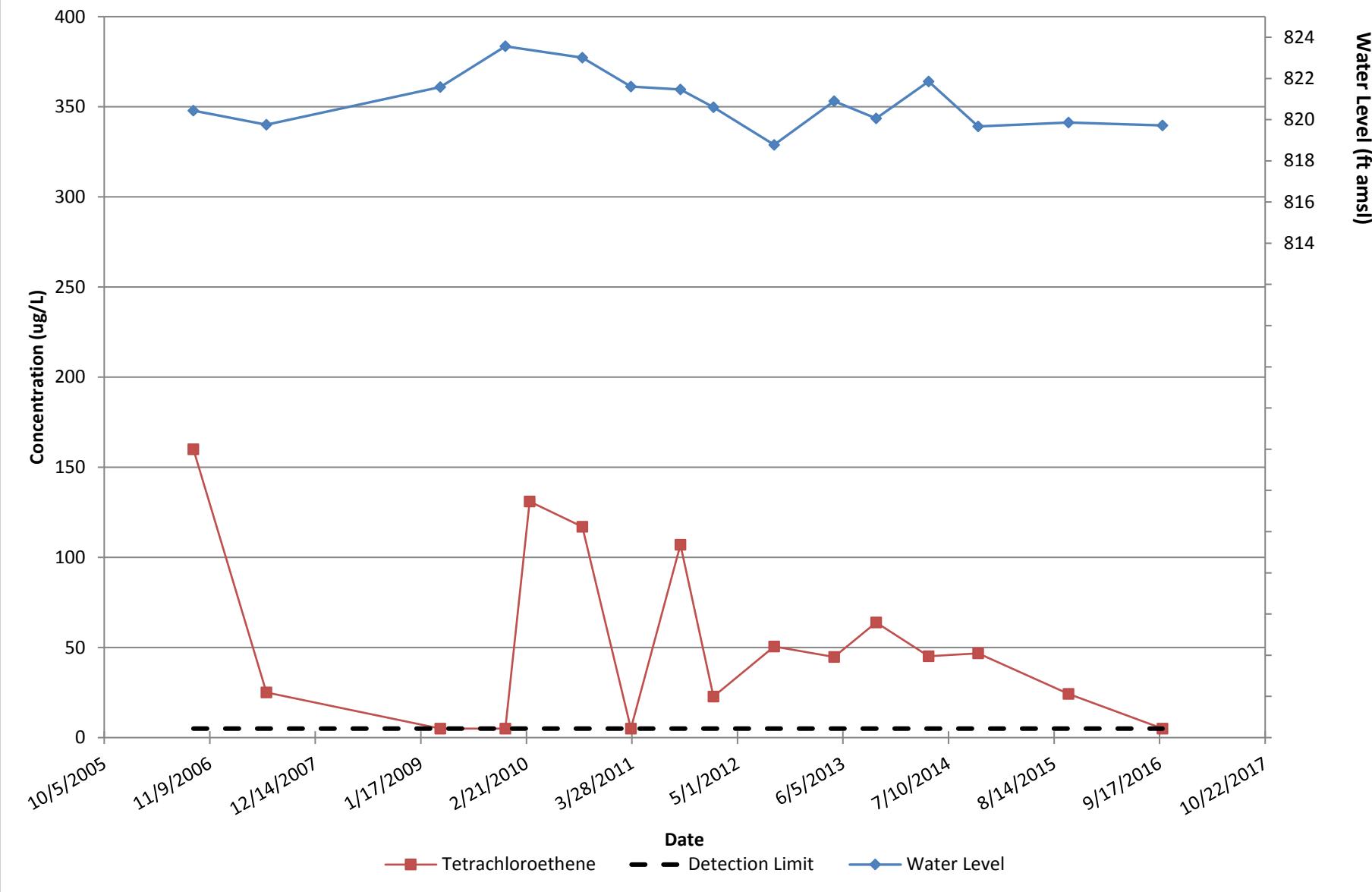
**MW-15**  
**CCHT - HSI No. 10341**  
**Conyers, Georgia**



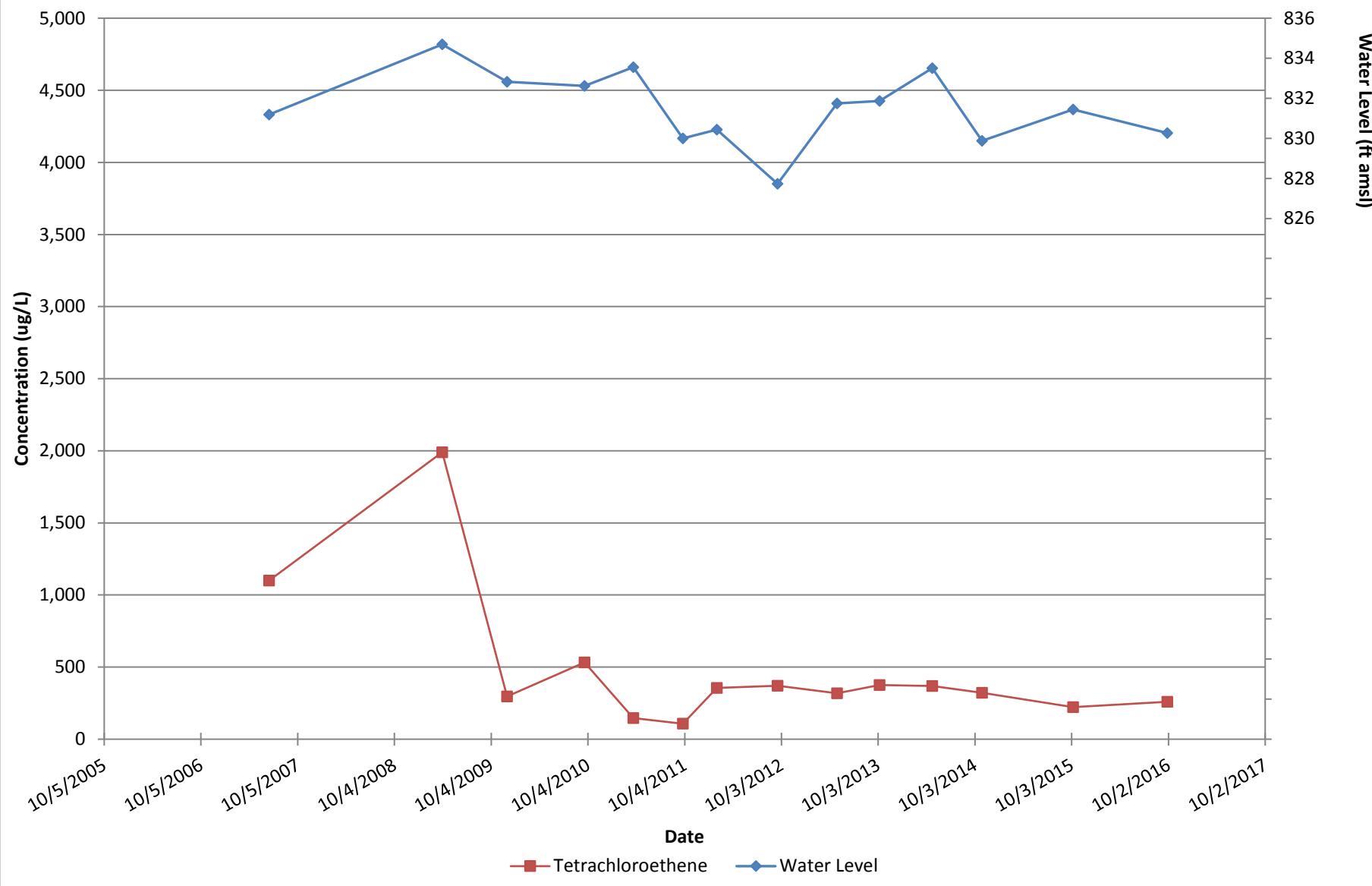
**MW-19**  
**CCHT - HSI No. 10341**  
**Conyers, Georgia**



