

## Voluntary Remediation Plan and Application Carolina Commercial Heat Treat

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

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

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## Acronyms and Abbreviations

11DCE	1,1-Dichloroethene
12DCE	1,2-Dichloroethene
BTP	Bodycoat Thermal Processing
cm/sec	Centimeters per Second
CAP	Corrective Action Plan
cDCE	cis-1,2-Dichloroethene
CSM	Conceptual Site Model
CSR	Compliance Status Report
EDR	Environmental Data Resources
ft bgs	Feet Below Ground Surface
ft/day	Feet per Day
GA EPD	Georgia Environmental Protection Division
HSI	Hazardous Site Inventory
HSRA	Hazardous Site Response Act
kg	Kilograms
m <sup>3</sup> /day	Cubic Meters per Day
mg/day	Milligrams per Day
mg/kg	Milligrams per kilogram
PCE	Perchloroethylene
RRS	Risk Reduction Standards
SVE	Solid Vapor Extraction
TCE	Trichloroethylene
USEPA	United States Environmental Protection Agency
VC	Vinyl Chloride
VOC	Volatile Organic Compound
VRP	Voluntary Remediation Program

## 1 Introduction

This application to the Georgia Voluntary Remediation Program (VRP) has been prepared for Rexmet Corporation (Rexmet). Rexmet currently leases the property located at 1690 Highway 138 NE in Conyers Georgia to Bodycote Thermal Processing (BTP), formerly known as Carolina Commercial Heat Treat (CCHT), which operates a metals heat treating business on the property. 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) in soil. In addition to PCE in the soil, PCE and its breakdown products trichloroethylene (TCE); cis1,2-dichloroethene (cDCE); and, 1,1-dichloroethene (11DCE) have been detected in the groundwater associated with the site. The groundwater impacts extend southeast from the former CCHT property across Highway 138. GA EPD determined that clean up levels have been met for the source materials and soil as stated in a March 2001 letter, subsequent investigation and corrective actions have focused on groundwater impacts across Highway 138.

The site has undergone a series of environmental assessments to characterize the nature and extent of impacts, including assessments based on GA EPD comments on multiple Compliance Status Reports (CSRs) and associated addenda. Characterization and delineation of the groundwater impacts have been ongoing since the site was listed on the HSI in 1995. During these assessment activities, a total of 29 groundwater monitoring wells have been installed upgradient, downgradient, and cross gradient of the property. ENVIRON has prepared this report on behalf of Rexmet in support of Rexmet's application to enroll the site in the VRP. The Voluntary Investigation and Remediation Plan Application Form is provided in **Attachment A**.

The remainder of this report is organized as follows:

- Section 2: Site Background
- Section 3: Site Setting
- Section 4: Nature and Extent of Contamination
- Section 5: Exposure Assessment
- Section 6: Cleanup Goals
- Section 7: Proposed Corrective Action
- Section 8: Project Schedule
- Section 9: References
- Attachment A: VRP Application Form
- Supporting Appendices

## 2 Site Background

This section of the report includes a description of the site and a site history, including the investigations and associated reports submitted to the GA EPD and a summary of soil and groundwater corrective actions associated with the site.

## 2.1 Site Description

The Former CCHT property is located at 1690 Highway 138 NE in Conyers, Rockdale County, Georgia, approximately 1.3 miles north of Interstate 20 (I-20). According to the Rockdale County Board of Assessors, the 1.7 acre property is currently owned and maintained by John Rex, and consists of Tax Parcel ID 069001003L. A warranty deed with a legal description of the property and a tax plat map are included in **Appendix A**. An asphalt parking lot exists on the south and southwest portions of the property. Residential properties are located north and west (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 surface water drainage swale. The 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. The site layout presented in **Figure 1** includes the subject property as well as surrounding properties.

## 2.2 Site History

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 the 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 beneath the parking lot. A series of six multi-phase extraction (MPE) events were performed to remediate the groundwater at the source area.

Active remediation via the air sparge system was suspended in June 2009 while the SVE portion of the system remained in operation. It 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 are monitored.

In order to monitor the natural attenuation of the groundwater impacts following remediation, groundwater monitoring events have been performed semi-annually since 2009. 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 shut down groundwater concentrations have decreased by an order of magnitude. These activities are discussed in Section 4.4 of this report.

To assess the bedrock groundwater conditions and vertically delineate the groundwater impacts, deep groundwater monitoring wells were installed in 2012 and 2013. The well installation and groundwater characterization is discussed in Section 3 of this report. Attempted installation of additional shallow groundwater monitoring wells northeast and southeast of the former Carpenter Insulation building is also discussed in Section 3.1.

A summary listing of the investigative and remedial activities that have occurred since 1997 is presented below, followed by expanded information regarding the corrective actions performed at the site.

- April 1997:                          Evaluated the former degreasing pit area

- June 1997: Conducted source area SVE pilot test and designed SVE system
- January 1998: Installed and began operation of source area SVE system
- December 1998: Submitted Compliance Status Report
- January 1999: Sampled soil in source area following SVE operation
- March 1999: Submitted Compliance Status Report Addendum #1
- June 1999: Installed and sampled a deep monitoring well to define the vertical extent of impact (MW-10). Advanced five additional DPT borings (B-6 thru B-10) to address horizontal and vertical extent of soil impacts
- August 1999: Submitted Compliance Status Report Addendum #2
- December 1999: Offsite assessment using DPT screening. Installed and sampled two monitoring wells (MW-11 and MW-12) to assess groundwater impacts
- January 2000: Discontinued SVE remediation of former source area, performed supplemental groundwater sampling of selected monitoring wells
- February 2000: Conducted air sparge pilot test to design a system to address offsite groundwater impacts
- July 2000: Supplemental offsite assessment including DPT screening and surface water sampling.
- January 2001: Submitted Corrective Action Plan
- September 2001: Installed remediation wells
- January 2002: Baseline groundwater sampling event for all wells
- March 2002: Installed and start up air sparge/SVE remediation system
- July 2003: Submitted OM&M Report to EPD; air sparge system re-design and retrofit performed and system started up
- March 2005: Commenced onsite source removal via six MPE episodic events
- 2005 – 2012: Performed semi-annual groundwater sampling in March and September each year, culminating with submittal of annual Operation, Maintenance, & Monitoring (OM&M) Reports in June
- February 2012: Groundwater remediation system shut down

## **Summary of Corrective Actions – Soil**

The soil was characterized during assessment activities performed in 1994 through 1997. The source of contamination was identified as a former degreasing pit and septic system that were used in the mid-1980s. An SVE system operated on site from 1998 to 2000 to remediate the source area soil contamination. The GA EPD determined that clean up levels have been met for the source materials and soil as stated in a March 2001 letter.

## **Summary of Corrective Actions – Groundwater**

An air sparge/SVE remediation system has been the primary method for remediating groundwater at the site. A description of the system operation and performance is presented below.

As described in the CAP, the remediation system was designed to function as a sparge treatment and barrier wall (“curtain”) for the chlorinated constituents that have migrated from the former CCHT property in the groundwater. The system performance and uptime percentage is an indicator of the effectiveness of treating the contaminants in groundwater as it passed through the curtain. Prior to the actual blower malfunction in September 2010, the SVE system was operating at greater than 95 percent run-time. The SVE system has remained off while evaluating the groundwater concentrations, and is currently off as groundwater attenuation is being monitored. The remedial activities have substantially reduced the groundwater concentrations on site creating a detached plume downgradient of the site that is naturally attenuating. Groundwater quality is discussed in Section 4.3 of this report.

## **3 Site Setting**

### **3.1 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). This is followed by a second localized bedrock high area further to the southeast. The bedrock low area situated between the two localized bedrock high areas essentially creates a depressed area of bedrock situated underneath and/or immediately downgradient of the suspected release area.

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, shallow 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. These locations are identified on **Figure 2**.

### **3.2 Site Hydrogeology**

Well yield tests performed during investigations activities in January 1998 indicated monitoring wells would produce an estimated 0.5 to 1.5 gallons per minute. A sodium bromide injection study performed in 2000 yielded an estimated groundwater flow velocity range of 0.1 to 12 feet

per day. Some of the shallow groundwater beneath the site appears to flow into the underlying bedrock as it moves downgradient, after which it ultimately discharges to the retention pond.

### 3.2.1 Groundwater Flow Direction

Based on current and historic groundwater sampling events, the groundwater flows generally to the southeast, consistent with the surface topography. The groundwater gradient for these events was approximately 0.025 ft/ft as measured between wells MW-4 and MW-19, which is consistent with the historic data.

Groundwater elevations have shown little fluctuation since the submittal of the 2005 OM&M Report. Graphical representations of groundwater elevation changes for monitoring wells are included in the PCE concentration trend charts located in **Appendix B**. Depth to groundwater measurements and corresponding groundwater elevations are presented for the May 2013, and previous groundwater sampling events in **Table 1**.

Monitoring well locations and general site features are shown on **Figures 1** and **2**. The potentiometric surface map based on the May 2013 gauging data is presented as **Figure 3**. The groundwater elevation data for all these monitoring events are presented in **Table 1**.

## 4 Nature and Extent of Contamination

The source area was identified as a former degreasing pit located in the central portion of the facility which was filled with concrete in the mid-1980s, and a former septic system located in the southern portion of the property. Based on data presented in historic CSRs and the CAP, as well as recent OM&M reports, the soil has been characterized and remediated and the groundwater impacts have been delineated. This information is discussed further in the following subsections.

### 4.1 Soil

Based on assessment activities performed from 1994 through 1997 soil impacts were limited to the central portion of the former CCHT property. Following the SVE remedial activities the GA EPD determined that clean up levels have been met for the soil as stated in a March 2001 letter.

### 4.2 Groundwater

Volatile organic compounds (VOCs) have been detected in groundwater at the site. A summary of historic and recent VOC concentrations in groundwater are presented in **Table 2**.

During the most recent sampling event (May 2013), PCE concentrations were detected greater than the 5 ug/L detection limit in 12 of the 29 monitoring wells. Concentrations of PCE ranged from 5.7 µg/L in MW-12 to 318 µg/L in MW-25D. Several breakdown products of PCE (including TCE, 11DCE, and cDCE) have been historically detected in the downgradient monitoring wells at the site. The laboratory analytical data is presented in **Appendix C**.

Contaminant concentrations were plotted against time to show the trending of the chemical constituent to allow an analysis of the fate and transport mechanisms and natural attenuation conditions that are occurring in the subsurface. Additionally, water table elevations were plotted with the concentration trends to depict the water table fluctuations that were occurring during the sampling period. This was done to evaluate whether a correlation exists between water table conditions and changing contaminant concentrations. Graphical trend analyses of historic PCE concentrations were prepared for select wells and are presented in **Appendix B**.

Concentrations of PCE have generally trended downward and have been relatively stable from December 2009 through May 2013. The most dramatic downward trend in groundwater concentrations has been observed in the bedrock wells. During the monitoring period after the groundwater remediation system shut down groundwater concentrations have decreased by an order of magnitude. The extent of impacted groundwater has been delineated to the GA EPD Type 1 Risk Reduction Standard for PCE of 5 µg/L. The extent of the impacts have been defined in the upgradient direction (MW-3, MW-4, and MW-5), downgradient direction (MW-16 and MW-17), and vertically (MW-28D). In addition the groundwater impacts have been delineated laterally to the southwest in permanent wells (MW-11 and MW-29D) and temporary monitoring wells (TW13-1 and TW13-2), and to the northeast by wells (MW-9R and MW-22) and shallow bedrock.

The groundwater analytical results are summarized in **Table 2**, and **Figure 4** presents the results for the constituents that were detected during the May 2013 monitoring event. Groundwater PCE concentrations from the May 2013 sampling event are also illustrated in **Figure 5**, which shows contaminant distribution in cross-section along the plume axis.

#### 4.3 Surface Water

Two surface water samples were collected during the February 2012 semi-annual groundwater sampling event. The surface water samples were collected at the entrance to, and just downstream of the confluence of the intermittent drainage swale and the pond (**Figure 2**). The only constituent detected was PCE, which was detected in the sample collected at the entrance of the drainage swale to the retention pond. The sample contained PCE at a concentration of 5.37 µg/L, which is only slightly greater than the detection limit of 5.0 µg/L, and only slightly greater than the Georgia In-Stream Water Quality Standard (ISWQS) for PCE of 3.3 µg/L. The surface water analytical results are summarized in **Table 3**. The surface water sampling activities are described in **Appendix D**.

#### 4.4 Summary

Based on current site conditions, horizontal and vertical delineation has been achieved for the site-related regulated substances associated with the site.

### 5 Exposure Assessment

This section presents the exposure assessment for the site, in which currently complete and reasonably-anticipated future exposure pathways are identified. To identify these pathways, the contaminant sources and release mechanisms are presented, followed by the potential receptors and associated exposure routes. Based on this information, a site-specific conceptual site model (CSM) is developed.

#### 5.1 Contaminant Sources and Release Mechanisms

The sources of the regulated substances detected at the site are the former degreasing pit located in the central portion of the property and the former septic system located in the southern portion of the property. It is possible that the degreasing pit leaked during its usage, with the regulated substances in the material that leaked from the degreasing pit reaching the surrounding soil and then reaching the groundwater via infiltration and leaching from the soil. Releases from the former septic system likely reached the groundwater in the same manner as those from the degreasing pit.

## 5.2 Potential Receptors and Exposure Routes

The potential receptors for media impacted by site-related constituents were identified based on current and reasonably-anticipated land use at the site. Once the receptors and associated media are identified, the exposure routes (e.g., ingestion, dermal contact, inhalation) for each receptor are specified. Each combination of source, release mechanism, receptor, and exposure route is termed an exposure pathway, and each currently complete or reasonably complete future exposure pathway will be considered in the development of cleanup goals for the site (**Section 6**). Because the GA EPD determined that clean up levels have been met for the source materials and soil, the exposure assessment for the former CCHT site is focused on groundwater and surface water.

### 5.2.1 Groundwater

Currently, the groundwater at the site is not used as a source of potable water, and it is unlikely that that situation will change as potable water to the area is supplied by Rockdale Public Water. To further evaluate potential groundwater receptors, ENVIRON conducted a well survey in February 2012. The well survey identified one well within a 1-mile radius of the site. The well that was identified was located at 1706 Highway 138 NE (approximately 700 feet from the site), which is side- and/or upgradient of the site, and supplies water to the bathroom at the Accurate Transmission automobile maintenance shop. Groundwater is not being used as a source of drinking water in the area. In addition, because the depth to groundwater at the site is approximately 20 feet, exposures to utility and construction workers are not considered likely. Based on this information, there are no current or reasonably anticipated future complete pathways associated with ingestion of or dermal contact with the groundwater at the site. However, inhalation of vapors from the VOCs in the groundwater that migrate upwards through the soil and into an onsite building (i.e., via vapor intrusion) may occur. Therefore, inhalation exposure to VOCs in the groundwater via vapor intrusion will be evaluated and groundwater cleanup goals based on this exposure pathway will be developed.

### 5.2.2 Surface Water

The portion of the site that is across Highway 138 contains a retention pond and an intermittent drainage swale that directs precipitation to the retention pond. Groundwater that is impacted by site-related constituents may also enter the retention pond and drainage swale. While it is unlikely that significant human exposures to the surface water in these two features is occurring or will occur, potential incidental ingestion of and dermal contact with surface water by trespassers will be evaluated and cleanup goals based on this exposure pathway will be developed. In addition, the ecological reconnaissance (see **Appendix D**) indicated that wildlife receptors are present in the most downstream portions of the drainage swale. Therefore, direct contact with surface water by ecological receptors represents a potentially complete exposure pathway and cleanup goals based on this exposure pathway will be considered and/or developed.

## 5.3 Summary of Potentially Complete Exposure Pathways and CSM

Based on the site data and available information, the potentially complete exposure pathways associated with the site are:

- Exposure of commercial/industrial workers to constituents in the groundwater via vapor intrusion and subsequent inhalation;

- Exposure of trespassers to constituents in the surface water via incidental ingestion and dermal contact; and,
- Exposure of ecological receptors to constituents in the surface water via direct contact.

The conceptual site model that depicts and summarizes the potentially complete exposure pathways (contaminant sources, release mechanisms, exposure media, receptors, and exposure routes) is presented in **Figure 6 and Figure 7**.

## 6 Cleanup Goals

The subject property is currently used for industrial purposes and will remain as such in the future. Site-specific cleanup goals were developed for the identified potentially complete exposure pathways (i.e., vapor intrusion into the buildings and direct contact with the surface water). As such, commercial/industrial workers, trespassers, and ecological receptors were considered in the development of the cleanup goals (**Figure 7**). To calculate these cleanup goals, the exposure factor values used to calculate the criteria were obtained from federal guidance (USEPA, 2000; USEPA, 2004; USEPA, 2012) and professional judgment, and discussed below.

### 6.1 Commercial/Industrial Worker – Vapor Intrusion

Commercial/industrial workers were assumed to have a body weight of 70 kilograms (kg) and be present at work for 8 hours per day over the course of 250 days per year for 25 years (EPD, 2009; USEPA, 2012). To be consistent with HSRA, the target hazard index (noncarcinogens) was 1 and the target cancer risk was 1E-05 for Class A and Class B carcinogens and 1E-04 for Class C and Class D carcinogens. These exposure factors, target hazard index, and target cancer risk were used in USEPA's Vapor Intrusion Screening Level (VISL) Calculator (USEPA, 2012) which calculates the cleanup goals for groundwater that are protective of the commercial/industrial worker exposed to the vapors in the building. The input for and output of the VISL Calculator and the generated cleanup goals for groundwater are provided in **Appendix E**. Cleanup goals are presented in **Table 4**.

Based on a comparison of the maximum detected concentrations of VOCs in groundwater with vapor intrusion criteria calculated, PCE was detected in one location (MW-25D) at the site at a concentration (318 ug/L) that exceeds the cleanup goal for PCE of 240 ug/L (**Figure 7**). However, this location is not under or in immediate proximity to current site structures or downgradient structures at which workers might be exposed to indoor air.

### 6.2 Trespasser

Both youth and adult trespassers were assumed to be present at the site. The youth were assumed to have a body weight of 45 kg and the adult to have a body weight of 70 kg. They were assumed to ingest 50 ml/event of surface water from the pond during swimming activities and 10 ml/event of surface water from the drainage swale during wading activities (USEPA, 2000). Each event was assumed to be 1 hour/day for 26 days per year based on professional judgment. This assumes that the trespasser visits the site once a week for six months a year (based on seasonal temperatures). The youth is expected to be exposed for 10 years and the adult for 30 years (USEPA, 2004). The target hazard index and target cancer risk was that same as discussed above.

The risk-based cleanup criteria for trespassers exposed to the surface water were calculated in accordance with USEPA's Risk Assessment Guidance for Superfund – Part B and Part E (USEPA, 1991; USEAP, 2004). The equations, input parameters, and calculations are provided in **Appendix F**. PCE, the only constituent detected in the surface water, was detected in the drainage swale at a concentration of 0.00537 mg/L which is less than the risk-based criteria of 0.0078 mg/L (**Table 4**) calculated for a trespasser wading in the swale. Constituents were not detected in the surface water collected from the pond.

### **6.2.1 Ecological Receptors**

The concentration of PCE detected in the drainage swale collected downstream of the site (0.00537 mg/L) was compared to state and federal ecological surface water criteria (**Appendix D, Table 1**). This concentration of PCE is more than one order of magnitude less than the most conservative criteria (i.e., USEPA Region 4 Chronic Surface Water Screening Benchmark; also presented in **Table 4**). As such, it is unlikely that PCE impacts to the surface water pose an unacceptable risk to wildlife receptors.

## **7 Proposed Corrective Action**

Based on the current site conditions (**Section 3**), the exposure pathways (**Section 5**), and the cleanup goals (**Section 6**), the following corrective actions are proposed for the site:

### **Groundwater**

There is no direct exposure to groundwater via ingestion or dermal contact at or within 1,000 feet of the site. Additionally, the maximum concentrations that are estimated to discharge to the drainage swale and pond are significantly less than the ecological criteria. With the exception of PCE in MW-25D (located downgradient of the site and not in proximity to other buildings), groundwater concentrations of VOCs do not exceed the cleanup goals for commercial/industrial workers exposed to groundwater via vapor intrusion. Therefore, corrective action for vapor intrusion is not required. However, risks associated with vapor intrusion will be assessed prior to future development.

To monitor the groundwater at the site, semi-annual sampling of 11 shallow monitoring wells (MW-6, MW-8R, MW-12, MW-14, MW-15, MW-18, MW-19, MW-20, MW-21, MW-13, MW-24) and 3 deep monitoring wells (MW-25D, MW-26D, and MW-27D) is proposed for 2 years after the site is accepted into the VRP. The results of these sampling events will be included in future Annual Status Reports.

### **Surface Water**

VOCs were not detected in the most recent samples collected from the retention pond. The concentration of PCE detected in surface water collected from the intermittent drainage swale was less than the human health cleanup goal for a trespasser and ecological criteria. As such, corrective action for surface water is not warranted.

In addition to the proposed annual monitoring of groundwater, 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, and any future construction plans for a building on the site will be evaluated for risks associated with vapor intrusion.

## 8 Project Schedule

The proposed schedule for continuing activities at the site is presented in **Appendix G**. An updated CSM (if indicated) and the required cost estimate associated with the site will be submitted within 30 months of acceptance into the VRP, and a final CSR will be submitted within 60 months of acceptance into the VRP.

## 9 References

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## Tables

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

Well IDs	Date of Installation	Top of Casing Elevation	DTW 12/1/2009	Elevation 12/1/2009	DTW 9/20/2010	Elevation 9/20/2010	DTW 3/23/2011	Elevation 3/23/2011	DTW 9/27/2011	Elevation 9/27/2011	DTW 1/31/2012	Elevation 1/31/2012	DTW 9/17/2012	Elevation 9/17/2012	DTW	Elevation	
															5/1/2013	5/1/2013	
MW-1	10/15/1993	865.81	23.26	842.55	23.17	842.64	24.07	841.74	26.79	839.02	28.57	837.24	30.15	835.66	26.30	839.51	
MW-3	3/28/1995	866.61	19.92	846.69	18.40	848.21	17.25	849.36	20.51	846.10	19.57	847.04	--	--	17.39	849.22	
MW-4	3/28/1995	874.16	27.76	846.4	27.54	846.62	28.80	845.36	--	--	33.95	840.21	--	--	30.85	843.31	
MW-5 <sup>(1)</sup>	3/29/1995	873.58	NM	NM	12.11	861.47	11.93	861.65	14.22	859.36	14.68	858.90	--	--	12.93	860.65	
MW-6	11/28/1995	868.76	11.64	861.94	23.58	845.18	24.89	843.87	27.51	841.25	29.62	839.14	29.61	839.15	27.32	841.44	
MW-7	11/29/1995	863.60	23.96	844.80	21.14	842.46	21.89	841.71	24.69	838.91	26.29	837.31	27.95	835.65	24.02	839.58	
MW-8	3/1/1999	861.89	21.13	842.47	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8R <sup>(2)(3)</sup>	9/6/2006	863.25	NM	NM	21.09	842.15	21.61	841.64	24.53	838.72	26.08	837.17	27.70	835.55	24.07	839.18	
MW-9	3/2/1999	856.32	20.79	842.45	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R <sup>(2)(4)</sup>	9/6/2006	857.14	18.19	838.97	17.54	839.62	18.62	838.52	20.88	836.26	22.53	834.61	--	--	24.28	832.86	
MW-10	6/18/1999	866.14	23.67	842.47	23.51	842.63	24.40	841.74	27.16	838.98	28.89	837.25	30.50	835.64	26.63	839.51	
MW-11	12/27/1999	847.53	12.21	835.32	14.18	833.35	12.89	834.64	16.92	830.61	16.45	831.08	--	--	15.05	832.48	
MW-12	12/27/1999	846.59	13.57	833.02	15.03	831.56	14.00	832.59	18.12	828.47	16.77	829.82	19.63	826.96	15.71	830.88	
MW-13	3/27/2000	866.00	23.00	843.00	22.92	843.08	23.76	842.24	26.59	839.41	28.33	837.67	29.95	836.05	26	840.00	
MW-14	7/7/2000	842.24	18.48	823.76	21.64	820.60	18.73	823.51	20.29	821.95	21.09	821.15	22.54	819.70	20.87	821.37	
MW-15	7/7/2000	843.25	13.39	829.86	14.78	828.47	13.85	829.40	17.14	826.11	15.80	827.45	18.97	824.28	15.36	827.89	
MW-16	7/26/2000	830.18	9.06	821.12	NM	NM	15.54	814.64	11.62	818.56	10.99	819.19	--	--	10.98	819.2	
MW-17	7/26/2000	826.35	15.2	811.15	16.94	809.41	10.74	815.61	14.94	811.41	15.37	810.98	--	--	15.68	810.67	
MW-18 <sup>(5)</sup>	9/6/2006	861.56	19.62	841.94	19.64	841.92	20.31	841.25	23.19	838.37	24.55	837.01	26.29	835.27	22.49	839.07	
MW-19	9/7/2006	836.42	16.01	820.41	14.50	821.92	17.01	819.41	18.03	818.39	17.02	819.40	19.08	817.34	16.76	819.66	
MW-20	9/7/2006	841.37	14.39	826.98	15.58	825.79	14.87	826.50	20.67	820.70	16.43	824.94	19.27	822.10	15.73	825.64	
MW-21	9/7/2006	838.58	15.02	823.56	15.57	823.01	16.98	821.60	17.12	821.46	17.98	820.60	19.80	818.78	17.68	820.9	
MW-22	6/12/2007	854.34	20.87	833.47	21.75	832.59	22.28	832.06	24.62	829.72	24.39	829.95	26.74	827.60	23.31	831.03	
MW-23	6/12/2007	841.56	10.32	831.24	11.78	829.78	10.72	830.84	14.05	827.51	12.83	828.73	15.87	825.69	12.18	829.38	
MW-24	6/12/2007	847.36	22.02	825.34	21.43	825.93	22.15	825.21	24.11	823.25	24.61	822.75	26.37	820.99	23.92	823.44	
MW-25D <sup>(6)</sup>	6/12/2007	850.17	15.5	834.69	17.57	832.62	16.64	833.53	20.19	829.98	19.75	830.42	22.44	827.73	18.42	831.75	
MW-26D <sup>(7)</sup>	6/12/2007	861.26	20.12	837.06	20.50	836.68	20.30	840.96	23.72	837.54	24.59	836.67	26.51	834.75	22.32	838.94	
MW-27D	5/18/2012	834.31	NM	NM	NM	9.50	824.81	5.75	828.56								
MW-28D	5/18/2012	834.18	NM	NM	NM	28.29	805.89	8.8	825.38								

**Notes:**

- (1) Well was resurveyed on June 8, 2003. Historic elevation was 874.66 ft amsl.
- (2) Well is a replacement well installed on September 6, 2006.
- (3) Well was resurveyed on May 22, 2012. Historic elevation was 863.24 ft amsl.
- (4) Well was resurveyed on May 22, 2012. Historic elevation was 857.16 ft amsl.
- (5) Well was resurveyed on May 22, 2012. Historic elevation was 861.56 ft amsl.
- (6) Well was resurveyed on May 22, 2012. Historic elevation was 850.19 ft amsl.
- (7) Well was resurveyed on May 22, 2012. Historic elevation was 857.19 ft amsl. The apparent inconsistency between current and historic casing elevations for MW-26D is due to a mis-label of a survey ID point on June 28, 2007.

DTW Depth to Water

NM Not Measured

-- Monitoring well has been abandoned

**Table 2 - Summary of Groundwater Analytical Data**

CCHT (HSI No. 10341)

Conyers, Georgia

		<b>Analyte CAS No.</b>	1,1-DCE 75-35-4	Chloroform 67-66-3	Chloromethane 74-87-3	cis-1,2-DCE 156-59-2	PCE 127-18-4	TCE 79-01-6	Vinyl Chloride 75-01-4
Sample ID	Sample Date	Units							
<b>VOCs by USEPA Method 8260</b>									
MW-01	12/1/2009	ug/L	< 5	< 5	< 5	< 5	10.2	< 5	< 2
	9/20/2010	ug/L	< 5	5.83	< 5	< 5	6.98	< 5	< 2
	3/23/2011	ug/L	< 5	5.15	< 5	< 5	11	< 5	< 2
	9/27/2011	ug/L	< 5	< 5	16.2	< 5	13.6	< 5	< 2
	2/2/2012	ug/L	< 5	< 5	< 5	< 5	16.9	< 5	< 5
	9/17/2012	ug/L	< 5	< 5	< 5	< 5	8.96	< 5	< 5
	5/1/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5
MW-03	5/1/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5
MW-04	5/3/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5
MW-05	5/2/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5
MW-06	12/1/2009	ug/L	< 5	< 5	< 5	< 5	17.9	< 5	< 2
	9/20/2010	ug/L	< 5	< 5	< 5	< 5	5.03	< 5	< 2
	3/23/2011	ug/L	< 5	< 5	< 5	< 5	7.97	< 5	< 2
	9/28/2011	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	5/2/2013	ug/L	< 5	< 5	< 5	< 5	13.2	< 5	< 5
MW-07	12/1/2009	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	< 5	< 5	< 5	< 5	< 2
	1/31/2012	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/17/2012	ug/L	< 5	< 5	< 5	< 5	10.2	< 5	< 5
	5/2/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5
MW-08R	12/1/2009	ug/L	< 5	7.89	< 5	< 5	19.8	< 5	< 2
	9/20/2010	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	3/23/2011	ug/L	< 5	6.08	< 5	< 5	19.7	< 5	< 2
	9/27/2011	ug/L	< 5	5.23	< 5	< 5	15.3	< 5	< 2
	2/2/2012	ug/L	< 5	6.86	< 5	< 5	31	< 5	< 5
	9/18/2012	ug/L	< 5	< 5	< 5	< 5	11.1	< 5	< 5
	5/1/2013	ug/L	< 5	< 5	< 5	< 5	16.7	< 5	< 5
MW-09R	5/1/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5

**Table 2 - Summary of Groundwater Analytical Data**  
**CCHT (HSI No. 10341)**  
**Conyers, Georgia**

<b>Analyte CAS No.</b>		<b>1,1-DCE 75-35-4</b>	<b>Chloroform 67-66-3</b>	<b>Chloromethane 74-87-3</b>	<b>cis-1,2-DCE 156-59-2</b>	<b>PCE 127-18-4</b>	<b>TCE 79-01-6</b>	<b>Vinyl Chloride 75-01-4</b>
<b>Sample ID</b>	<b>Sample Date</b>	<b>Units</b>						
MW-10	12/1/2009	ug/L	< 5	< 5	< 5	35.5	< 5	< 2
	9/20/2010	ug/L	< 5	11.5	< 5	26.2	< 5	< 2
	3/23/2011	ug/L	< 5	< 5	< 5	< 5	< 5	< 2
	9/27/2011	ug/L	< 5	< 5	14.7	< 5	< 5	< 2
	2/2/2012	ug/L	< 5	< 5	< 5	< 5	< 5	< 5
	9/17/2012	ug/L	< 5	< 5	< 5	< 5	< 5	< 5
	5/1/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5
MW-11	8/1/2012	ug/L	< 5	< 5	< 5	< 5	< 5	< 5
	5/3/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5
MW-12	12/3/2009	ug/L	< 5	< 5	< 5	12.6	< 5	< 2
	9/21/2010	ug/L	< 5	< 5	< 5	8.9	< 5	< 2
	3/24/2011	ug/L	< 5	< 5	< 5	5.71	< 5	< 2
	9/27/2011	ug/L	< 5	< 5	8.35	< 5	9.36	< 2
	1/31/2012	ug/L	< 5	< 5	< 5	< 5	< 5	< 5
	9/18/2012	ug/L	< 5	< 5	< 5	6.68	< 5	< 5
	5/2/2013	ug/L	< 5	< 5	< 5	5.27	< 5	< 5
MW-13	12/1/2009	ug/L	< 5	8.55	< 5	< 5	< 5	< 2
	9/20/2010	ug/L	< 5	< 5	< 5	< 5	< 5	< 2
	3/23/2011	ug/L	< 5	6.56	< 5	< 5	15.4	< 2
	9/27/2011	ug/L	< 5	< 5	7.09	< 5	13.5	< 2
	2/2/2012	ug/L	< 5	< 5	< 5	< 5	12.4	< 5
	9/18/2012	ug/L	< 5	< 5	< 5	< 5	7.97	< 5
	5/1/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5
MW-14	12/1/2009	ug/L	< 5	< 5	< 5	< 5	28.9	< 2
	9/21/2010	ug/L	< 5	< 5	< 5	< 5	21.8	< 2
	3/24/2011	ug/L	< 5	< 5	< 5	< 5	22.6	< 2
	9/28/2011	ug/L	< 5	< 5	25	< 5	16.9	< 2
	2/1/2012	ug/L	< 5	< 5	< 5	< 5	26	< 5
	9/17/2012	ug/L	< 5	< 5	< 5	< 5	22.1	< 5
	5/2/2013	ug/L	< 5	< 5	< 5	< 5	17.3	< 5