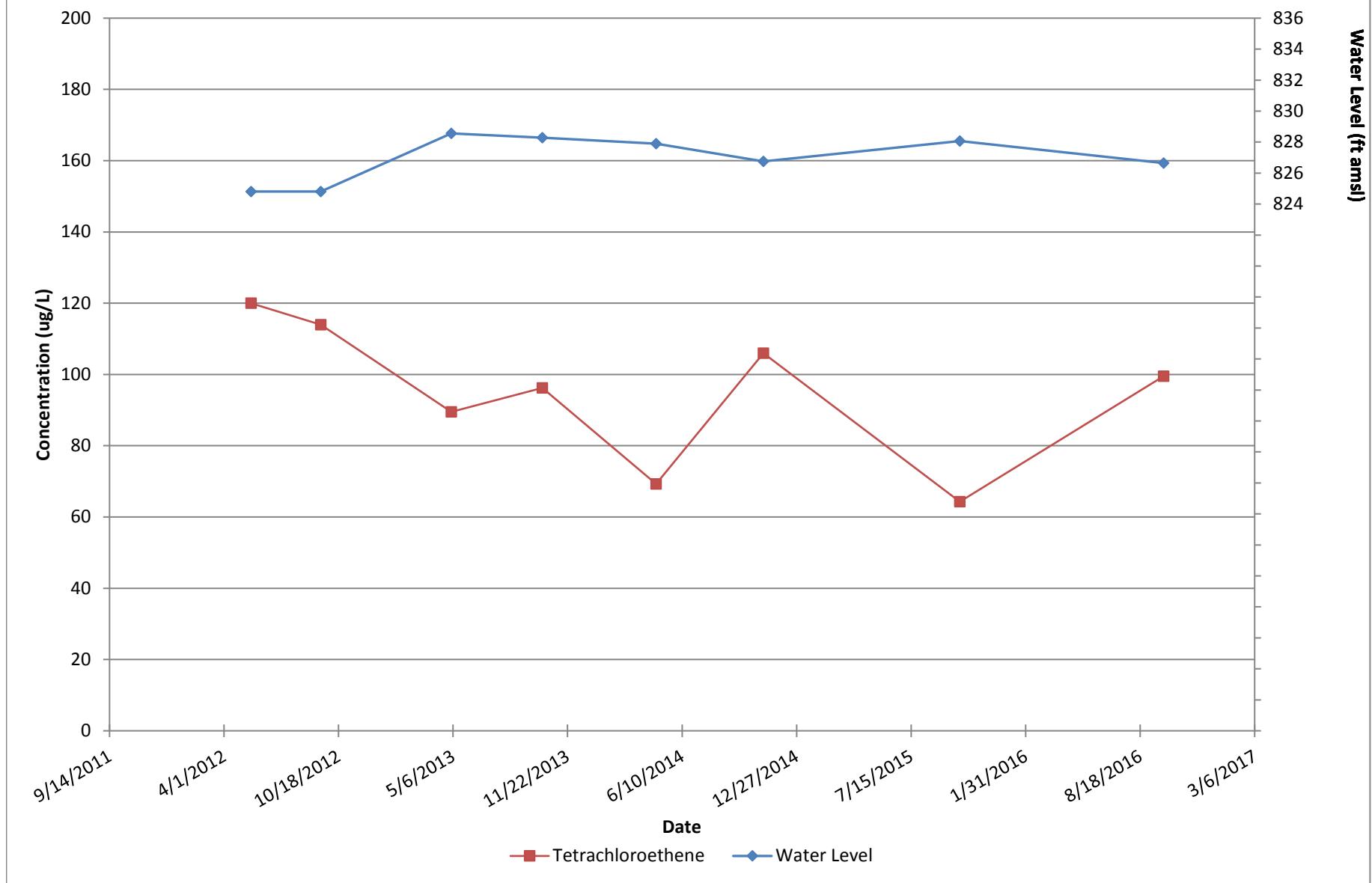
**MW-21**  
**CCHT - HSI No. 10341**  
**Conyers, Georgia**



**MW-25D**  
**CCHT - HSI No. 10341**  
**Conyers, Georgia**



**MW-27D**  
**CCHT - HSI No. 10341**  
**Conyers, Georgia**



**Appendix B**  
**Laboratory Analytical Report**

# ANALYTICAL RESULTS

PERFORMED BY

**GCAL, LLC**  
7979 Innovation Park Dr.  
Baton Rouge, LA 70820

**Report Date** 12/08/2016

**GCAL Report** 216093002



**Project** CCHT/ 07-21924M

<b>Deliver To</b>	<b>Additional Recipients</b>
Rob Patchett Ramboll Environ 1600 Parkwood Cr. Atlanta, GA 30339 678-491-4230	NONE



## Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

### Common Abbreviations that may be Utilized in this Report

<b>ND</b>	Indicates the result was Not Detected at the specified reporting limit
<b>NO</b>	Indicates the sample did not ignite when preliminary test performed for EPA Method 1030
<b>DO</b>	Indicates the result was Diluted Out
<b>MI</b>	Indicates the result was subject to Matrix Interference
<b>TNTC</b>	Indicates the result was Too Numerous To Count
<b>SUBC</b>	Indicates the analysis was Sub-Contracted
<b>FLD</b>	Indicates the analysis was performed in the Field
<b>DL</b>	Detection Limit
<b>DL</b>	Diluted analysis – when appended to Client Sample ID
<b>LOD</b>	Limit of Detection
<b>LOQ</b>	Limit of Quantitation
<b>RE</b>	Re-analysis
<b>CF</b>	HPLC or GC Confirmation
<b>00:01</b>	Reported as a time equivalent to 12:00 AM

### Reporting Flags that may be Utilized in this Report

<b>J or I</b>	Indicates the result is between the MDL and LOQ
<b>J</b>	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
<b>U</b>	Indicates the compound was analyzed for but not detected
<b>B or V</b>	Indicates the analyte was detected in the associated Method Blank
<b>Q</b>	Indicates a non-compliant QC Result (See Q Flag Application Report)
*	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
<b>E</b>	The result is estimated because it exceeded the instrument calibration range
<b>E</b>	Metals - % difference for the serial dilution is > 10%
<b>P</b>	RPD between primary and confirmation result is greater than 40

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with The NELAC Institute (TNI) Standard 2009 and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

---

Authorized Signature  
GCAL Report 216093002

## Certifications

Certification	Certification Number
DOD ELAP	L14-243
Alabama	01955
Arkansas	12-060-0
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
USDA Soil Permit	P330-10-00117

## Case Narrative

**Client:** Ramboll ENVIRON International Corp      **Report:** 216093002

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

This report was revised 12/08/16. The EPA 8260B LOQ's for samples analyzed at 2X or 5X were lowered if possible to meet the required regulatory limits. The lower limits are supported by a low level standard included in the initial calibration curve. The LOQ for Vinyl chloride for sample 21609300201 (MW-15 20160928) has been changed to the MDL in order to meet the required regulatory limit.

This report was revised 10/06/16 due to the client requesting a lower reporting limit for Vinyl Chloride.

### VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis, samples 21609300201 (MW-15 20160928), 21609300202 (MW-19 20160928), 21609300204 (MW-25D 20160928), and 21609300206 (DUP-01 20160928) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilution is reflected in elevated detection limits.

## Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21609300201	MW-15 20160928	Water	09/28/2016 13:45	09/30/2016 09:54
21609300202	MW-19 20160928	Water	09/28/2016 09:55	09/30/2016 09:54
21609300203	MW-21 20160928	Water	09/28/2016 10:30	09/30/2016 09:54
21609300204	MW-25D 20160928	Water	09/28/2016 14:00	09/30/2016 09:54
21609300205	MW-27D 20160928	Water	09/28/2016 14:15	09/30/2016 09:54
21609300206	DUP-01 20160928	Water	09/28/2016 00:01	09/30/2016 09:54
21609300207	TRIP BLANK 20160928	Water	09/28/2016 00:01	09/30/2016 09:54

## Summary of Compounds Detected

<b>MW-15 20160928</b>	Collect Date	09/28/2016 13:45	GCAL ID	21609300201
	Receive Date	09/30/2016 09:54	Matrix	Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	353	5.00	ug/L

<b>MW-19 20160928</b>	Collect Date	09/28/2016 09:55	GCAL ID	21609300202
	Receive Date	09/30/2016 09:54	Matrix	Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	161	5.00	ug/L

<b>MW-21 20160928</b>	Collect Date	09/28/2016 10:30	GCAL ID	21609300203
	Receive Date	09/30/2016 09:54	Matrix	Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	55.6	10.0	ug/L
67-64-1	Acetone	8.54	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	54.5	5.00	ug/L
79-01-6	Trichloroethene	19.7	5.00	ug/L

<b>MW-25D 20160928</b>	Collect Date	09/28/2016 14:00	GCAL ID	21609300204
	Receive Date	09/30/2016 09:54	Matrix	Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
67-64-1	Acetone	10.2	5.00	ug/L
127-18-4	Tetrachloroethene	259	5.00	ug/L

## Summary of Compounds Detected

<b>MW-27D 20160928</b>	Collect Date	09/28/2016 14:15	GCAL ID	21609300205
	Receive Date	09/30/2016 09:54	Matrix	Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
67-64-1	Acetone	6.94	5.00	ug/L
127-18-4	Tetrachloroethene	99.5	5.00	ug/L

<b>DUP-01 20160928</b>	Collect Date	09/28/2016 00:01	GCAL ID	21609300206
	Receive Date	09/30/2016 09:54	Matrix	Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	168	5.00	ug/L