**Table 2 - Summary of Groundwater Analytical Data**  
**CCHT (HSI No. 10341)**  
**Conyers, Georgia**

		Analyte CAS No.	1,1-DCE 75-35-4	Chloroform 67-66-3	Chloromethane 74-87-3	cis-1,2-DCE 156-59-2	PCE 127-18-4	TCE 79-01-6	Vinyl Chloride 75-01-4
Sample ID	Sample Date	Units							
MW-15	12/3/2009	ug/L	5.59	< 5	< 5	< 5	110	< 5	< 2
	9/21/2010	ug/L	14.6	< 5	< 5	6.87	406	< 5	< 2
	3/24/2011	ug/L	< 5	< 5	< 5	< 5	91.7	< 5	< 2
	9/28/2011	ug/L	17.9	< 5	26	13.6	693	< 5	< 2
	2/1/2012	ug/L	< 5	< 5	< 5	< 5	88.8	< 5	< 5
	2/1/2012	ug/L	< 5	< 5	< 5	< 5	82.2	< 5	< 5
	9/17/2012	ug/L	< 25 D	< 25 D	< 25 D	< 25 D	606 D	< 25 D	< 25 D
	5/2/2013	ug/L	< 5	< 5	< 5	< 5	171	< 5	< 5
MW-16	2/2/2012	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/2/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5
MW-17	2/2/2012	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/2/2013	ug/L	< 5	< 5	< 5	< 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	5.72	< 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
MW-19	12/3/2009	ug/L	6.17	< 5	< 5	< 5	355	< 5	< 2
	3/5/2010	ug/L	< 5	< 5	< 5	9.66	38.9	< 5	< 2
	9/21/2010	ug/L	< 5	< 5	< 5	106	20.9	18.9	2.76
	3/24/2011	ug/L	< 5	< 5	< 5	< 5	99.1	< 5	< 2
	9/28/2011	ug/L	5.37	< 5	< 5	77.5	62.8	8.82	< 2
	1/31/2012	ug/L	7.14	< 5	< 5	< 5	230 D	< 5	< 5
	9/18/2012	ug/L	5.18	< 5	< 5	< 5	150	< 5	< 5
	5/2/2013	ug/L	5.81	< 5	< 5	< 5	183	< 5	< 5

**Table 2 - Summary of Groundwater Analytical Data**  
**CCHT (HSI No. 10341)**  
**Conyers, Georgia**

		Analyte CAS No.	1,1-DCE 75-35-4	Chloroform 67-66-3	Chloromethane 74-87-3	cis-1,2-DCE 156-59-2	PCE 127-18-4	TCE 79-01-6	Vinyl Chloride 75-01-4
Sample ID	Sample Date	Units							
MW-20	12/3/2009	ug/L	< 5	< 5	< 5	< 5	15.2	< 5	< 2
	9/21/2010	ug/L	< 5	< 5	< 5	< 5	21	< 5	< 2
	3/24/2011	ug/L	< 5	< 5	< 5	< 5	9.57	< 5	< 2
	9/28/2011	ug/L	< 5	< 5	28.2	< 5	12.8	< 5	< 2
	2/1/2012	ug/L	< 5	< 5	< 5	< 5	19.5	< 5	< 5
	9/17/2012	ug/L	< 5	< 5	< 5	< 5	19.7	< 5	< 5
	5/2/2013	ug/L	< 5	< 5	< 5	< 5	12.7	< 5	< 5
MW-21	12/3/2009	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	3/5/2010	ug/L	< 5	< 5	< 5	< 5	131	< 5	< 2
	9/21/2010	ug/L	< 5	< 5	< 5	< 5	117	< 5	< 2
	3/24/2011	ug/L	< 5	< 5	< 5	25.1	< 5	< 5	4.75
	9/28/2011	ug/L	5.47	< 5	< 5	< 5	107	< 5	< 2
	1/31/2012	ug/L	< 5	< 5	< 5	9.95	22.8	< 5	< 5
	9/17/2012	ug/L	< 5	< 5	< 5	40.5	50.6	14.1	< 5
	5/2/2013	ug/L	< 5	< 5	< 5	< 5	44.8	< 5	< 5
MW-22	12/3/2009	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	9/21/2010	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	3/23/2011	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 2
	9/28/2011	ug/L	< 5	< 5	7.15	< 5	< 5	< 5	< 2
	1/31/2012	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/18/2012	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/2/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5
MW-23	12/3/2009	ug/L	58.1	< 5	< 5	10.9	1730	31.8	< 2
	9/21/2010	ug/L	< 5	< 5	< 5	< 5	140	< 5	< 2
	3/24/2011	ug/L	< 5	< 5	< 5	< 5	123	< 5	< 2
	9/27/2011	ug/L	< 5	< 5	25.7	< 5	121	< 5	< 2
	1/31/2012	ug/L	< 5	< 5	< 5	< 5	77.7	< 5	< 5
	9/18/2012	ug/L	< 5	< 5	< 5	< 5	63.9	< 5	< 5
	5/3/2013	ug/L	< 5	< 5	< 5	< 5	51.7	< 5	< 5

**Table 2 - Summary of Groundwater Analytical Data**  
**CCHT (HSI No. 10341)**  
**Conyers, Georgia**

<b>Analyte CAS No.</b>		<b>1,1-DCE 75-35-4</b>	<b>Chloroform 67-66-3</b>	<b>Chloromethane 74-87-3</b>	<b>cis-1,2-DCE 156-59-2</b>	<b>PCE 127-18-4</b>	<b>TCE 79-01-6</b>	<b>Vinyl Chloride 75-01-4</b>
<b>Sample ID</b>	<b>Sample Date</b>	<b>Units</b>						
MW-24	12/3/2009	ug/L	< 5	< 5	< 5	< 5	< 5	< 2
	9/21/2010	ug/L	< 5	< 5	< 5	< 5	< 5	< 2
	3/24/2011	ug/L	< 5	< 5	< 5	< 5	< 5	< 2
	9/28/2011	ug/L	< 5	< 5	14.4	< 5	6.87	< 5
	2/1/2012	ug/L	< 5	< 5	< 5	< 5	10.2	< 5
	9/17/2012	ug/L	< 5	< 5	< 5	< 5	6.75	< 5
	5/2/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5
MW-25D	12/3/2009	ug/L	< 5	< 5	< 5	296	< 5	< 2
	9/21/2010	ug/L	< 5	< 5	< 5	532	< 5	< 2
	3/24/2011	ug/L	< 5	< 5	< 5	146	< 5	< 2
	9/27/2011	ug/L	< 5	< 5	15.8	< 5	107	< 5
	2/2/2012	ug/L	< 5	5	< 5	< 5	355 D	< 5
	9/18/2012	ug/L	< 25 D	< 25 D	< 25 D	< 25 D	370 D	< 25 D
	5/2/2013	ug/L	< 25	< 25	< 25	< 25	318	< 25
MW-26D	12/3/2009	ug/L	56.6	< 5	< 5	11.2	1900	31.9
	9/20/2010	ug/L	38.7	< 5	< 5	5.69	934	17.8
	3/23/2011	ug/L	< 5	< 5	< 5	< 5	7.71	< 5
	9/27/2011	ug/L	< 5	< 5	5.38	< 5	49.5	< 5
	2/1/2012	ug/L	< 5	< 5	< 5	< 5	7.68	< 5
	9/18/2012	ug/L	< 5	< 5	< 5	< 5	20.9	< 5
	5/1/2013	ug/L	< 5	< 5	< 5	< 5	5.45	< 5
MW-27D	5/18/2012	ug/L	< 5	14.4	< 5	< 5	120	< 5
	9/17/2012	ug/L	< 5	5.49	< 5	< 5	114	< 5
	5/3/2013	ug/L	< 5	5	< 5	< 5	89.5	< 5
MW-28D	5/18/2012	ug/L	< 5	19	< 5	< 5	9.99	< 5
	9/17/2012	ug/L	< 5	5.97	< 5	< 5	< 5	< 5
	5/3/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5
MW-29D	5/3/2013	ug/L	< 5	8.05	< 5	< 5	< 5	< 5

**Table 2 - Summary of Groundwater Analytical Data**  
**CCHT (HSI No. 10341)**  
**Conyers, Georgia**

<b>Analyte CAS No.</b>		<b>1,1-DCE 75-35-4</b>	<b>Chloroform 67-66-3</b>	<b>Chloromethane 74-87-3</b>	<b>cis-1,2-DCE 156-59-2</b>	<b>PCE 127-18-4</b>	<b>TCE 79-01-6</b>	<b>Vinyl Chloride 75-01-4</b>
<b>Sample ID</b>	<b>Sample Date</b>	<b>Units</b>						
TW12-01	8/1/2012	ug/L	< 5	< 5	< 5	< 5	6.21	< 5
TW12-02	8/1/2012	ug/L	< 5	< 5	< 5	< 5	< 5	< 5
TW12-03	8/1/2012	ug/L	< 5	< 5	< 5	< 5	5.29	< 5
TW12-04	8/1/2012	ug/L	< 5	< 5	< 5	< 5	< 5	< 5
TWP 13-1	5/3/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5
TWP 13-2	5/3/2013	ug/L	< 5	< 5	< 5	< 5	< 5	< 5

**Notes**

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

< -- Analyte was not detected at the laboratory reporting limit indicated

**Table 3 - Summary of Surface Water Analytical Data**

**CCHT (HSI No. 10341)**

**Conyers, GA**

<i>Analyte CAS No.</i>		1,1-DCE 75-35-4	Chloroform 67-66-3	Chloromethane 74-87-3	cis-1,2-DCE 156-59-2	PCE 127-18-4	TCE 79-01-6	Vinyl Chloride 75-01-4
Sample ID	Sample Date	Units						
<b>VOCs by USEPA Method 8260</b>								
SW01	1/31/2012	ug/l	< 5	< 5	< 5	< 5	5.37	< 5
SW02	1/31/2012	ug/l	< 5	< 5	< 5	< 5	< 3	< 5

**Notes**

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

< -- Analyte was not detected at the laboratory reporting limit indicated

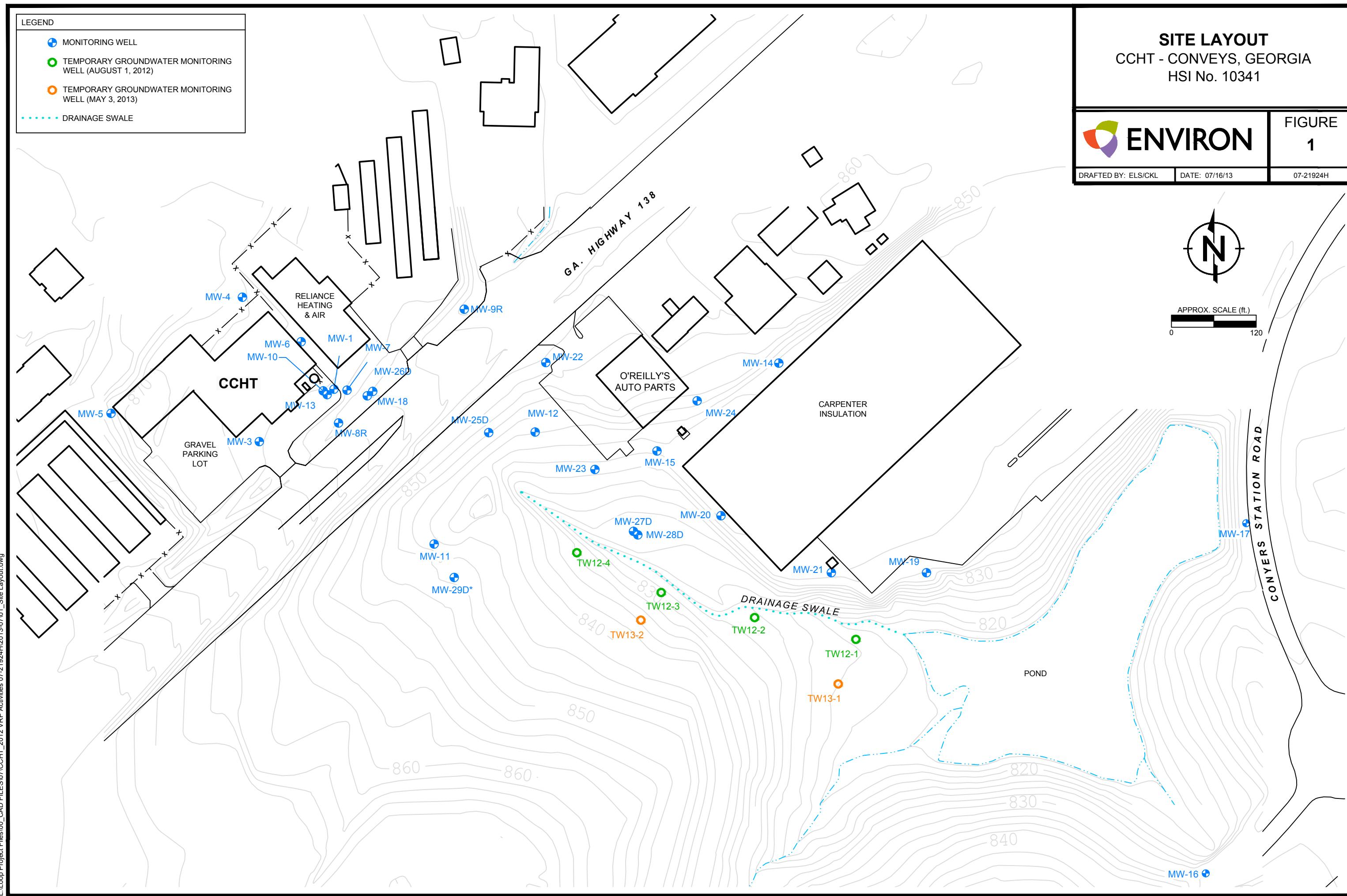
**Table 4 - Summary of Cleanup Criteria**  
**CCHT (HSI No. 10341)**  
**Conyers, GA**

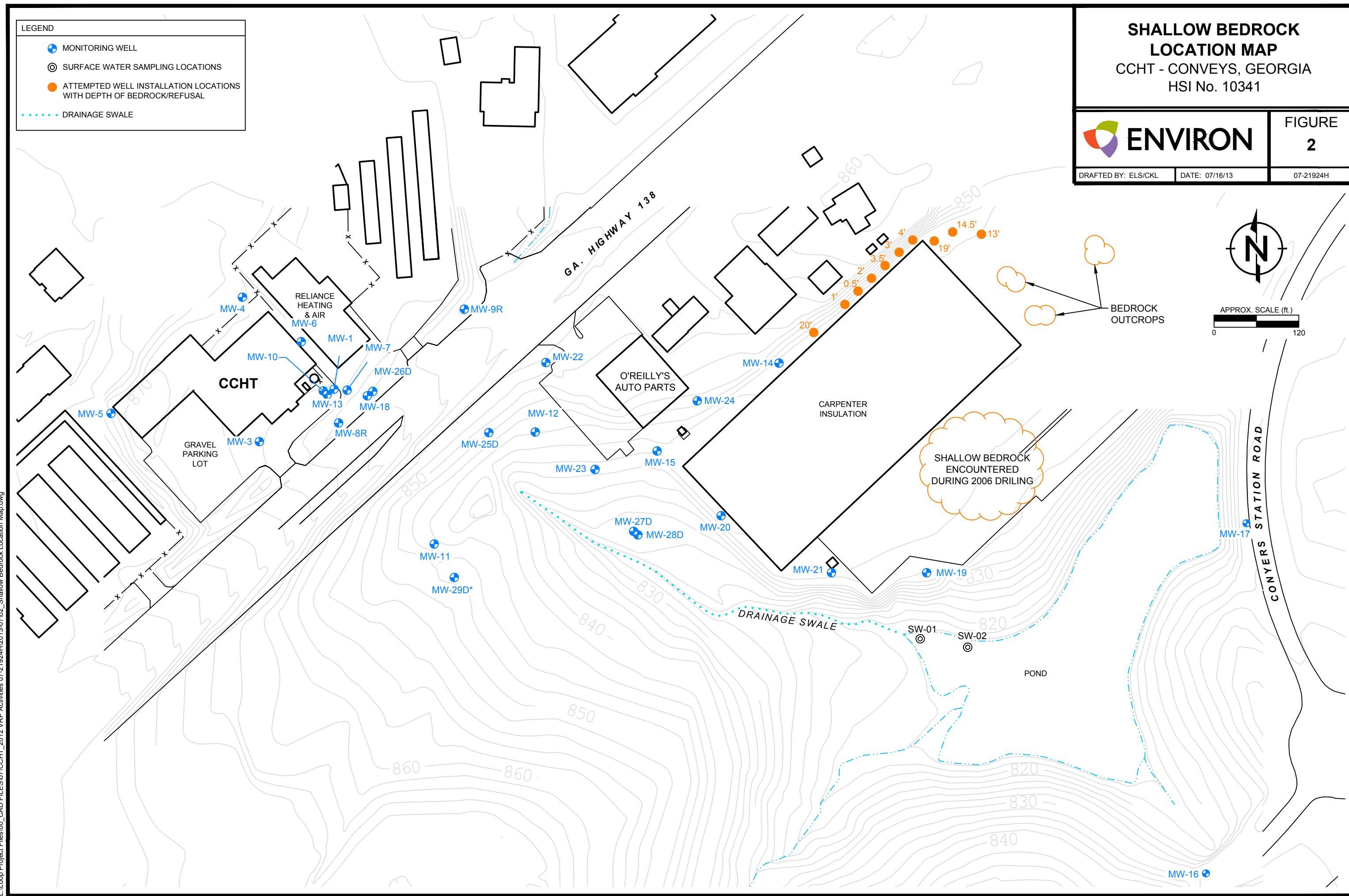
Constituent	Groundwater Criteria Based on Vapor Intrusion (ug/L)	Surface Water Criteria (ug/L)	
		Pond	Drainage Swale
Chloroform	360	--	--
Chloromethane	1,100	--	--
1,1-Dichloroethylene	820	--	--
Tetrachloroethylene	240	2.5	7.8
Trichloroethylene	22	--	--
Vinyl Chloride	25	--	--

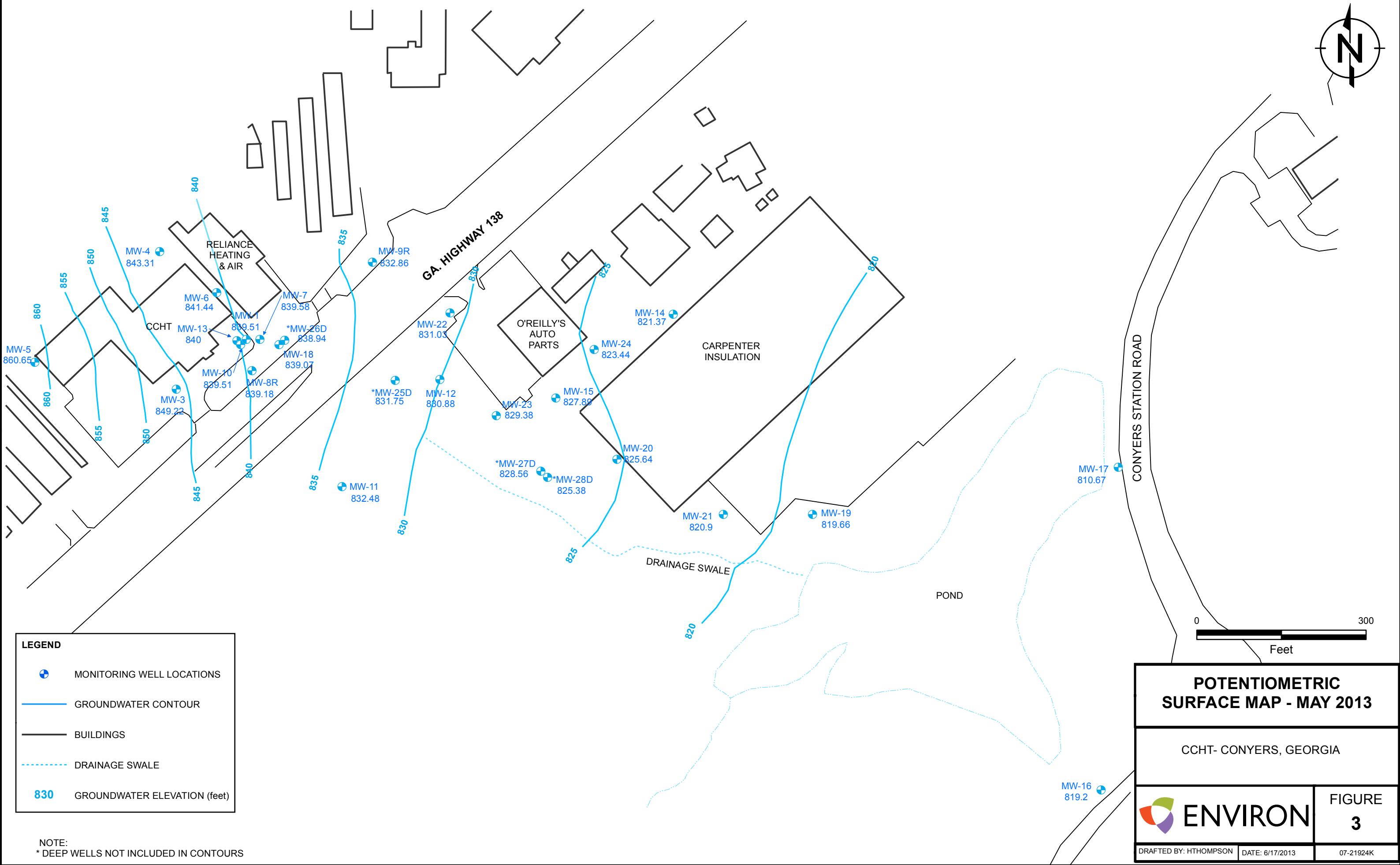
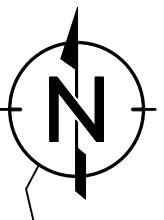
**Notes**

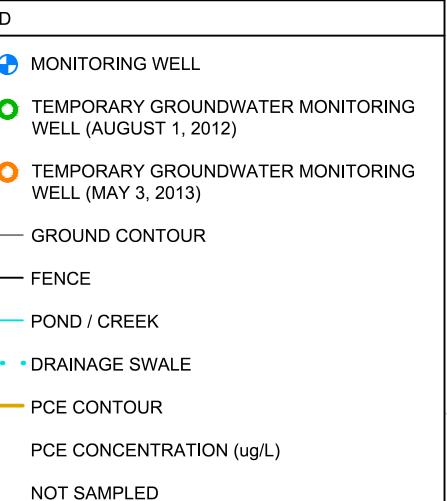
-- Criteria not calculated for this constituent.