## Sample Results

<b>MW-15 20160928</b>	Collect Date	09/28/2016 13:45	GCAL ID	21609300201
	Receive Date	09/30/2016 09:54	Matrix	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	10/03/2016 22:05	LBH	595814
CAS#	Parameter			Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane			<5.00	5.00	ug/L
71-55-6	1,1,1-Trichloroethane			<5.00	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane			<5.00	5.00	ug/L
79-00-5	1,1,2-Trichloroethane			<5.00	5.00	ug/L
75-34-3	1,1-Dichloroethane			<5.00	5.00	ug/L
75-35-4	1,1-Dichloroethene			<5.00	5.00	ug/L
563-58-6	1,1-Dichloropropene			<5.00	5.00	ug/L
96-18-4	1,2,3-Trichloropropane			<5.00	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene			<5.00	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene			<5.00	5.00	ug/L
96-12-8	1,2-Dibromo-3-chloropropane			<5.00	5.00	ug/L
106-93-4	1,2-Dibromoethane			<5.00	5.00	ug/L
95-50-1	1,2-Dichlorobenzene			<5.00	5.00	ug/L
107-06-2	1,2-Dichloroethane			<5.00	5.00	ug/L
540-59-0	1,2-Dichloroethene(Total)			<10.0	10.0	ug/L
78-87-5	1,2-Dichloropropane			<5.00	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene			<5.00	5.00	ug/L
541-73-1	1,3-Dichlorobenzene			<5.00	5.00	ug/L
142-28-9	1,3-Dichloropropane			<5.00	5.00	ug/L
106-46-7	1,4-Dichlorobenzene			<5.00	5.00	ug/L
594-20-7	2,2-Dichloropropane			<5.00	5.00	ug/L
78-93-3	2-Butanone			<25.0	25.0	ug/L
95-49-8	2-Chlorotoluene			<5.00	5.00	ug/L
591-78-6	2-Hexanone			<25.0	25.0	ug/L
106-43-4	4-Chlorotoluene			<5.00	5.00	ug/L
99-87-6	4-Isopropyltoluene			<5.00	5.00	ug/L
108-10-1	4-Methyl-2-pentanone			<5.00	5.00	ug/L
67-64-1	Acetone			<5.00	5.00	ug/L
71-43-2	Benzene			<5.00	5.00	ug/L
108-86-1	Bromobenzene			<5.00	5.00	ug/L
74-97-5	Bromochloromethane			<5.00	5.00	ug/L
75-27-4	Bromodichloromethane			<5.00	5.00	ug/L
75-25-2	Bromoform			<5.00	5.00	ug/L
74-83-9	Bromomethane			<5.00	5.00	ug/L
75-15-0	Carbon disulfide			<5.00	5.00	ug/L
56-23-5	Carbon tetrachloride			<5.00	5.00	ug/L
108-90-7	Chlorobenzene			<5.00	5.00	ug/L
75-00-3	Chloroethane			<5.00	5.00	ug/L
67-66-3	Chloroform			<5.00	5.00	ug/L
74-87-3	Chloromethane			<5.00	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene			<5.00	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene			<5.00	5.00	ug/L
124-48-1	Dibromochloromethane			<5.00	5.00	ug/L
74-95-3	Dibromomethane			<5.00	5.00	ug/L
75-71-8	Dichlorodifluoromethane			<5.00	5.00	ug/L
100-41-4	Ethylbenzene			<5.00	5.00	ug/L
87-68-3	Hexachlorobutadiene			<5.00	5.00	ug/L

## Sample Results

<b>MW-15 20160928</b>	Collect Date	09/28/2016 13:45	GCAL ID	21609300201
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	10/03/2016 22:05	LBH	595814

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	<5.00	5.00	ug/L
136777-61-2	m,p-Xylene	<10.0	10.0	ug/L
74-88-4	Methyl iodide	<25.0	25.0	ug/L
75-09-2	Methylene chloride	<5.00	5.00	ug/L
91-20-3	Naphthalene	<25.0	25.0	ug/L
104-51-8	n-Butylbenzene	<5.00	5.00	ug/L
103-65-1	n-Propylbenzene	<10.0	10.0	ug/L
95-47-6	o-Xylene	<5.00	5.00	ug/L
135-98-8	sec-Butylbenzene	<5.00	5.00	ug/L
100-42-5	Styrene	<5.00	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	<5.00	5.00	ug/L
98-06-6	tert-Butylbenzene	<5.00	5.00	ug/L
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>353</b>	<b>5.00</b>	<b>ug/L</b>
108-88-3	Toluene	<5.00	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	<5.00	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	<5.00	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	<25.0	25.0	ug/L
79-01-6	Trichloroethene	<5.00	5.00	ug/L
75-69-4	Trichlorofluoromethane	<5.00	5.00	ug/L
76-13-1	Trichlorotrifluoroethane	<5.00	5.00	ug/L
108-05-4	Vinyl acetate	<25.0	25.0	ug/L
75-01-4	Vinyl chloride	<2.00	2.00	ug/L
1330-20-7	Xylene (total)	<15.0	15.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	250	257	ug/L	103	78 - 130
1868-53-7	Dibromofluoromethane	250	258	ug/L	103	77 - 127
2037-26-5	Toluene d8	250	268	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	250	246	ug/L	98	71 - 127

<b>MW-19 20160928</b>	Collect Date	09/28/2016 09:55	GCAL ID	21609300202
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/03/2016 22:30	LBH	595814

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	<5.00	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	<5.00	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	<5.00	5.00	ug/L

## Sample Results

<b>MW-19 20160928</b>	Collect Date	09/28/2016 09:55	GCAL ID	21609300202
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/03/2016 22:30	LBH	595814

CAS#	Parameter	Result	LOQ	Units
79-00-5	1,1,2-Trichloroethane	<5.00	5.00	ug/L
75-34-3	1,1-Dichloroethane	<5.00	5.00	ug/L
75-35-4	1,1-Dichloroethene	<5.00	5.00	ug/L
563-58-6	1,1-Dichloropropene	<5.00	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	<5.00	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	<5.00	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	<5.00	5.00	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/L
106-93-4	1,2-Dibromoethane	<5.00	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	<5.00	5.00	ug/L
107-06-2	1,2-Dichloroethane	<5.00	5.00	ug/L
540-59-0	1,2-Dichloroethene(Total)	<10.0	10.0	ug/L
78-87-5	1,2-Dichloropropene	<5.00	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	<5.00	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	<5.00	5.00	ug/L
142-28-9	1,3-Dichloropropane	<5.00	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	<5.00	5.00	ug/L
594-20-7	2,2-Dichloropropane	<5.00	5.00	ug/L
78-93-3	2-Butanone	<10.0	10.0	ug/L
95-49-8	2-Chlorotoluene	<5.00	5.00	ug/L
591-78-6	2-Hexanone	<10.0	10.0	ug/L
106-43-4	4-Chlorotoluene	<5.00	5.00	ug/L
99-87-6	4-Isopropyltoluene	<5.00	5.00	ug/L
108-10-1	4-Methyl-2-pentanone	<5.00	5.00	ug/L
67-64-1	Acetone	<5.00	5.00	ug/L
71-43-2	Benzene	<5.00	5.00	ug/L
108-86-1	Bromobenzene	<5.00	5.00	ug/L
74-97-5	Bromochloromethane	<5.00	5.00	ug/L
75-27-4	Bromodichloromethane	<5.00	5.00	ug/L
75-25-2	Bromoform	<5.00	5.00	ug/L
74-83-9	Bromomethane	<5.00	5.00	ug/L
75-15-0	Carbon disulfide	<5.00	5.00	ug/L
56-23-5	Carbon tetrachloride	<5.00	5.00	ug/L
108-90-7	Chlorobenzene	<5.00	5.00	ug/L
75-00-3	Chloroethane	<5.00	5.00	ug/L
67-66-3	Chloroform	<5.00	5.00	ug/L
74-87-3	Chloromethane	<5.00	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	<5.00	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	<5.00	5.00	ug/L
124-48-1	Dibromochloromethane	<5.00	5.00	ug/L
74-95-3	Dibromomethane	<5.00	5.00	ug/L
75-71-8	Dichlorodifluoromethane	<5.00	5.00	ug/L
100-41-4	Ethylbenzene	<5.00	5.00	ug/L
87-68-3	Hexachlorobutadiene	<5.00	5.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	<5.00	5.00	ug/L
136777-61-2	m,p-Xylene	<5.00	5.00	ug/L
74-88-4	Methyl iodide	<10.0	10.0	ug/L