## Figures

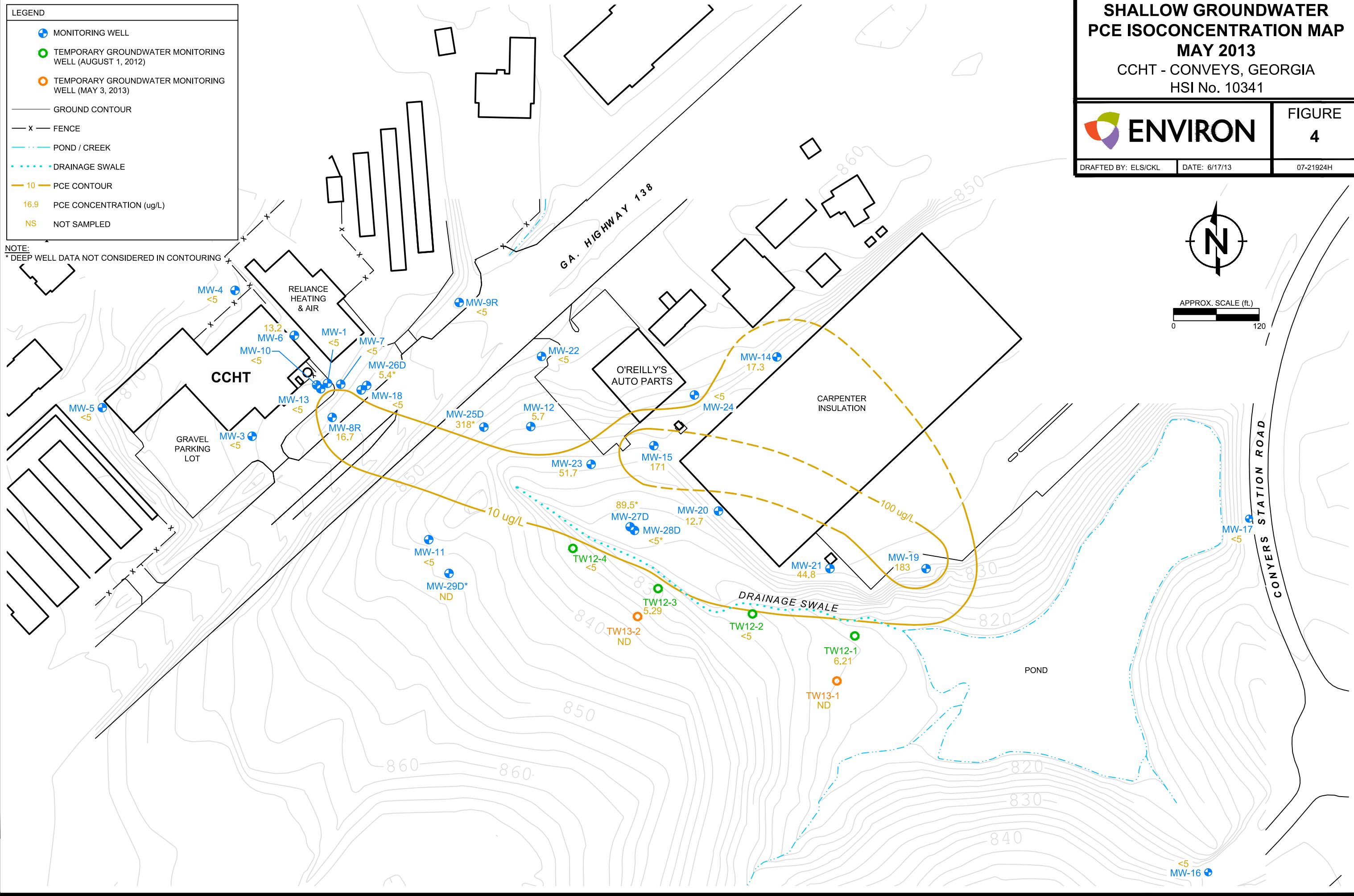


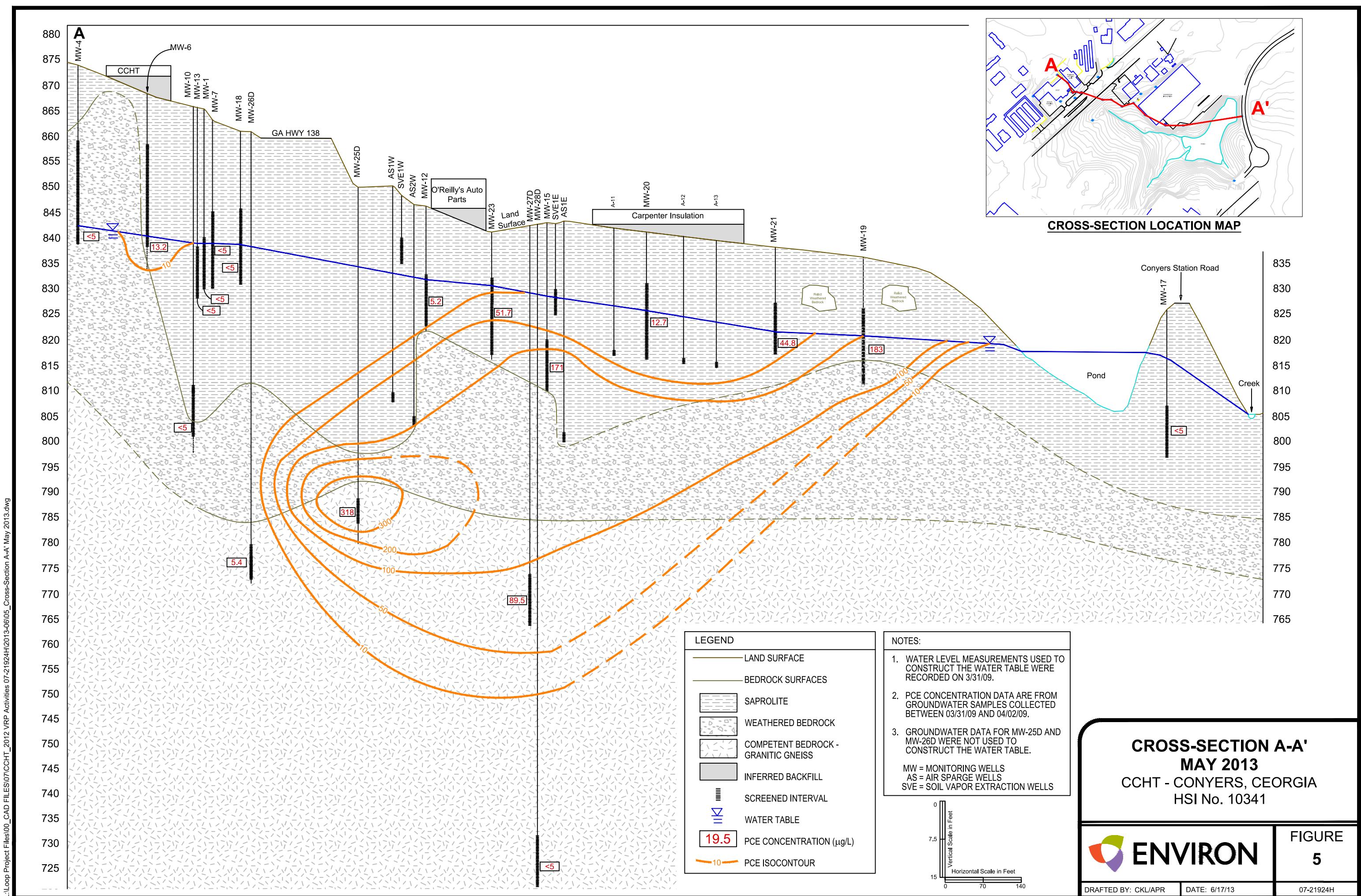


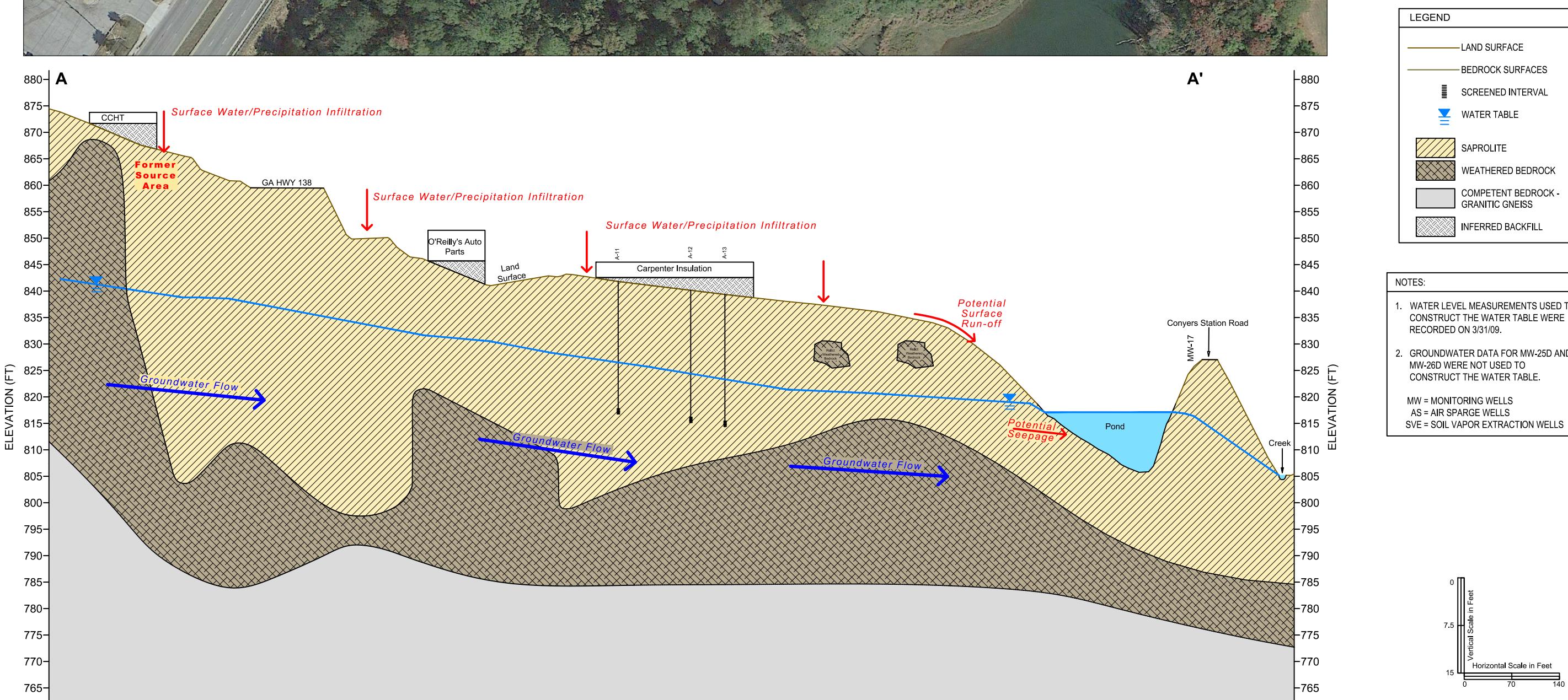
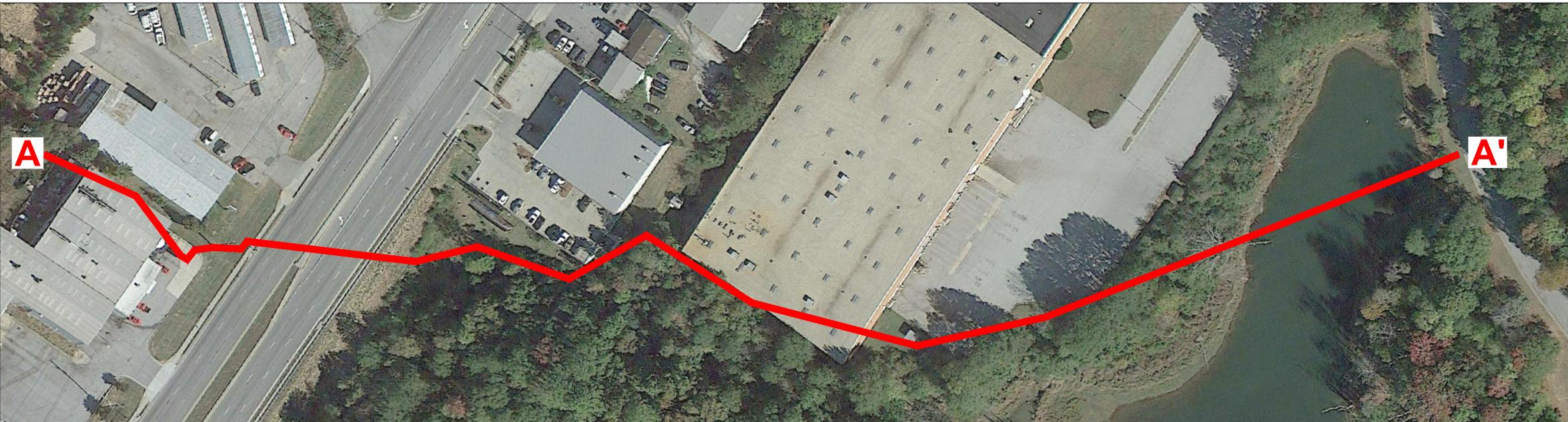


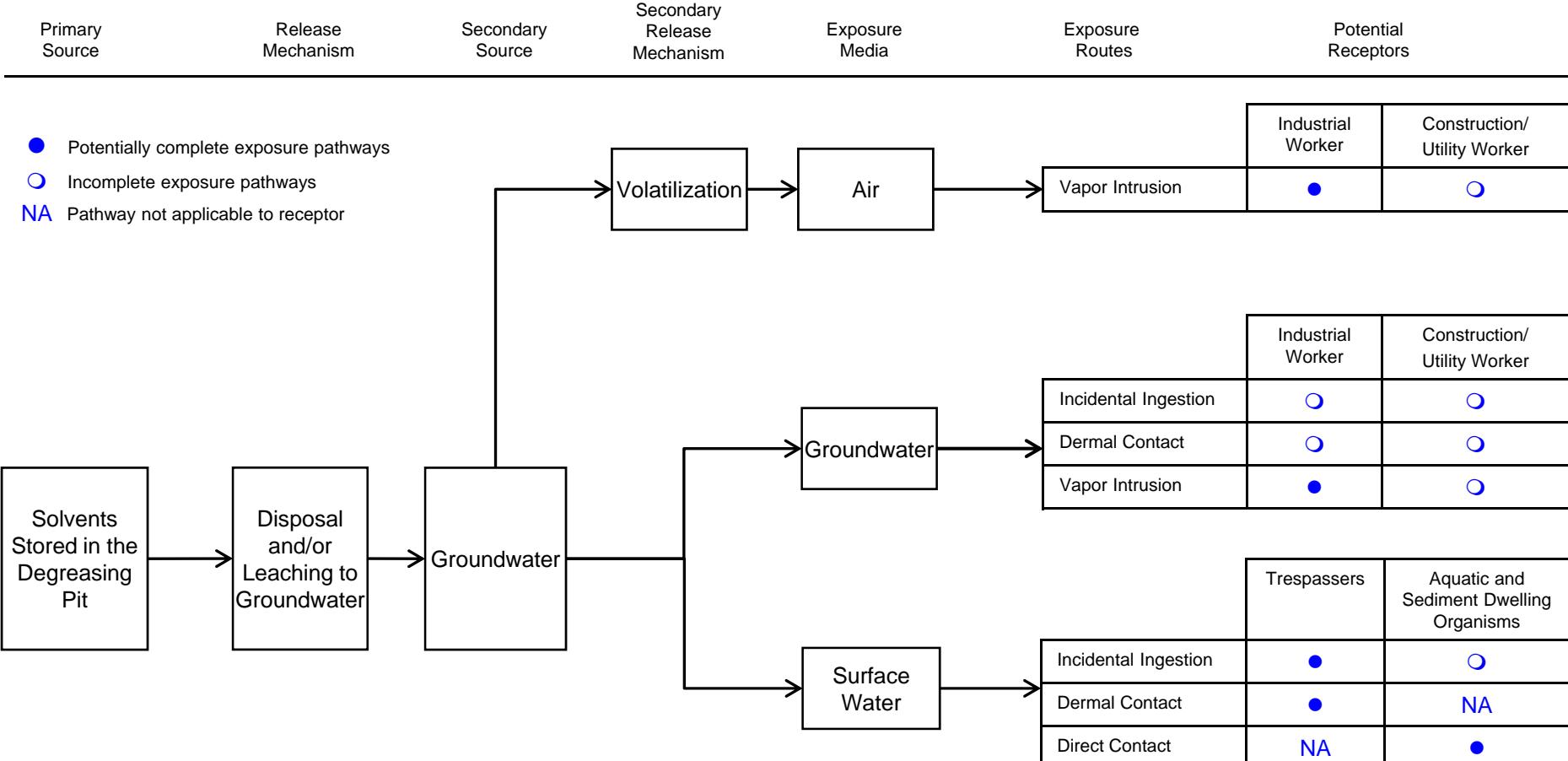


L:\Loop Project Files\00\_CAD FILES\07\CCHT\_2012 VRP Activities 07-21924H\2013-06\04\_Shallow GW PCE Iso Map May 2013.dwg









**Attachment A**  
**VRP Application Form and Checklist**

# Voluntary Investigation and Remediation Plan Application Form and Checklist

## VRP APPLICANT INFORMATION

COMPANY NAME	Rexmet Corp.		
CONTACT PERSON/TITLE	John Rex		
ADDRESS	P.O. Box 270, Lansdale, Pennsylvania 19446		
PHONE	215-855-1131	FAX	E-MAIL <a href="mailto:John.Rex@texht.com">John.Rex@texht.com</a>

## GEORGIA CERTIFIED PROFESSIONAL GEOLOGIST OR PROFESSIONAL ENGINEER OVERSEEING CLEANUP

NAME	Keith Cole	GA PE/PG NUMBER	PE #21809
COMPANY	ENVIRON International Corporation		
ADDRESS	1600 Parkwood Circle, Suite 310		
PHONE	770-874-5011	FAX	770-874-5011 <a href="mailto:kcole@environcorp.com">kcole@environcorp.com</a>

## APPLICANT'S CERTIFICATION

In order to be considered a qualifying property for the VRP:

- (1) The property must have a release of regulated substances into the environment;
- (2) The property shall not be:
  - (A) Listed on the federal National Priorities List pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601.
  - (B) Currently undergoing response activities required by an order of the regional administrator of the federal Environmental Protection Agency; or
  - (C) A facility required to have a permit under Code Section 12-8-66.
- (3) Qualifying the property under this part would not violate the terms and conditions under which the division operates and administers remedial programs by delegation or similar authorization from the United States Environmental Protection Agency.
- (4) Any lien filed under subsection (e) of Code Section 12-8-96 or subsection (b) of Code Section 12-13-12 against the property shall be satisfied or settled and released by the director pursuant to Code Section 12-8-94 or Code Section 12-13-6.

In order to be considered a participant under the VRP:

- (1) The participant must be the property owner of the voluntary remediation property or have express permission to enter another's property to perform corrective action.
- (2) The participant must not be in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the director.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify that this property is eligible for the Voluntary Remediation Program (VRP) as defined in Code Section 12-8-105 and I am eligible as a participant as defined in Code Section 12-8-106.

APPLICANT'S SIGNATURE		APPLICANT'S NAME/TITLE John W. Rex - President	DATE 6-28-2013
-----------------------	---	---	-------------------

QUALIFYING PROPERTY INFORMATION (For additional qualities, please refer to the last page of application form)			
HAZARDOUS SITE INVENTORY INFORMATION (if applicable)			
HSI Number	10341	Date HSI Site listed	7/1/2005
HSI Facility Name	Carolina Commercial Heat Treat	NAICS CODE	332811
PROPERTY INFORMATION			
TAX PARCEL ID	069-001-003L	PROPERTY SIZE (ACRES)	1.73
PROPERTY ADDRESS	1690 Highway 138 NE		
CITY	Conyers	COUNTY	Rockdale
STATE	Georgia	ZIPCODE	30208
LATITUDE (decimal format)	33° 40' 4"	LONGITUDE (decimal format)	83° 59' 25"
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	John Rex	PHONE #	215-855-1131
MAILING ADDRESS	P.O. Box 270		
CITY	Lansdale	STATE/ZIPCODE	PA / 19446
ITEM #	DESCRIPTION OF REQUIREMENT	Location in VRP (i.e. pg., Table #, Figure #, etc.)	For EPD Comment Only (Leave Blank)
1.	<b>\$5,000 APPLICATION FEE IN THE FORM OF A CHECK PAYABLE TO THE GEORGIA DEPARTMENT OF NATURAL RESOURCES. (PLEASE LIST CHECK DATE AND CHECK NUMBER IN COLUMN TITLED "LOCATION IN VRP." PLEASE DO NOT INCLUDE A SCANNED COPY OF CHECK IN ELECTRONIC COPY OF APPLICATION.)</b>	Submitted June 2013 Check #2258	
2.	<b>WARRANTY DEED(S) FOR QUALIFYING PROPERTY.</b>		Attachment A
3.	<b>TAX PLAT OR OTHER FIGURE INCLUDING QUALIFYING PROPERTY BOUNDARIES, ABUTTING PROPERTIES, AND TAX PARCEL IDENTIFICATION NUMBER(S).</b>		Appendix A
4.	<b>ONE (1) PAPER COPY AND TWO (2) COMPACT DISC (CD) COPIES OF THE VOLUNTARY REMEDIATION PLAN IN A SEARCHABLE PORTABLE DOCUMENT FORMAT (PDF).</b>	Included	
5.	The VRP participant's initial plan and application must include, using all reasonably available current information to the extent known at the time of application, a graphic three-dimensional preliminary conceptual site model (CSM) including a preliminary remediation plan with a table of delineation standards, brief supporting text, charts, and figures (no more than 10 pages, total) that illustrates the site's surface and subsurface setting, the known or suspected source(s) of contamination, how contamination might move within the environment, the potential human health and ecological receptors, and the complete or incomplete exposure pathways that may exist at the site; the preliminary CSM must be updated as the investigation and remediation progresses and an up-to-date CSM must be included in each semi-annual status report submitted to the director by the participant; a <b>PROJECTED MILESTONE SCHEDULE</b> for investigation and remediation of the site, and after enrollment as a participant, must update the schedule in each semi-annual status report to the director describing implementation of the plan	<b>CSM – Figure 6</b> <b>Delineation Standard for</b> <b>PCE = 5 µg/L</b> <b>(See Tables 2)</b> <b>Text, Charts,</b> <b>Figures -</b> <b>Attached</b> <b>Projected</b> <b>Milestone</b> <b>Schedule –</b> <b>Attachment F</b>	

annual status report to the director describing implementation of the plan during the preceding period. A Gantt chart format is preferred for the milestone schedule.	The following four (4) generic milestones are required in all initial plans with the results reported in the participant's next applicable semi-annual reports to the director. The director may extend the time for or waive these or other milestones in the participant's plan where the director determines, based on a showing by the participant, that a longer time period is reasonably necessary:		
<b>5.a.</b>	Within the first 12 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern on property where access is available at the time of enrollment.	<b>Completed – Section 3</b>	
<b>5.b.</b>	Within the first 24 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern extending onto property for which access was not available at the time of enrollment.	<b>Completed – Section 3</b>	
<b>5.c.</b>	Within 30 months after enrollment, the participant must update the site CSM to include vertical delineation, finalize the remediation plan and provide a preliminary cost estimate for implementation of remediation and associated continuing actions; and		
<b>5.d.</b>	Within 60 months after enrollment, the participant must submit the compliance status report required under the VRP, including the requisite certifications.		
<b>SIGNED AND SEALED PE/PG CERTIFICATION AND SUPPORTING DOCUMENTATION:</b>			
<p>I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.</p> <p>Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.</p> <p>The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</p>			
<b>6.</b>  Printed Name and GA PE/PG Number Keith Cole PE #21809  Signature and Stamp 7/30/13			

**Appendix A**  
**Legal Description and Warranty Deed**

STATE OF GEORGIA

## COUNTY OF ROCKDALE

THIS INDENTURE, made the 6<sup>th</sup> day of August, in the year one thousand nine hundred and seventy nine, between MAX LARSEN, of the County of Rockdale, and State of Georgia, as party of the first part, hereinafter called the Grantor, and JOHN W. REX, of the County of Rockdale, and State of Georgia, as party of the second part, hereinafter called Grantee.

WITNESSETH that: Grantor, for and in consideration of the sum of one dollar (\$1.00) and other valuable considerations in hand paid at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, by these presents does hereby remise, convey and forever QUITCLAIM unto the said Grantee:

## PARCEL I:

All that tract or parcel of land lying and being in Land Lot 320 of the 16th District of Rockdale County, Georgia, and known and distinguished as the southern half of LOT THREE (3), as shown on plat prepared for Allied Properties, Inc. by B. L. Bruner & Associates, Inc., dated September 13, 1972, and is the same property shown on plat prepared for T. C. Williams by B. L. Bruner & Associates, Inc., dated July 23, 1973, recorded in Plat Book H, page 266, Clerk's Office, Rockdale County, Georgia, and more fully described as follows: BEGINNING at an iron pin located on the Northwest right of way of Georgia State Highway No. 138, said pin being located 1344.41 feet northeast from the northeast right of way of Pine Log Road (Georgia Star Route No. 138), as measured along the northwest right of way of Georgia State Highway No. 138; thence North 42 degrees 50 minutes 05 seconds west along the northeast line of Lot No. 4 a distance of 250.0 feet to an iron pin corner; thence north 47 degrees 09 minutes 55 seconds east 50.0 feet to an iron pin corner at Lot No. 2; thence south 42 degrees 50 minutes 05 seconds east along the southwest line of Lot No. 2 a distance of 250.0 feet to an iron pin corner located on the northwest right of way of Georgia State Highway No. 138; thence south 47 degrees 09 minutes 55 seconds west along the northwest right of way of State Route No. 138, a distance of 50.0 feet to an iron pin at the point of beginning.

## PARCEL II:

All that tract or parcel of land lying and being in Land Lot 320 of the 16th District of Rockdale County, Georgia and being Lot 2 as shown on a Plat of Survey by B. L. Bruner & Associates, Inc., a copy of which is recorded in Plat Book H, Page 242, in the office of the Clerk of the Superior Court of Rockdale County, Georgia, and more particularly described as follows: BEGINNING at a point on the northwest side of Georgia Highway No. 138 (a 100-foot right of way) 1444.41 feet northeasterly as measured along the northwest right of way line of said Georgia Highway No. 138 from its intersection with the right of way of Pine Log Road (a 100-foot right of way); thence north 42 degrees 50 minutes 5 seconds west a distance of 250 feet; thence north 47 degrees 09 minutes 55 seconds east a distance of 100 feet; thence south 42 degrees 50 minutes 05 seconds east a distance of 250 feet to the northwest right of way line of Georgia Highway No. 138; thence south 47 degrees 09 minutes 55 seconds west along said right of way line a distance of 100 feet to the point of beginning.

## PARCEL III:

All that tract or parcel of land lying and being in Land Lot 320 of the 16th District of Rockdale County, Georgia and being the northeast one-half of Lot 3, said Lot 3 being shown by a Plat of Survey by B. L. Bruner & Associates, Inc., dated July 23, 1973,

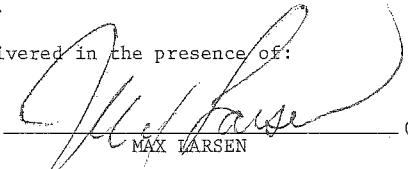
BOOK 200 PAGE 228

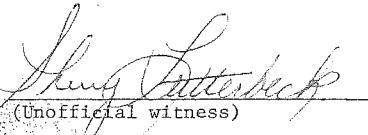
a copy of which is recorded in Plat Book H, page 266 in the Office of the Clerk of the Superior Court of Rockdale County, Georgia and being more particularly described as follows: BEGINNING at a point on the northwest right of way line of Georgia Highway No. 138 (a 100-foot right of way) 1394.41 feet northeasterly as measured along said right of way line from the right of way line of Pine Log Road (a 100-foot right of way); thence north 42 degrees 50 minutes 05 seconds west a distance of 250 feet to a point; thence north 47 degrees 09 minutes 55 seconds east a distance of 50 feet to the line of Lot 2 aforesaid; thence south 42 degrees 50 minutes 5 seconds east a distance of 250 feet to the northwest right of way line of Georgia Highway No. 138; thence south 47 degrees 09 minutes 55 seconds west a distance of 50 feet to the point of beginning.

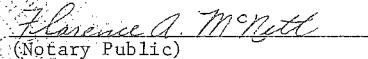
TO HAVE AND TO HOLD the said described premises to Grantee, so that neither Grantor nor any person or persons claiming under Grantor shall at any time, by any means or ways, have, claim or demand any right or title to said premises or appurtenances, or any rights thereof.

IN WITNESS WHEREOF, Grantor has signed and sealed this deed, the day and year first above written.

Signed, sealed and delivered in the presence of:

  
MAX VARSEN (Seal)

  
(Unofficial witness)

  
(Notary Public)



FLORENCE A. MCNETT  
Notary Public, Branch County, Mich.  
My Commission Expires Jan. 12, 1981

GEORGIA, ROCKDALE COUNTY,  
OFFICE CLERK SUPERIOR COURT

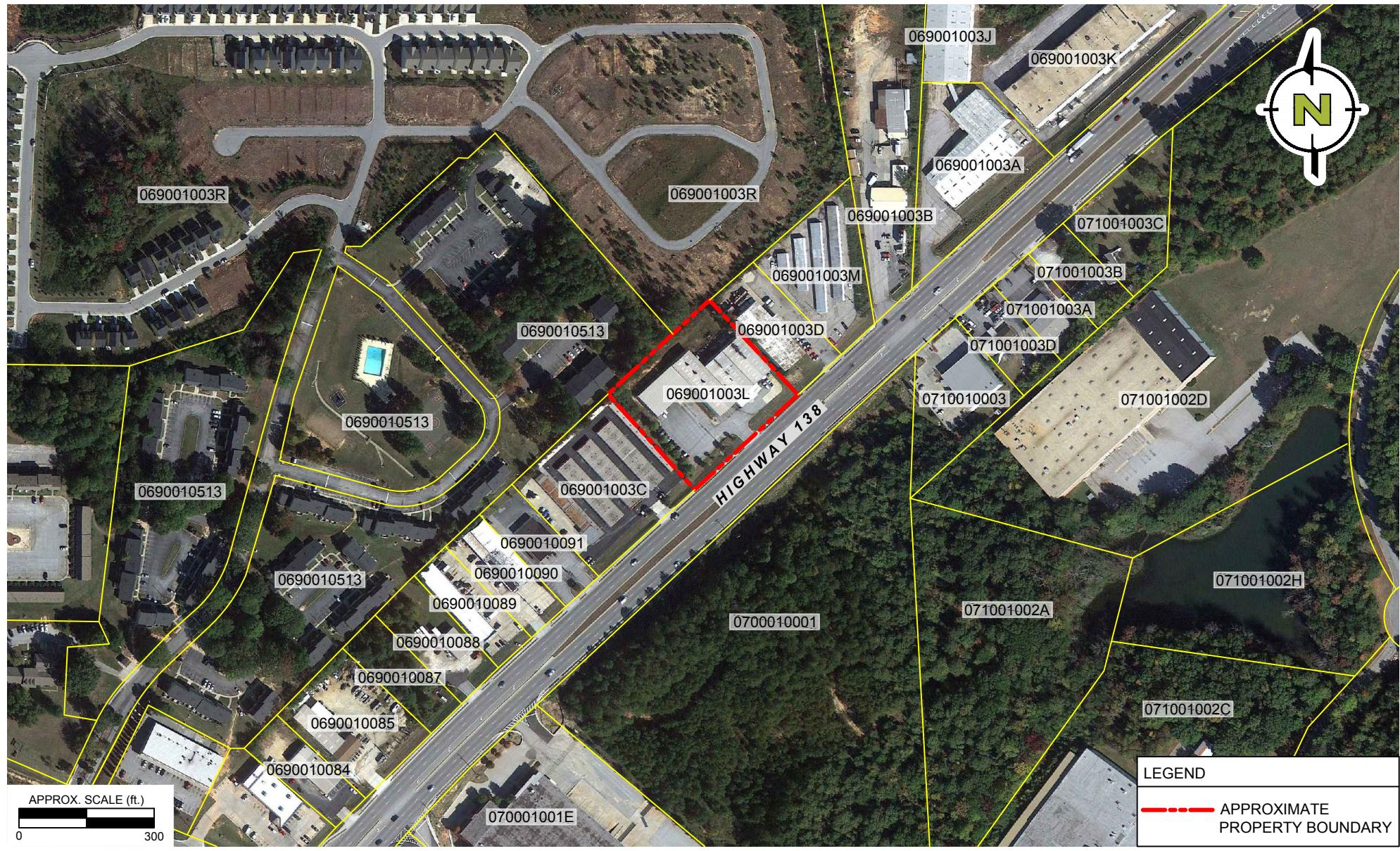
Filed for record at 11:21 o'clock A. M.

August 16 1979

Recorded in book 200 folio 227

August 16 1979

Florence A. McNett Clerk



**Table A1 - Parcel Listings**

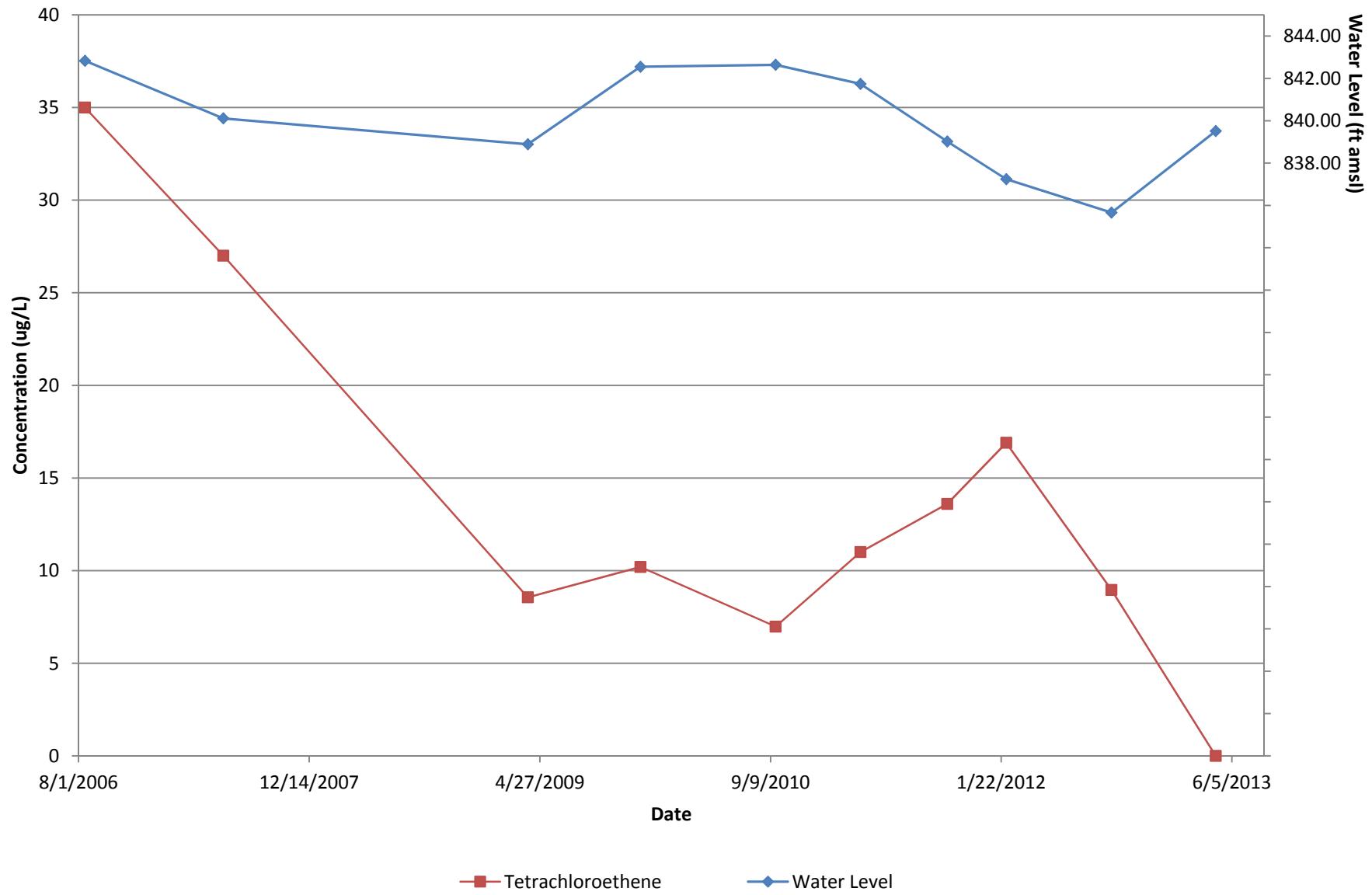
CCHT - HSI No. 10341

Conyers, Georgia

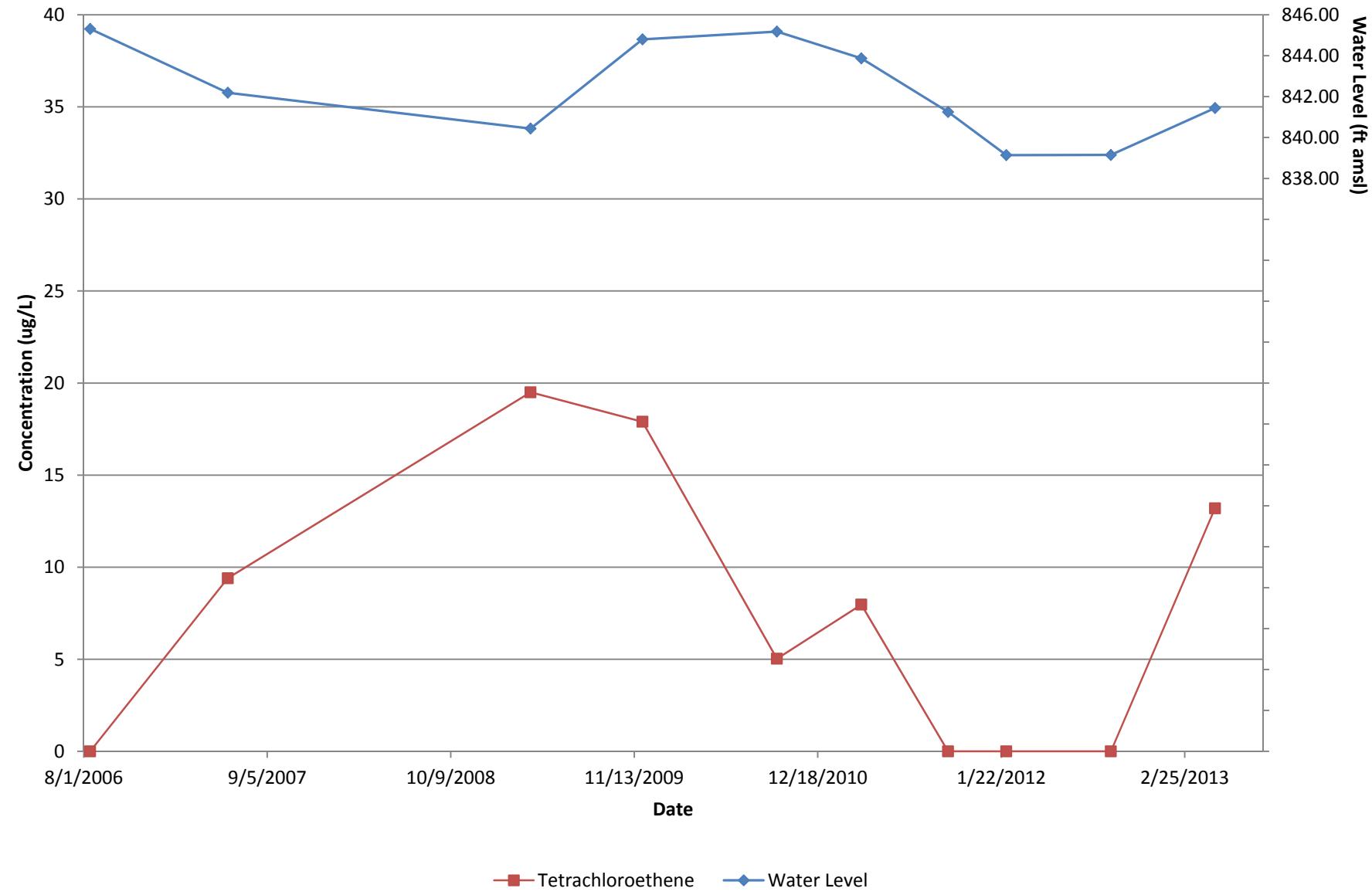
<b>Parcel ID</b>	<b>Owner</b>	<b>Size (Acres)</b>
069001003A	THURMOND PROPERTIES INC	1.48
069001003B	SANFORD WILLIAM H & ;	3
069001003C	U-SECURIT LLC	1.72
069001003D	BILBREY JIM	0.79
069001003J	IB PROPERTY HOLDINGS LLC	0.75
069001003K	CLARK 100 LLC	3.09
069001003L	REX JOHN W	1.73
069001003M	BILBREY JIM	1.05
069001003R	HUFF JENNIFER	30.29
0690010084	DAMRON H STUART	0.59
0690010085	WHITMIRE STEPHEN BARTLY	1.17
0690010087	REISING GILBERT	0.59
0690010088	REISING ERIK C & ;	0.58
0690010089	HIGHWAY 138 RENTAL PROPERTIES LLC	0.58
0690010090	HIGHWAY 138 RENTAL PROPERTIES LLC	0.57
0690010091	SHELNUTT BRAD T & ; KELLIE J SHELNUTT	0.57
0690010513	BRIAR CREEK APTS LLC	20.15
0700010001	STONE MTN INDUSTRIAL PK	16.1
070001001E	STONE MTN INDUSTRIAL PK	5.51
0710010003	OREILLY AUTOMOTIVE INC	1.19
071001002A	STONE MOUNTAIN INDUSTRIAL PARK	5.62
071001002C	PRATT PROPERTIES INC	11
071001002D	CARPENTER E R CO INC	18.78
071001002H	JET CORR INC	4.58
071001003A	MORRIS JOHN H JR	0.48
071001003B	MATHIS ESTHER I	0.48
071001003C	MATHIS ESTHER I	0.99
071001003D	LAUGHNER RICHARD E	0.48