## Sample Results

<b>MW-19 20160928</b>	Collect Date	09/28/2016 09:55	GCAL ID	21609300202
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/03/2016 22:30	LBH	595814
CAS#	Parameter			Result	LOQ	Units
75-09-2	Methylene chloride			<5.00	5.00	ug/L
91-20-3	Naphthalene			<10.0	10.0	ug/L
104-51-8	n-Butylbenzene			<5.00	5.00	ug/L
103-65-1	n-Propylbenzene			<5.00	5.00	ug/L
95-47-6	o-Xylene			<5.00	5.00	ug/L
135-98-8	sec-Butylbenzene			<5.00	5.00	ug/L
100-42-5	Styrene			<5.00	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)			<5.00	5.00	ug/L
98-06-6	tert-Butylbenzene			<5.00	5.00	ug/L
<b>127-18-4</b>	<b>Tetrachloroethene</b>			<b>161</b>	<b>5.00</b>	<b>ug/L</b>
108-88-3	Toluene			<5.00	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene			<5.00	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene			<5.00	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene			<5.00	5.00	ug/L
79-01-6	Trichloroethene			<5.00	5.00	ug/L
75-69-4	Trichlorofluoromethane			<5.00	5.00	ug/L
76-13-1	Trichlorotrifluoroethane			<5.00	5.00	ug/L
108-05-4	Vinyl acetate			<10.0	10.0	ug/L
75-01-4	Vinyl chloride			<2.00	2.00	ug/L
1330-20-7	Xylene (total)			<15.0	15.0	ug/L
CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	101	ug/L	101	78 - 130
1868-53-7	Dibromofluoromethane	100	102	ug/L	102	77 - 127
2037-26-5	Toluene d8	100	105	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	96.6	ug/L	97	71 - 127

<b>MW-21 20160928</b>	Collect Date	09/28/2016 10:30	GCAL ID	21609300203
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/03/2016 22:52	LBH	595814
CAS#	Parameter			Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane			<5.00	5.00	ug/L
71-55-6	1,1,1-Trichloroethane			<5.00	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane			<5.00	5.00	ug/L
79-00-5	1,1,2-Trichloroethane			<5.00	5.00	ug/L
75-34-3	1,1-Dichloroethane			<5.00	5.00	ug/L
75-35-4	1,1-Dichloroethene			<5.00	5.00	ug/L

## Sample Results

<b>MW-21 20160928</b>	Collect Date	09/28/2016 10:30	GCAL ID	21609300203
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/03/2016 22:52	LBH	595814
<b>CAS#</b>	<b>Parameter</b>			<b>Result</b>	<b>LOQ</b>	<b>Units</b>
563-58-6	1,1-Dichloropropene			<5.00	5.00	ug/L
96-18-4	1,2,3-Trichloropropane			<5.00	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene			<5.00	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene			<5.00	5.00	ug/L
96-12-8	1,2-Dibromo-3-chloropropane			<5.00	5.00	ug/L
106-93-4	1,2-Dibromoethane			<5.00	5.00	ug/L
95-50-1	1,2-Dichlorobenzene			<5.00	5.00	ug/L
107-06-2	1,2-Dichloroethane			<5.00	5.00	ug/L
<b>540-59-0</b>	<b>1,2-Dichloroethene(Total)</b>			<b>55.6</b>	<b>10.0</b>	<b>ug/L</b>
78-87-5	1,2-Dichloropropane			<5.00	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene			<5.00	5.00	ug/L
541-73-1	1,3-Dichlorobenzene			<5.00	5.00	ug/L
142-28-9	1,3-Dichloropropane			<5.00	5.00	ug/L
106-46-7	1,4-Dichlorobenzene			<5.00	5.00	ug/L
594-20-7	2,2-Dichloropropane			<5.00	5.00	ug/L
78-93-3	2-Butanone			<5.00	5.00	ug/L
95-49-8	2-Chlorotoluene			<5.00	5.00	ug/L
591-78-6	2-Hexanone			<5.00	5.00	ug/L
106-43-4	4-Chlorotoluene			<5.00	5.00	ug/L
99-87-6	4-Isopropyltoluene			<5.00	5.00	ug/L
108-10-1	4-Methyl-2-pentanone			<5.00	5.00	ug/L
<b>67-64-1</b>	<b>Acetone</b>			<b>8.54</b>	<b>5.00</b>	<b>ug/L</b>
71-43-2	Benzene			<5.00	5.00	ug/L
108-86-1	Bromobenzene			<5.00	5.00	ug/L
74-97-5	Bromochloromethane			<5.00	5.00	ug/L
75-27-4	Bromodichloromethane			<5.00	5.00	ug/L
75-25-2	Bromoform			<5.00	5.00	ug/L
74-83-9	Bromomethane			<5.00	5.00	ug/L
75-15-0	Carbon disulfide			<5.00	5.00	ug/L
56-23-5	Carbon tetrachloride			<5.00	5.00	ug/L
108-90-7	Chlorobenzene			<5.00	5.00	ug/L
75-00-3	Chloroethane			<5.00	5.00	ug/L
67-66-3	Chloroform			<5.00	5.00	ug/L
74-87-3	Chloromethane			<5.00	5.00	ug/L
<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>			<b>54.5</b>	<b>5.00</b>	<b>ug/L</b>
10061-01-5	cis-1,3-Dichloropropene			<5.00	5.00	ug/L
124-48-1	Dibromochloromethane			<5.00	5.00	ug/L
74-95-3	Dibromomethane			<5.00	5.00	ug/L
75-71-8	Dichlorodifluoromethane			<5.00	5.00	ug/L
100-41-4	Ethylbenzene			<5.00	5.00	ug/L
87-68-3	Hexachlorobutadiene			<5.00	5.00	ug/L
98-82-8	Isopropylbenzene (Cumene)			<5.00	5.00	ug/L
136777-61-2	m,p-Xylene			<10.0	10.0	ug/L
74-88-4	Methyl iodide			<5.00	5.00	ug/L
75-09-2	Methylene chloride			<5.00	5.00	ug/L
91-20-3	Naphthalene			<5.00	5.00	ug/L
104-51-8	n-Butylbenzene			<5.00	5.00	ug/L

## Sample Results

<b>MW-21 20160928</b>	Collect Date	09/28/2016 10:30	GCAL ID	21609300203
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch	
NA	NA	NA	1	10/03/2016 22:52	LBH	595814	
<b>CAS#</b>	<b>Parameter</b>			<b>Result</b>	<b>LOQ</b>	<b>Units</b>	
103-65-1	n-Propylbenzene			<5.00	5.00	ug/L	
95-47-6	o-Xylene			<5.00	5.00	ug/L	
135-98-8	sec-Butylbenzene			<5.00	5.00	ug/L	
100-42-5	Styrene			<5.00	5.00	ug/L	
1634-04-4	tert-Butyl methyl ether (MTBE)			<5.00	5.00	ug/L	
98-06-6	tert-Butylbenzene			<5.00	5.00	ug/L	
127-18-4	Tetrachloroethene			<5.00	5.00	ug/L	
108-88-3	Toluene			<5.00	5.00	ug/L	
156-60-5	trans-1,2-Dichloroethene			<5.00	5.00	ug/L	
10061-02-6	trans-1,3-Dichloropropene			<5.00	5.00	ug/L	
110-57-6	trans-1,4-Dichloro-2-butene			<5.00	5.00	ug/L	
<b>79-01-6</b>	<b>Trichloroethene</b>			<b>19.7</b>	<b>5.00</b>	<b>ug/L</b>	
75-69-4	Trichlorofluoromethane			<5.00	5.00	ug/L	
76-13-1	Trichlorotrifluoroethane			<5.00	5.00	ug/L	
108-05-4	Vinyl acetate			<5.00	5.00	ug/L	
75-01-4	Vinyl chloride			<2.00	2.00	ug/L	
1330-20-7	Xylene (total)			<15.0	15.0	ug/L	
<b>CAS#</b>	<b>Surrogate</b>		<b>Conc. Spiked</b>	<b>Conc. Rec</b>	<b>Units</b>	<b>% Recovery</b>	<b>Rec Limits</b>
460-00-4	4-Bromofluorobenzene		50	51.5	ug/L	103	78 - 130
1868-53-7	Dibromofluoromethane		50	51.4	ug/L	103	77 - 127
2037-26-5	Toluene d8		50	54.4	ug/L	109	76 - 134
17060-07-0	1,2-Dichloroethane-d4		50	48.7	ug/L	97	71 - 127

<b>MW-25D 20160928</b>	Collect Date	09/28/2016 14:00	GCAL ID	21609300204
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/03/2016 23:17	LBH	595814
<b>CAS#</b>	<b>Parameter</b>			<b>Result</b>	<b>LOQ</b>	<b>Units</b>
630-20-6	1,1,1,2-Tetrachloroethane			<5.00	5.00	ug/L
71-55-6	1,1,1-Trichloroethane			<5.00	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane			<5.00	5.00	ug/L
79-00-5	1,1,2-Trichloroethane			<5.00	5.00	ug/L
75-34-3	1,1-Dichloroethane			<5.00	5.00	ug/L
75-35-4	1,1-Dichloroethene			<5.00	5.00	ug/L
563-58-6	1,1-Dichloropropene			<5.00	5.00	ug/L
96-18-4	1,2,3-Trichloropropane			<5.00	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene			<5.00	5.00	ug/L