**Appendix B**  
**PCE/Groundwater Concentration Trend Charts**

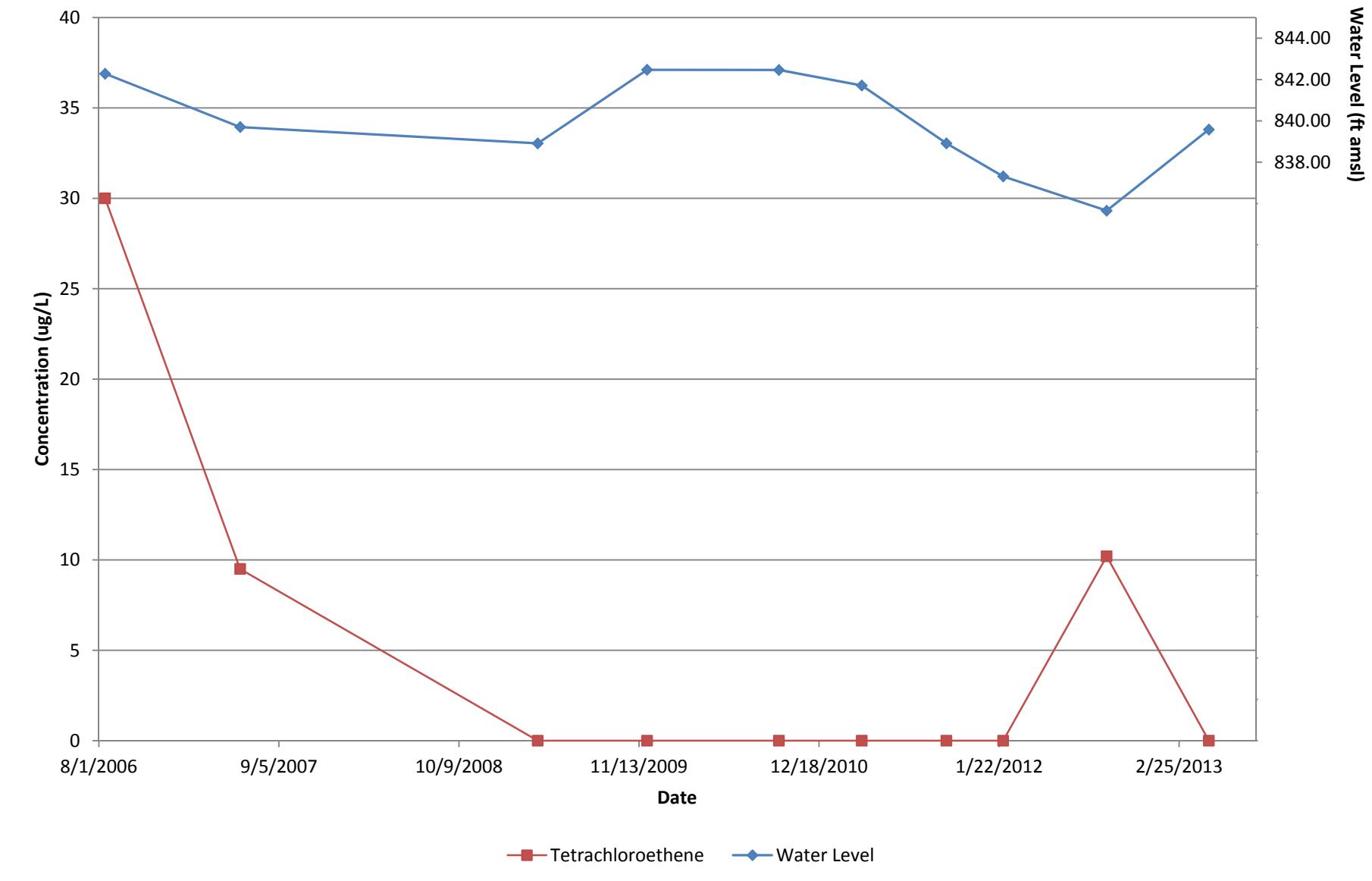
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**Conyers, Georgia**



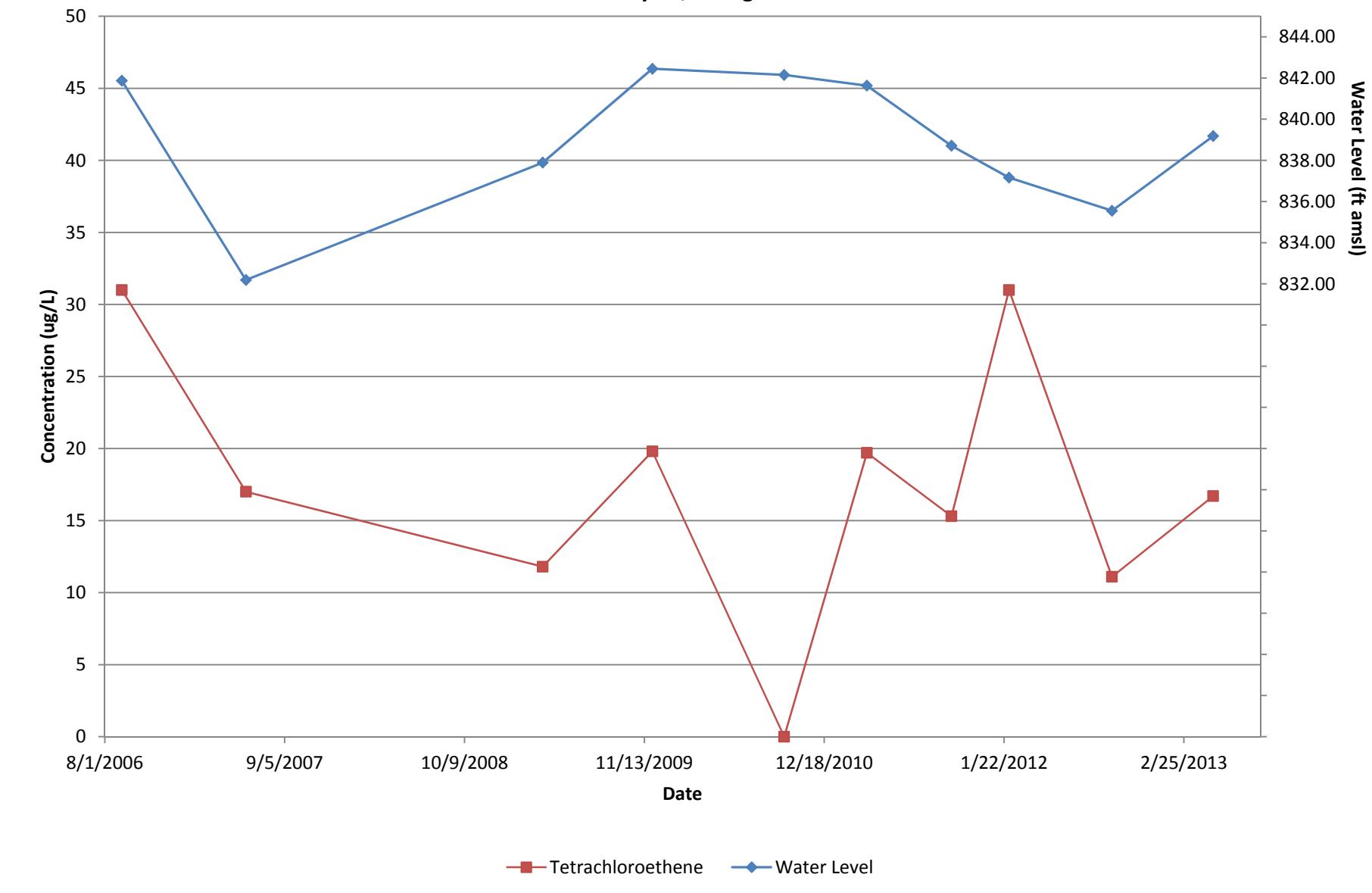
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**Conyers, Georgia**



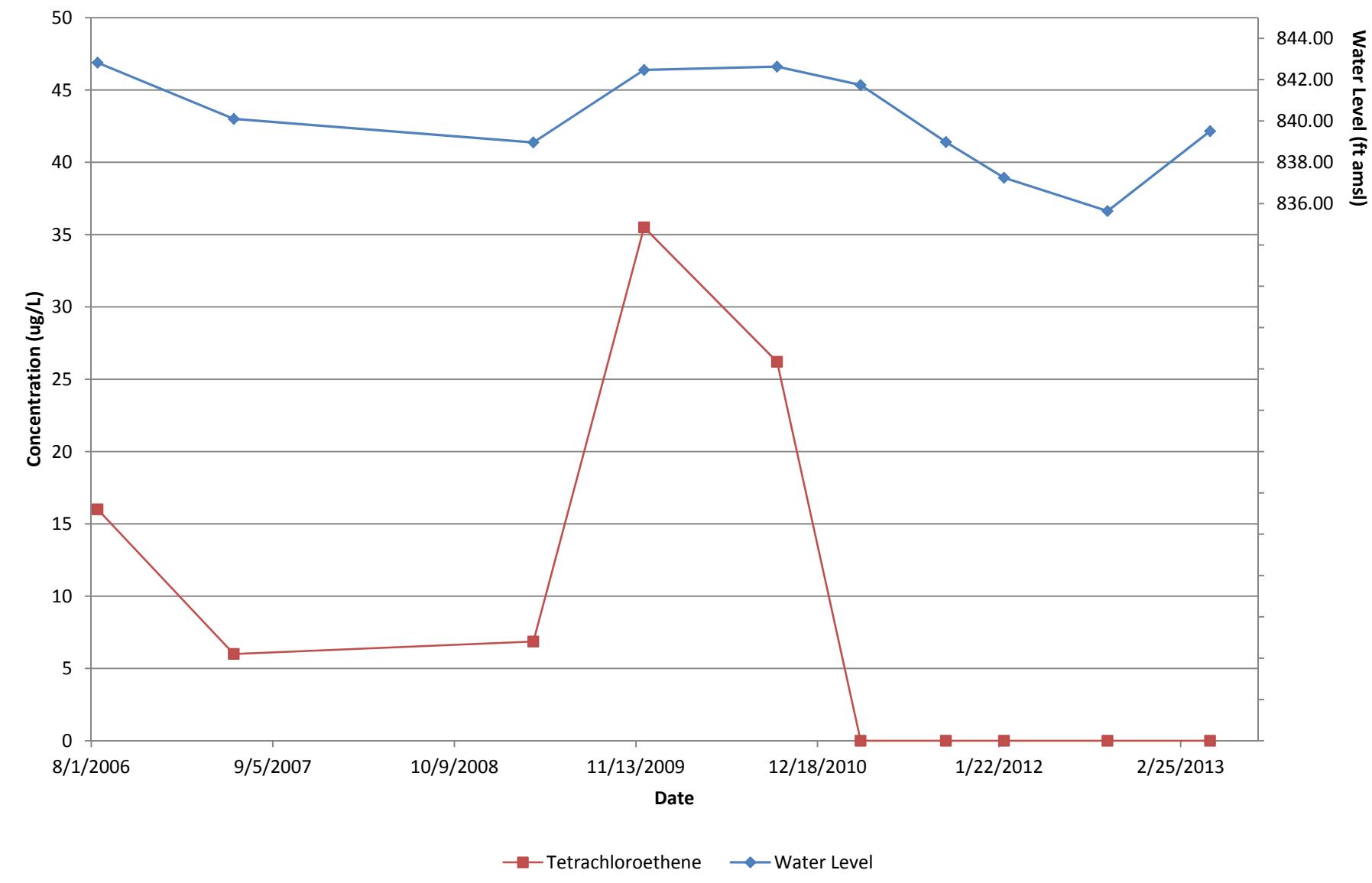
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**Conyers, Georgia**



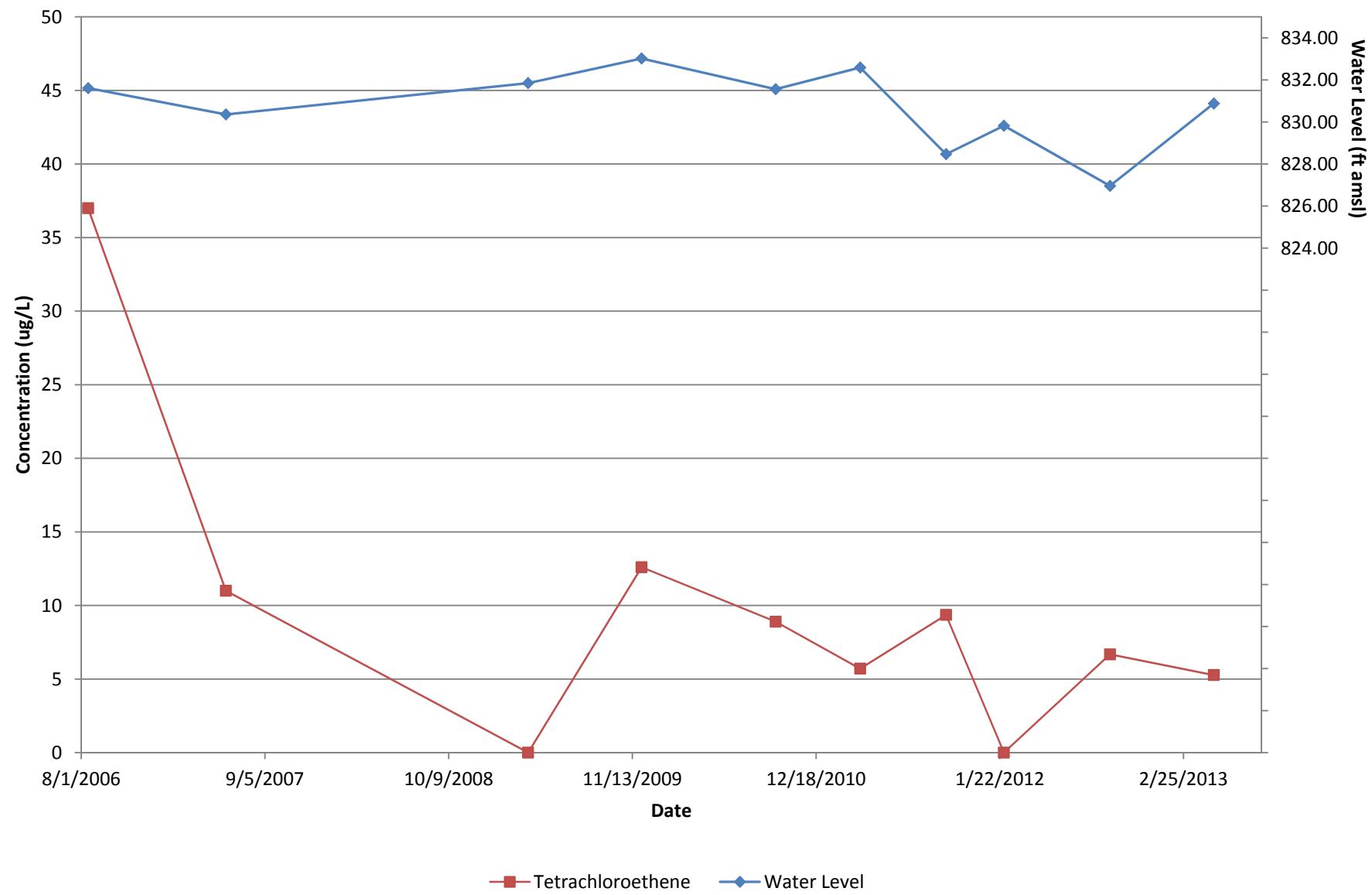
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**Conyers, Georgia**