## Sample Results

<b>MW-25D 20160928</b>	Collect Date	09/28/2016 14:00	GCAL ID	21609300204
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/03/2016 23:17	LBH	595814
<b>CAS#</b>	<b>Parameter</b>			<b>Result</b>	<b>LOQ</b>	<b>Units</b>
95-63-6	1,2,4-Trimethylbenzene			<5.00	5.00	ug/L
96-12-8	1,2-Dibromo-3-chloropropane			<5.00	5.00	ug/L
106-93-4	1,2-Dibromoethane			<5.00	5.00	ug/L
95-50-1	1,2-Dichlorobenzene			<5.00	5.00	ug/L
107-06-2	1,2-Dichloroethane			<5.00	5.00	ug/L
540-59-0	1,2-Dichloroethene(Total)			<5.00	5.00	ug/L
78-87-5	1,2-Dichloropropane			<5.00	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene			<5.00	5.00	ug/L
541-73-1	1,3-Dichlorobenzene			<5.00	5.00	ug/L
142-28-9	1,3-Dichloropropane			<5.00	5.00	ug/L
106-46-7	1,4-Dichlorobenzene			<5.00	5.00	ug/L
594-20-7	2,2-Dichloropropane			<5.00	5.00	ug/L
78-93-3	2-Butanone			<10.0	10.0	ug/L
95-49-8	2-Chlorotoluene			<5.00	5.00	ug/L
591-78-6	2-Hexanone			<10.0	10.0	ug/L
106-43-4	4-Chlorotoluene			<5.00	5.00	ug/L
99-87-6	4-Isopropyltoluene			<5.00	5.00	ug/L
108-10-1	4-Methyl-2-pentanone			<5.00	5.00	ug/L
<b>67-64-1</b>	<b>Acetone</b>			<b>10.2</b>	<b>5.00</b>	<b>ug/L</b>
71-43-2	Benzene			<5.00	5.00	ug/L
108-86-1	Bromobenzene			<5.00	5.00	ug/L
74-97-5	Bromochloromethane			<5.00	5.00	ug/L
75-27-4	Bromodichloromethane			<5.00	5.00	ug/L
75-25-2	Bromoform			<5.00	5.00	ug/L
74-83-9	Bromomethane			<5.00	5.00	ug/L
75-15-0	Carbon disulfide			<5.00	5.00	ug/L
56-23-5	Carbon tetrachloride			<5.00	5.00	ug/L
108-90-7	Chlorobenzene			<5.00	5.00	ug/L
75-00-3	Chloroethane			<5.00	5.00	ug/L
67-66-3	Chloroform			<5.00	5.00	ug/L
74-87-3	Chloromethane			<5.00	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene			<5.00	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene			<5.00	5.00	ug/L
124-48-1	Dibromochloromethane			<5.00	5.00	ug/L
74-95-3	Dibromomethane			<5.00	5.00	ug/L
75-71-8	Dichlorodifluoromethane			<5.00	5.00	ug/L
100-41-4	Ethylbenzene			<5.00	5.00	ug/L
87-68-3	Hexachlorobutadiene			<5.00	5.00	ug/L
98-82-8	Isopropylbenzene (Cumene)			<5.00	5.00	ug/L
136777-61-2	m,p-Xylene			<5.00	5.00	ug/L
74-88-4	Methyl iodide			<10.0	10.0	ug/L
75-09-2	Methylene chloride			<5.00	5.00	ug/L
91-20-3	Naphthalene			<10.0	10.0	ug/L
104-51-8	n-Butylbenzene			<5.00	5.00	ug/L
103-65-1	n-Propylbenzene			<5.00	5.00	ug/L
95-47-6	o-Xylene			<5.00	5.00	ug/L
135-98-8	sec-Butylbenzene			<5.00	5.00	ug/L

## Sample Results

<b>MW-25D 20160928</b>	Collect Date	09/28/2016 14:00	GCAL ID	21609300204
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/03/2016 23:17	LBH	595814
<b>CAS#</b>	<b>Parameter</b>			<b>Result</b>	<b>LOQ</b>	<b>Units</b>
100-42-5	Styrene			<5.00	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)			<5.00	5.00	ug/L
98-06-6	tert-Butylbenzene			<5.00	5.00	ug/L
<b>127-18-4</b>	<b>Tetrachloroethene</b>			<b>259</b>	<b>5.00</b>	<b>ug/L</b>
108-88-3	Toluene			<5.00	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene			<5.00	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene			<5.00	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene			<5.00	5.00	ug/L
79-01-6	Trichloroethene			<5.00	5.00	ug/L
75-69-4	Trichlorofluoromethane			<5.00	5.00	ug/L
76-13-1	Trichlorotrifluoroethane			<5.00	5.00	ug/L
108-05-4	Vinyl acetate			<10.0	10.0	ug/L
75-01-4	Vinyl chloride			<2.00	2.00	ug/L
1330-20-7	Xylene (total)			<15.0	15.0	ug/L
<b>CAS#</b>	<b>Surrogate</b>		<b>Conc. Spiked</b>	<b>Conc. Rec</b>	<b>Units</b>	<b>% Recovery</b>
460-00-4	4-Bromofluorobenzene		100	101	ug/L	101
1868-53-7	Dibromofluoromethane		100	103	ug/L	103
2037-26-5	Toluene d8		100	104	ug/L	104
17060-07-0	1,2-Dichloroethane-d4		100	98.8	ug/L	99
						Rec Limits
						78 - 130
						77 - 127
						76 - 134
						71 - 127

<b>MW-27D 20160928</b>	Collect Date	09/28/2016 14:15	GCAL ID	21609300205
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/03/2016 23:39	LBH	595814
<b>CAS#</b>	<b>Parameter</b>			<b>Result</b>	<b>LOQ</b>	<b>Units</b>
630-20-6	1,1,1,2-Tetrachloroethane			<5.00	5.00	ug/L
71-55-6	1,1,1-Trichloroethane			<5.00	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane			<5.00	5.00	ug/L
79-00-5	1,1,2-Trichloroethane			<5.00	5.00	ug/L
75-34-3	1,1-Dichloroethane			<5.00	5.00	ug/L
75-35-4	1,1-Dichloroethene			<5.00	5.00	ug/L
563-58-6	1,1-Dichloropropene			<5.00	5.00	ug/L
96-18-4	1,2,3-Trichloropropane			<5.00	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene			<5.00	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene			<5.00	5.00	ug/L
96-12-8	1,2-Dibromo-3-chloropropane			<5.00	5.00	ug/L
106-93-4	1,2-Dibromoethane			<5.00	5.00	ug/L

## Sample Results

<b>MW-27D 20160928</b>	Collect Date	09/28/2016 14:15	GCAL ID	21609300205
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/03/2016 23:39	LBH	595814

CAS#	Parameter	Result	LOQ	Units
95-50-1	1,2-Dichlorobenzene	<5.00	5.00	ug/L
107-06-2	1,2-Dichloroethane	<5.00	5.00	ug/L
540-59-0	1,2-Dichloroethene(Total)	<10.0	10.0	ug/L
78-87-5	1,2-Dichloropropane	<5.00	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	<5.00	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	<5.00	5.00	ug/L
142-28-9	1,3-Dichloropropane	<5.00	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	<5.00	5.00	ug/L
594-20-7	2,2-Dichloropropane	<5.00	5.00	ug/L
78-93-3	2-Butanone	<5.00	5.00	ug/L
95-49-8	2-Chlorotoluene	<5.00	5.00	ug/L
591-78-6	2-Hexanone	<5.00	5.00	ug/L
106-43-4	4-Chlorotoluene	<5.00	5.00	ug/L
99-87-6	4-Isopropyltoluene	<5.00	5.00	ug/L
108-10-1	4-Methyl-2-pentanone	<5.00	5.00	ug/L
<b>67-64-1</b>	<b>Acetone</b>	<b>6.94</b>	<b>5.00</b>	<b>ug/L</b>
71-43-2	Benzene	<5.00	5.00	ug/L
108-86-1	Bromobenzene	<5.00	5.00	ug/L
74-97-5	Bromoform	<5.00	5.00	ug/L
75-27-4	Bromochloromethane	<5.00	5.00	ug/L
75-25-2	Bromodichloromethane	<5.00	5.00	ug/L
74-83-9	Bromoform	<5.00	5.00	ug/L
75-15-0	Bromomethane	<5.00	5.00	ug/L
56-23-5	Carbon disulfide	<5.00	5.00	ug/L
108-90-7	Carbon tetrachloride	<5.00	5.00	ug/L
75-00-3	Chlorobenzene	<5.00	5.00	ug/L
67-66-3	Chloroethane	<5.00	5.00	ug/L
74-87-3	Chloroform	<5.00	5.00	ug/L
156-59-2	Chloromethane	<5.00	5.00	ug/L
10061-01-5	cis-1,2-Dichloroethene	<5.00	5.00	ug/L
124-48-1	cis-1,3-Dichloropropene	<5.00	5.00	ug/L
74-95-3	Dibromochloromethane	<5.00	5.00	ug/L
75-71-8	Dibromomethane	<5.00	5.00	ug/L
100-41-4	Dichlorodifluoromethane	<5.00	5.00	ug/L
87-68-3	Ethylbenzene	<5.00	5.00	ug/L
98-82-8	Hexachlorobutadiene	<5.00	5.00	ug/L
136777-61-2	Isopropylbenzene (Cumene)	<5.00	5.00	ug/L
74-88-4	m,p-Xylene	<10.0	10.0	ug/L
75-09-2	Methyl iodide	<5.00	5.00	ug/L
91-20-3	Methylene chloride	<5.00	5.00	ug/L
104-51-8	Naphthalene	<5.00	5.00	ug/L
103-65-1	n-Butylbenzene	<5.00	5.00	ug/L
95-47-6	n-Propylbenzene	<5.00	5.00	ug/L
135-98-8	o-Xylene	<5.00	5.00	ug/L
100-42-5	sec-Butylbenzene	<5.00	5.00	ug/L
1634-04-4	Styrene	<5.00	5.00	ug/L
98-06-6	tert-Butyl methyl ether (MTBE)	<5.00	5.00	ug/L
	tert-Butylbenzene	<5.00	5.00	ug/L

## Sample Results

<b>MW-27D 20160928</b>	Collect Date	09/28/2016 14:15	GCAL ID	21609300205
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/03/2016 23:39	LBH	595814
<b>CAS#</b>	<b>Parameter</b>			<b>Result</b>	<b>LOQ</b>	<b>Units</b>
<b>127-18-4</b>	<b>Tetrachloroethene</b>			<b>99.5</b>	<b>5.00</b>	<b>ug/L</b>
108-88-3	Toluene			<5.00	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene			<5.00	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene			<5.00	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene			<5.00	5.00	ug/L
79-01-6	Trichloroethene			<5.00	5.00	ug/L
75-69-4	Trichlorofluoromethane			<5.00	5.00	ug/L
76-13-1	Trichlorotrifluoroethane			<5.00	5.00	ug/L
108-05-4	Vinyl acetate			<5.00	5.00	ug/L
75-01-4	Vinyl chloride			<2.00	2.00	ug/L
1330-20-7	Xylene (total)			<15.0	15.0	ug/L
<b>CAS#</b>	<b>Surrogate</b>		<b>Conc. Spiked</b>	<b>Conc. Rec</b>	<b>Units</b>	<b>% Recovery</b>
460-00-4	4-Bromofluorobenzene		50	49.9	ug/L	100
1868-53-7	Dibromofluoromethane		50	52.3	ug/L	105
2037-26-5	Toluene d8		50	52.3	ug/L	105
17060-07-0	1,2-Dichloroethane-d4		50	49.3	ug/L	99
						71 - 127

<b>DUP-01 20160928</b>	Collect Date	09/28/2016 00:01	GCAL ID	21609300206
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/04/2016 00:04	LBH	595814
<b>CAS#</b>	<b>Parameter</b>			<b>Result</b>	<b>LOQ</b>	<b>Units</b>
630-20-6	1,1,1,2-Tetrachloroethane			<5.00	5.00	ug/L
71-55-6	1,1,1-Trichloroethane			<5.00	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane			<5.00	5.00	ug/L
79-00-5	1,1,2-Trichloroethane			<5.00	5.00	ug/L
75-34-3	1,1-Dichloroethane			<5.00	5.00	ug/L
75-35-4	1,1-Dichloroethene			<5.00	5.00	ug/L
563-58-6	1,1-Dichloropropene			<5.00	5.00	ug/L
96-18-4	1,2,3-Trichloropropane			<5.00	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene			<5.00	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene			<5.00	5.00	ug/L
96-12-8	1,2-Dibromo-3-chloropropane			<5.00	5.00	ug/L
106-93-4	1,2-Dibromoethane			<5.00	5.00	ug/L
95-50-1	1,2-Dichlorobenzene			<5.00	5.00	ug/L
107-06-2	1,2-Dichloroethane			<5.00	5.00	ug/L
540-59-0	1,2-Dichloroethene(Total)			<5.00	5.00	ug/L

## Sample Results

<b>DUP-01 20160928</b>	Collect Date	09/28/2016 00:01	GCAL ID	21609300206
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/04/2016 00:04	LBH	595814
<b>CAS#</b>	<b>Parameter</b>			<b>Result</b>	<b>LOQ</b>	<b>Units</b>
78-87-5	1,2-Dichloropropane			<5.00	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene			<5.00	5.00	ug/L
541-73-1	1,3-Dichlorobenzene			<5.00	5.00	ug/L
142-28-9	1,3-Dichloropropane			<5.00	5.00	ug/L
106-46-7	1,4-Dichlorobenzene			<5.00	5.00	ug/L
594-20-7	2,2-Dichloropropane			<5.00	5.00	ug/L
78-93-3	2-Butanone			<10.0	10.0	ug/L
95-49-8	2-Chlorotoluene			<5.00	5.00	ug/L
591-78-6	2-Hexanone			<10.0	10.0	ug/L
106-43-4	4-Chlorotoluene			<5.00	5.00	ug/L
99-87-6	4-Isopropyltoluene			<5.00	5.00	ug/L
108-10-1	4-Methyl-2-pentanone			<5.00	5.00	ug/L
67-64-1	Acetone			<5.00	5.00	ug/L
71-43-2	Benzene			<5.00	5.00	ug/L
108-86-1	Bromobenzene			<5.00	5.00	ug/L
74-97-5	Bromochloromethane			<5.00	5.00	ug/L
75-27-4	Bromodichloromethane			<5.00	5.00	ug/L
75-25-2	Bromoform			<5.00	5.00	ug/L
74-83-9	Bromomethane			<5.00	5.00	ug/L
75-15-0	Carbon disulfide			<5.00	5.00	ug/L
56-23-5	Carbon tetrachloride			<5.00	5.00	ug/L
108-90-7	Chlorobenzene			<5.00	5.00	ug/L
75-00-3	Chloroethane			<5.00	5.00	ug/L
67-66-3	Chloroform			<5.00	5.00	ug/L
74-87-3	Chloromethane			<5.00	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene			<5.00	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene			<5.00	5.00	ug/L
124-48-1	Dibromochloromethane			<5.00	5.00	ug/L
74-95-3	Dibromomethane			<5.00	5.00	ug/L
75-71-8	Dichlorodifluoromethane			<5.00	5.00	ug/L
100-41-4	Ethylbenzene			<5.00	5.00	ug/L
87-68-3	Hexachlorobutadiene			<5.00	5.00	ug/L
98-82-8	Isopropylbenzene (Cumene)			<5.00	5.00	ug/L
136777-61-2	m,p-Xylene			<5.00	5.00	ug/L
74-88-4	Methyl iodide			<10.0	10.0	ug/L
75-09-2	Methylene chloride			<5.00	5.00	ug/L
91-20-3	Naphthalene			<10.0	10.0	ug/L
104-51-8	n-Butylbenzene			<5.00	5.00	ug/L
103-65-1	n-Propylbenzene			<5.00	5.00	ug/L
95-47-6	o-Xylene			<5.00	5.00	ug/L
135-98-8	sec-Butylbenzene			<5.00	5.00	ug/L
100-42-5	Styrene			<5.00	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)			<5.00	5.00	ug/L
98-06-6	tert-Butylbenzene			<5.00	5.00	ug/L
<b>127-18-4</b>	<b>Tetrachloroethene</b>			<b>168</b>	<b>5.00</b>	<b>ug/L</b>
108-88-3	Toluene			<5.00	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene			<5.00	5.00	ug/L

## Sample Results

<b>DUP-01 20160928</b>	Collect Date	09/28/2016 00:01	GCAL ID	21609300206
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/04/2016 00:04	LBH	595814

CAS#	Parameter	Result	LOQ	Units
10061-02-6	trans-1,3-Dichloropropene	<5.00	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	<5.00	5.00	ug/L
79-01-6	Trichloroethene	<5.00	5.00	ug/L
75-69-4	Trichlorofluoromethane	<5.00	5.00	ug/L
76-13-1	Trichlorotrifluoroethane	<5.00	5.00	ug/L
108-05-4	Vinyl acetate	<10.0	10.0	ug/L
75-01-4	Vinyl chloride	<2.00	2.00	ug/L
1330-20-7	Xylene (total)	<15.0	15.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	99.7	ug/L	100	78 - 130
1868-53-7	Dibromofluoromethane	100	105	ug/L	105	77 - 127
2037-26-5	Toluene d8	100	105	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	98.8	ug/L	99	71 - 127

<b>TRIP BLANK 20160928</b>	Collect Date	09/28/2016 00:01	GCAL ID	21609300207
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/04/2016 00:26	LBH	595814

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	<5.00	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	<5.00	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	<5.00	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	<5.00	5.00	ug/L
75-34-3	1,1-Dichloroethane	<5.00	5.00	ug/L
75-35-4	1,1-Dichloroethene	<5.00	5.00	ug/L
563-58-6	1,1-Dichloropropene	<5.00	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	<5.00	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	<5.00	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	<5.00	5.00	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/L
106-93-4	1,2-Dibromoethane	<5.00	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	<5.00	5.00	ug/L
107-06-2	1,2-Dichloroethane	<5.00	5.00	ug/L
540-59-0	1,2-Dichloroethene(Total)	<10.0	10.0	ug/L
78-87-5	1,2-Dichloropropene	<5.00	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	<5.00	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	<5.00	5.00	ug/L

## Sample Results

<b>TRIP BLANK 20160928</b>	Collect Date	09/28/2016 00:01	GCAL ID	21609300207
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/04/2016 00:26	LBH	595814

CAS#	Parameter	Result	LOQ	Units
142-28-9	1,3-Dichloropropane	<5.00	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	<5.00	5.00	ug/L
594-20-7	2,2-Dichloropropane	<5.00	5.00	ug/L
78-93-3	2-Butanone	<5.00	5.00	ug/L
95-49-8	2-Chlorotoluene	<5.00	5.00	ug/L
591-78-6	2-Hexanone	<5.00	5.00	ug/L
106-43-4	4-Chlorotoluene	<5.00	5.00	ug/L
99-87-6	4-Isopropyltoluene	<5.00	5.00	ug/L
108-10-1	4-Methyl-2-pentanone	<5.00	5.00	ug/L
67-64-1	Acetone	<5.00	5.00	ug/L
71-43-2	Benzene	<5.00	5.00	ug/L
108-86-1	Bromobenzene	<5.00	5.00	ug/L
74-97-5	Bromochloromethane	<5.00	5.00	ug/L
75-27-4	Bromodichloromethane	<5.00	5.00	ug/L
75-25-2	Bromoform	<5.00	5.00	ug/L
74-83-9	Bromomethane	<5.00	5.00	ug/L
75-15-0	Carbon disulfide	<5.00	5.00	ug/L
56-23-5	Carbon tetrachloride	<5.00	5.00	ug/L
108-90-7	Chlorobenzene	<5.00	5.00	ug/L
75-00-3	Chloroethane	<5.00	5.00	ug/L
67-66-3	Chloroform	<5.00	5.00	ug/L
74-87-3	Chloromethane	<5.00	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	<5.00	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	<5.00	5.00	ug/L
124-48-1	Dibromochloromethane	<5.00	5.00	ug/L
74-95-3	Dibromomethane	<5.00	5.00	ug/L
75-71-8	Dichlorodifluoromethane	<5.00	5.00	ug/L
100-41-4	Ethylbenzene	<5.00	5.00	ug/L
87-68-3	Hexachlorobutadiene	<5.00	5.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	<5.00	5.00	ug/L
136777-61-2	m,p-Xylene	<10.0	10.0	ug/L
74-88-4	Methyl iodide	<5.00	5.00	ug/L
75-09-2	Methylene chloride	<5.00	5.00	ug/L
91-20-3	Naphthalene	<5.00	5.00	ug/L
104-51-8	n-Butylbenzene	<5.00	5.00	ug/L
103-65-1	n-Propylbenzene	<5.00	5.00	ug/L
95-47-6	o-Xylene	<5.00	5.00	ug/L
135-98-8	sec-Butylbenzene	<5.00	5.00	ug/L
100-42-5	Styrene	<5.00	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	<5.00	5.00	ug/L
98-06-6	tert-Butylbenzene	<5.00	5.00	ug/L
127-18-4	Tetrachloroethene	<5.00	5.00	ug/L
108-88-3	Toluene	<5.00	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	<5.00	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	<5.00	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	<5.00	5.00	ug/L
79-01-6	Trichloroethene	<5.00	5.00	ug/L

## Sample Results

<b>TRIP BLANK 20160928</b>	Collect Date	09/28/2016 00:01	GCAL ID	21609300207
	Receive Date	09/30/2016 09:54	Matrix	Water

### EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/04/2016 00:26	LBH	595814

CAS#	Parameter		Result	LOQ	Units	
75-69-4	Trichlorofluoromethane		<5.00	5.00	ug/L	
76-13-1	Trichlorotrifluoroethane		<5.00	5.00	ug/L	
108-05-4	Vinyl acetate		<5.00	5.00	ug/L	
75-01-4	Vinyl chloride		<2.00	2.00	ug/L	
1330-20-7	Xylene (total)		<15.0	15.0	ug/L	
CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51.8	ug/L	104	78 - 130
1868-53-7	Dibromofluoromethane	50	51.5	ug/L	103	77 - 127
2037-26-5	Toluene d8	50	54.2	ug/L	108	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.3	ug/L	99	71 - 127

## GC/MS Volatiles QC Summary

Analytical Batch 595814	Client ID MB595814	GCAL ID 1613306	Sample Type MB	Prep Date NA	Analysis Date 10/03/2016 21:41	Matrix Water	LCS595814 1613307 LCS NA	LCSD595814 1613308 LCSD NA	LCSD595814 1613309 Water			
EPA 8260B		Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	630-20-6	<1.00	1.00	50.0	53.3	107	75 - 124	50.0	53.9	108	1	30
1,1,1-Trichloroethane	71-55-6	<1.00	1.00	50.0	50.7	101	76 - 126	50.0	49.4	99	3	30
1,1,2,2-Tetrachloroethane	79-34-5	<1.00	1.00	50.0	46.4	93	70 - 122	50.0	46.2	92	0	30
1,1,2-Trichloroethane	79-00-5	<1.00	1.00	50.0	50.9	102	72 - 121	50.0	52.0	104	2	30
1,1-Dichloroethane	75-34-3	<1.00	1.00	50.0	46.1	92	74 - 127	50.0	45.6	91	1	30
1,1-Dichloroethene	75-35-4	<1.00	1.00	50.0	54.6	109	69 - 129	50.0	54.1	108	1	20
1,1-Dichloropropene	563-58-6	<1.00	1.00	50.0	53.2	106	72 - 131	50.0	52.8	106	1	30
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	50.0	46.1	92	70 - 120	50.0	46.5	93	1	30
1,2,4-Trichlorobenzene	120-82-1	<1.00	1.00	50.0	50.9	102	61 - 135	50.0	51.4	103	1	30
1,2,4-Trimethylbenzene	95-63-6	<1.00	1.00	50.0	53.1	106	74 - 125	50.0	52.4	105	1	30
1,2-Dibromo-3-chloropropane	96-12-8	<1.00	1.00	50.0	49.5	99	57 - 121	50.0	50.6	101	2	30
1,2-Dibromoethane	106-93-4	<1.00	1.00	50.0	53.6	107	70 - 124	50.0	55.7	111	4	30
1,2-Dichlorobenzene	95-50-1	<1.00	1.00	50.0	51.2	102	71 - 126	50.0	51.1	102	0	30
1,2-Dichloroethane	107-06-2	<1.00	1.00	50.0	45.6	91	71 - 129	50.0	47.0	94	3	30
1,2-Dichloroethene(Total)	540-59-0	<2.00	2.00	100	100	100	74 - 128	100	99.1	99	1	30
1,2-Dichloropropane	78-87-5	<1.00	1.00	50.0	48.1	96	72 - 128	50.0	48.2	96	0	30
1,3,5-Trimethylbenzene	108-67-8	<1.00	1.00	50.0	51.9	104	71 - 132	50.0	50.9	102	2	30
1,3-Dichlorobenzene	541-73-1	<1.00	1.00	50.0	50.4	101	74 - 126	50.0	50.4	101	0	30
1,3-Dichloropropane	142-28-9	<1.00	1.00	50.0	48.1	96	74 - 122	50.0	48.9	98	2	30
1,4-Dichlorobenzene	106-46-7	<1.00	1.00	50.0	49.9	100	72 - 122	50.0	50.1	100	0	30
2,2-Dichloropropane	594-20-7	<1.00	1.00	50.0	50.6	101	77 - 124	50.0	50.2	100	1	30
2-Butanone	78-93-3	<5.00	5.00	50.0	50.5	101	58 - 137	50.0	51.1	102	1	30
2-Chlorotoluene	95-49-8	<1.00	1.00	50.0	49.2	98	72 - 127	50.0	48.7	97	1	30
2-Hexanone	591-78-6	<5.00	5.00	50.0	53.6	107	50 - 135	50.0	53.8	108	0	30
4-Chlorotoluene	106-43-4	<1.00	1.00	50.0	50.2	100	75 - 126	50.0	49.3	99	2	30
4-Isopropyltoluene	99-87-6	<1.00	1.00	50.0	54.5	109	71 - 129	50.0	53.3	107	2	30
4-Methyl-2-pentanone	108-10-1	<1.00	1.00	50.0	52.5	105	57 - 132	50.0	54.0	108	3	30
Acetone	67-64-1	<1.00	1.00	50.0	46.4	93	44 - 156	50.0	46.8	94	1	30
Benzene	71-43-2	<1.00	1.00	50.0	51.5	103	70 - 129	50.0	51.0	102	1	20
Bromobenzene	108-86-1	<1.00	1.00	50.0	45.8	92	71 - 120	50.0	45.7	91	0	30
Bromochloromethane	74-97-5	<1.00	1.00	50.0	50.7	101	76 - 130	50.0	52.7	105	4	30
Bromodichloromethane	75-27-4	<1.00	1.00	50.0	49.3	99	74 - 125	50.0	49.8	100	1	30
Bromoform	75-25-2	<1.00	1.00	50.0	54.5	109	64 - 122	50.0	55.1	110	1	30
Bromomethane	74-83-9	<1.00	1.00	50.0	39.3	79	47 - 138	50.0	40.2	80	2	30
Carbon disulfide	75-15-0	<1.00	1.00	50.0	53.4	107	69 - 136	50.0	52.3	105	2	30
Carbon tetrachloride	56-23-5	<1.00	1.00	50.0	50.6	101	76 - 128	50.0	50.4	101	0	30
Chlorobenzene	108-90-7	<1.00	1.00	50.0	52.2	104	74 - 123	50.0	52.2	104	0	20
Chloroethane	75-00-3	<1.00	1.00	50.0	46.8	94	62 - 141	50.0	50.7	101	8	30
Chloroform	67-66-3	<1.00	1.00	50.0	47.5	95	75 - 122	50.0	47.7	95	0	30
Chloromethane	74-87-3	<1.00	1.00	50.0	39.7	79	59 - 132	50.0	40.5	81	2	30
cis-1,2-Dichloroethene	156-59-2	<1.00	1.00	50.0	49.7	99	73 - 130	50.0	49.9	100	0	30
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	50.0	48.1	96	71 - 132	50.0	48.8	98	1	30
Dibromochloromethane	124-48-1	<1.00	1.00	50.0	54.5	109	71 - 123	50.0	55.0	110	1	30
Dibromomethane	74-95-3	<1.00	1.00	50.0	49.9	100	72 - 129	50.0	50.6	101	1	30
Dichlorodifluoromethane	75-71-8	<1.00	1.00	50.0	48.1	96	58 - 140	50.0	46.2	92	4	30
Ethylbenzene	100-41-4	<1.00	1.00	50.0	53.7	107	74 - 126	50.0	53.0	106	1	30
Hexachlorobutadiene	87-68-3	<1.00	1.00	50.0	51.6	103	61 - 144	50.0	50.8	102	2	30
Isopropylbenzene (Cumene)	98-82-8	<1.00	1.00	50.0	57.0	114	71 - 125	50.0	56.5	113	1	30
m,p-Xylene	136777-61-2	<2.00	2.00	100	110	110	74 - 126	100	109	109	1	30
Methyl iodide	74-88-4	<5.00	5.00	50.0	35.5	71	57 - 141	50.0	33.7	67	5	30
Methylene chloride	75-09-2	<1.00	1.00	50.0	46.6	93	68 - 132	50.0	47.2	94	1	30
Naphthalene	91-20-3	<5.00	5.00	50.0	49.1	98	57 - 138	50.0	49.5	99	1	35
n-Butylbenzene	104-51-8	<1.00	1.00	50.0	53.8	108	69 - 134	50.0	52.5	105	2	30
n-Propylbenzene	103-65-1	<2.00	2.00	50.0	48.7	97	75 - 129	50.0	47.6	95	2	30
o-Xylene	95-47-6	<1.00	1.00	50.0	57.9	116	73 - 130	50.0	57.2	114	1	30
sec-Butylbenzene	135-98-8	<1.00	1.00	50.0	52.1	104	70 - 136	50.0	50.3	101	4	30
Styrene	100-42-5	<1.00	1.00	50.0	58.4	117	71 - 127	50.0	58.3	117	0	30
tert-Butyl methyl ether (MTBE)	1634-04-4	<1.00	1.00	50.0	53.0	106	71 - 125	50.0	54.6	109	3	30

## GC/MS Volatiles QC Summary

<b>Analytical Batch</b>	Client ID 595814	MB595814	LCS595814	LCSD595814								
	GCAL ID 1613306	1613307		1613308								
Sample Type Prep Date	MB NA	LCS NA	LCSD NA									
Analysis Date Matrix	10/03/2016 21:41 Water	10/03/2016 20:12 Water	10/03/2016 20:34 Water									
<b>EPA 8260B</b>		Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
tert-Butylbenzene	98-06-6	<1.00	1.00	50.0	51.2	102	72 - 126	50.0	49.8	100	3	30
Tetrachloroethene	127-18-4	<1.00	1.00	50.0	54.1	108	68 - 128	50.0	53.5	107	1	30
Toluene	108-88-3	<1.00	1.00	50.0	50.6	101	72 - 120	50.0	50.4	101	0	20
trans-1,2-Dichloroethene	156-60-5	<1.00	1.00	50.0	50.4	101	69 - 132	50.0	49.2	98	2	30
trans-1,3-Dichloropropene	10061-02-6	<1.00	1.00	50.0	47.1	94	71 - 131	50.0	47.6	95	1	30
trans-1,4-Dichloro-2-butene	110-57-6	<5.00	5.00	50.0	44.2	88	56 - 132	50.0	44.2	88	0	30
Trichloroethene	79-01-6	<1.00	1.00	50.0	51.6	103	76 - 129	50.0	51.2	102	1	20
Trichlorofluoromethane	75-69-4	<1.00	1.00	50.0	51.3	103	72 - 136	50.0	50.2	100	2	30
Trichlorotrifluoroethane	76-13-1	<1.00	1.00	50.0	55.2	110	72 - 136	50.0	53.8	108	3	30
Vinyl acetate	108-05-4	<5.00	5.00	50.0	49.3	99	54 - 147	50.0	49.7	99	1	30
Vinyl chloride	75-01-4	<0.400	0.400	50.0	48.1	96	68 - 132	50.0	46.3	93	4	30
Xylene (total)	1330-20-7	<3.00	3.00	150	168	112	74 - 127	150	166	111	1	30
<b>Surrogate</b>												
1,2-Dichloroethane-d4	17060-07-0	48.8	98	50	47.6	95	71 - 127	50	47.6	95	NA	NA
4-Bromofluorobenzene	460-00-4	51.5	103	50	54.4	109	78 - 130	50	53.7	107	NA	NA
Dibromofluoromethane	1868-53-7	51	102	50	50.5	101	77 - 127	50	49.9	100	NA	NA
Toluene d8	2037-26-5	53.8	108	50	51.2	102	76 - 134	50	51.4	103	NA	NA



7979 Innovation Park Dr., Baton Rouge, LA 70820-7402  
Phone: 225.769.4900 • Fax: 225.767.5717 • www.gcal.com

# CHAIN OF CUSTODY RECORD

Client ID: 4447 - Ramboll ENVIRON International Corp

SDG: 216093002

PM: SAB3



## Report to:

Client: Ramboll Environ  
Address: 1600 Parkwood Circle,  
Suite 310, Atlanta, GA 30339  
Contact: Robert Patchett  
Phone: 770-874-5010  
E-mail: rpatchett@ramboll.com

## Bill to:

Client: Same  
Address:  
Contact:  
Phone:  
E-mail:

P.O. Number

Project Name/Number

CCHT / 07-21924M

Sampled By:

Aaron D. Hottenstein

## Analytical Requests & Method

## GCAL use only:

Custody Seal  
used  yes  no  
intact  yes  no

Temperature °C 1.8C26  
45 rpm

- Dissolved Analysis Requested
- Field filtered
- Lab filtered



## SAMPLE RECEIVING CHECKLIST



<b>SAMPLE DELIVERY GROUP 216093002</b>		<b>CHECKLIST</b>		
Client 4447 - Ramboll ENVIRON International Corp	PM SAB3	Transport Method FEDEX	YES	NO
Profile Number 229430	Received By McCune, Dodie N.	Samples received with proper thermal and chemical preservation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Line Item(s) 1 - Waters	Receive Date(s) 09/30/16	Radioactivity is <1600 cmp? If no, record cmp value in notes section.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Custody seals present and intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		COC relinquished and complete (including sample IDs, collect dates/times, and sampler name)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Short holds or RUSH samples received?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		All containers received in good condition and within hold time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		All sample labels and containers received match the chain of custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Preservation checked at receipt? Exceptions: VOC, Coliform, TOC, Oil and Grease, DOC	<input type="checkbox"/>	<input type="checkbox"/>
		Preservative added to any containers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		VOC water containers received with headspace < 6mm?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Received filtered sample volume for dissolved analysis?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Trip blank present in all coolers containing VOC waters?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Samples collected in containers provided by GCAL?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>COOLERS</b>		<b>DISCREPANCIES</b>	<b>LAB PRESERVATIONS</b>	
Airbill 777352551700	Thermometer ID: E26	Temp(°C) 1.8	None	None
NOTES				

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