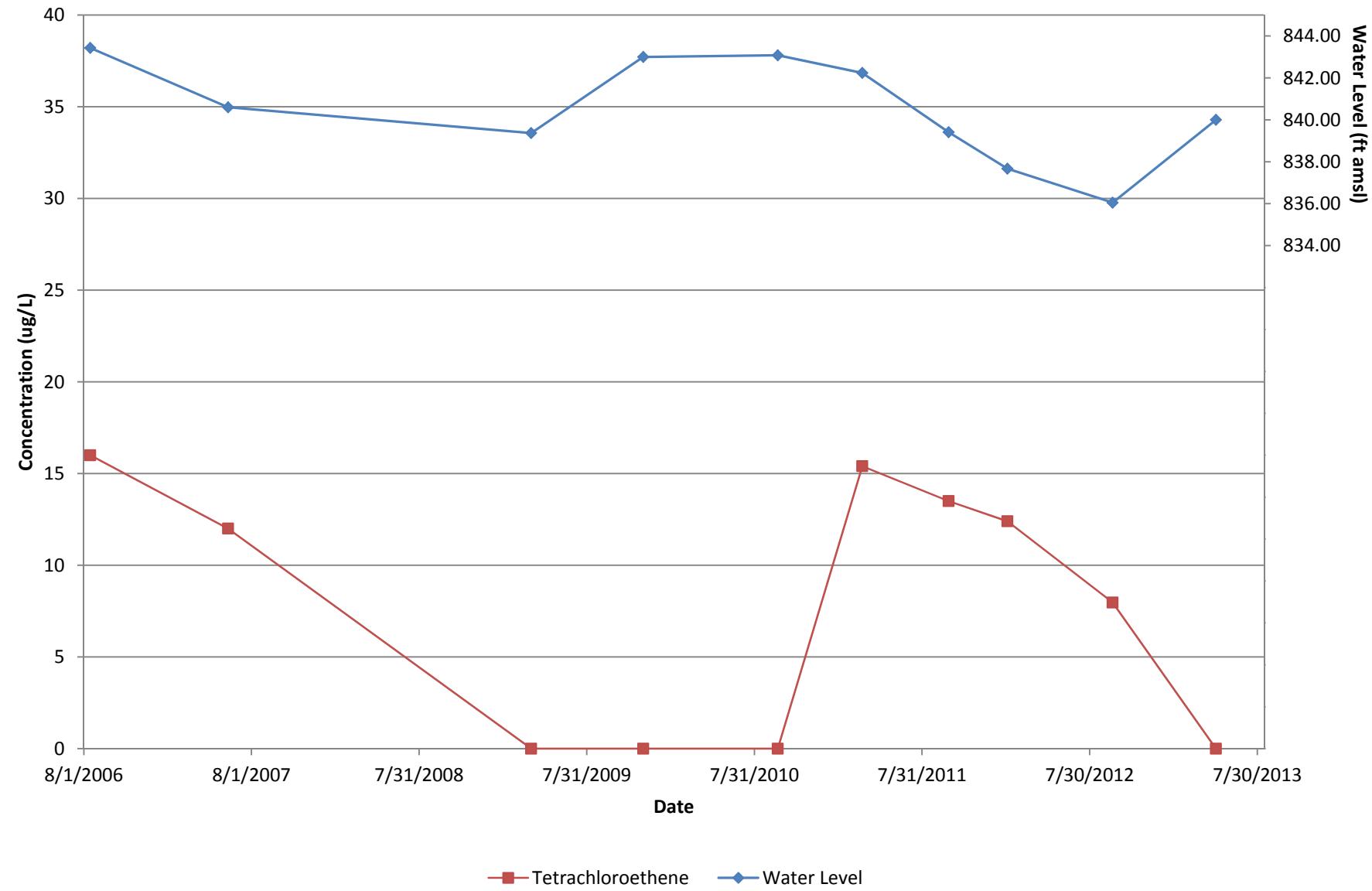
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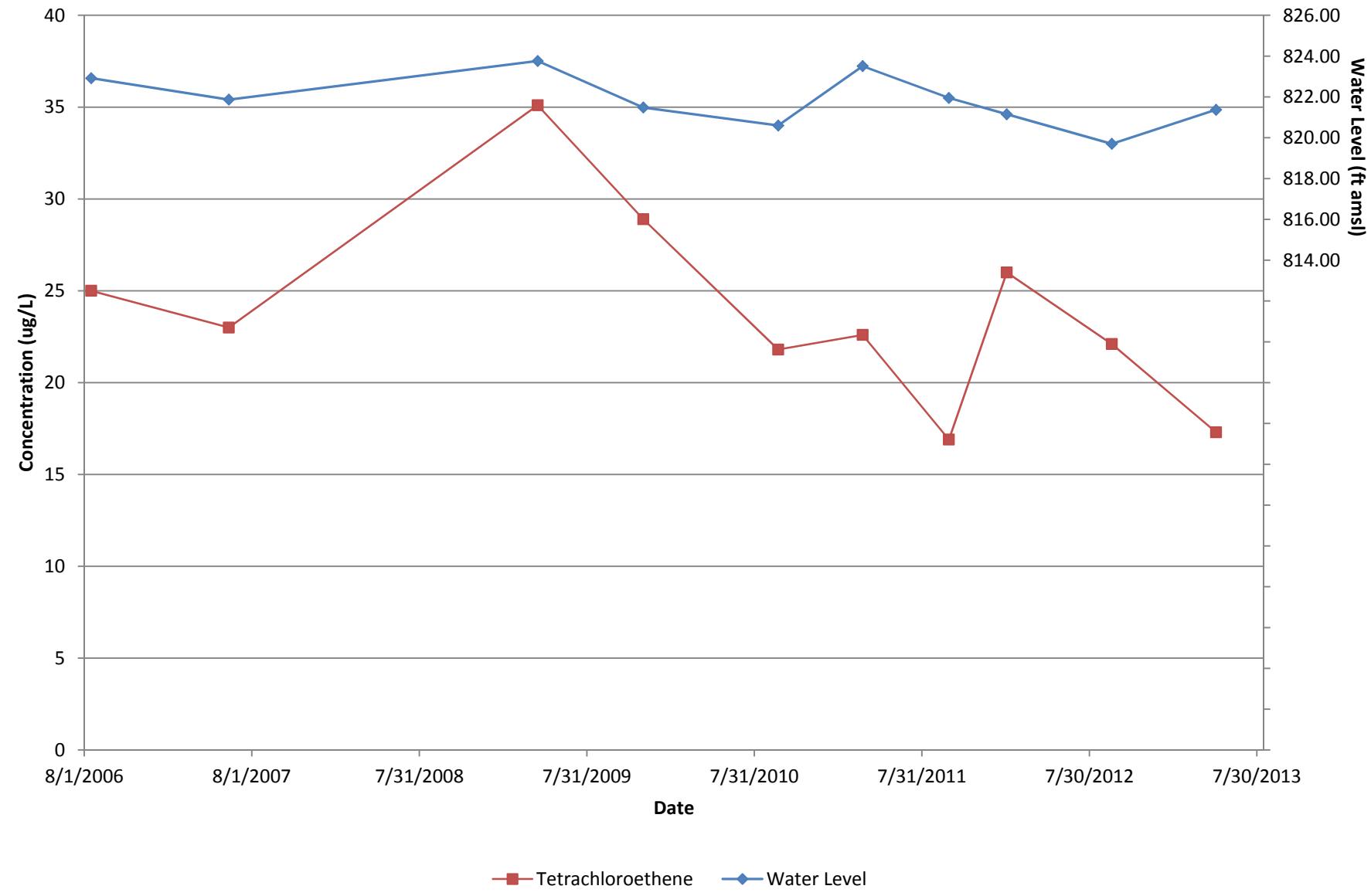
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**Conyers, Georgia**



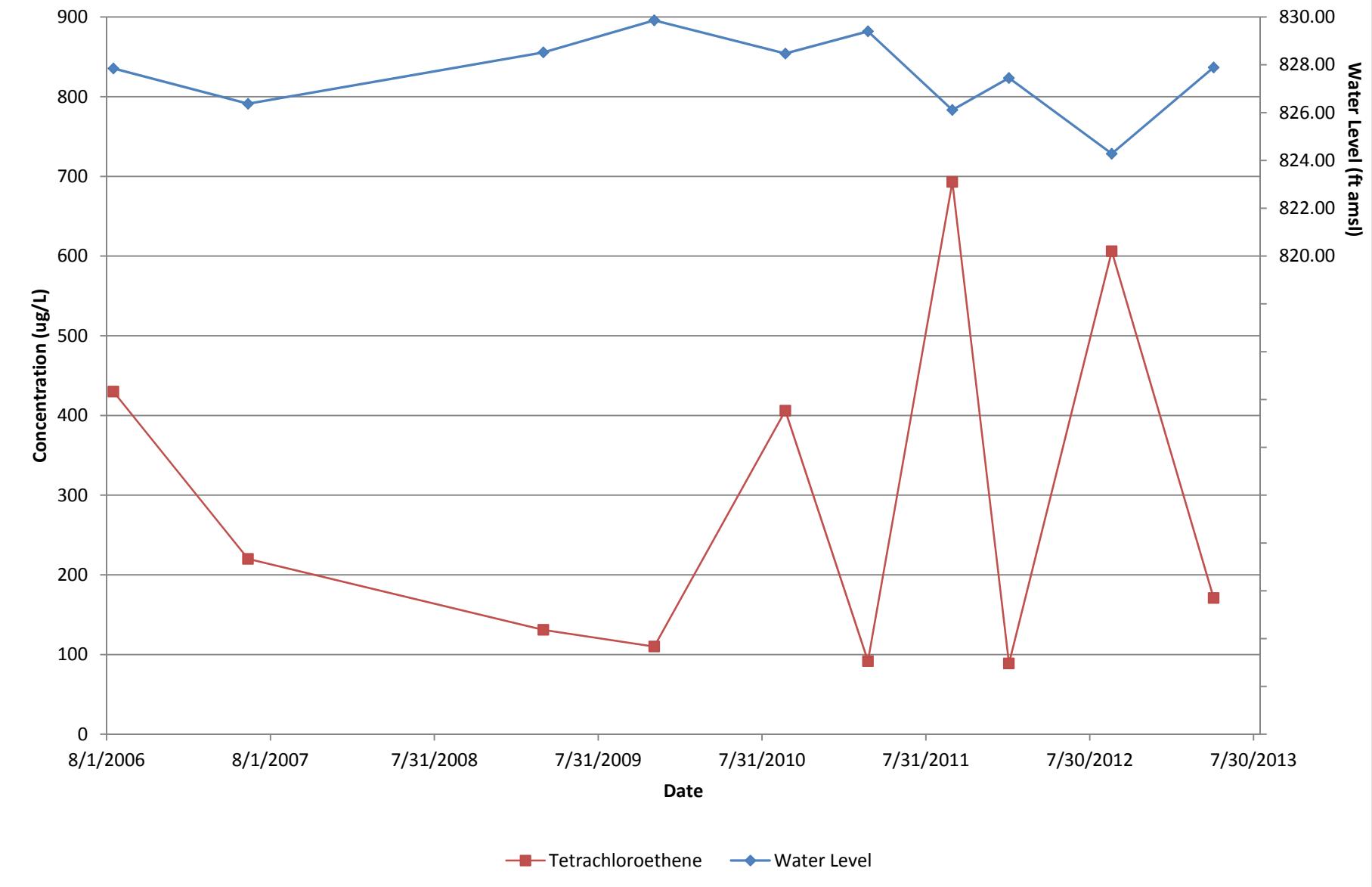
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**Conyers, Georgia**



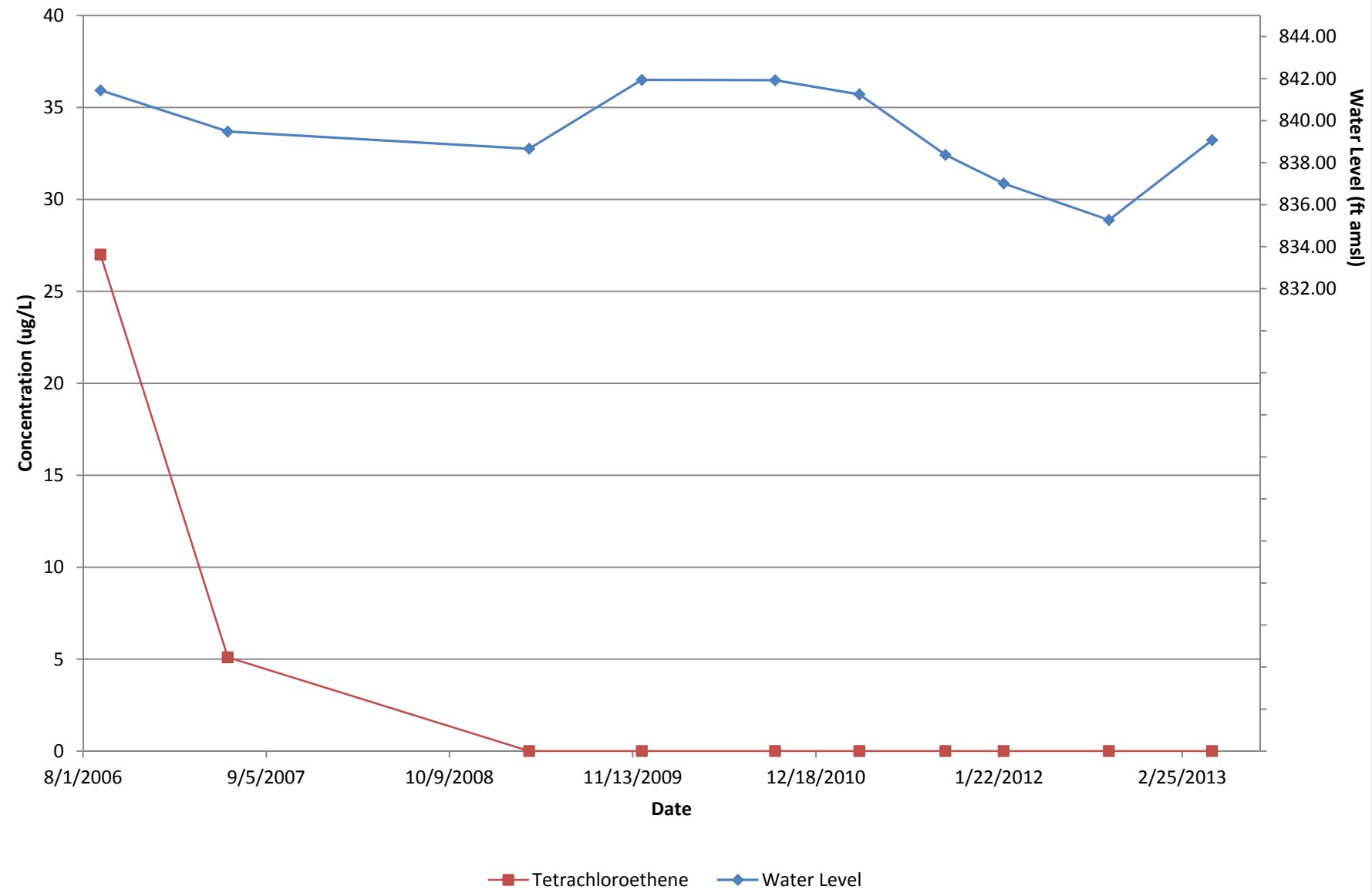
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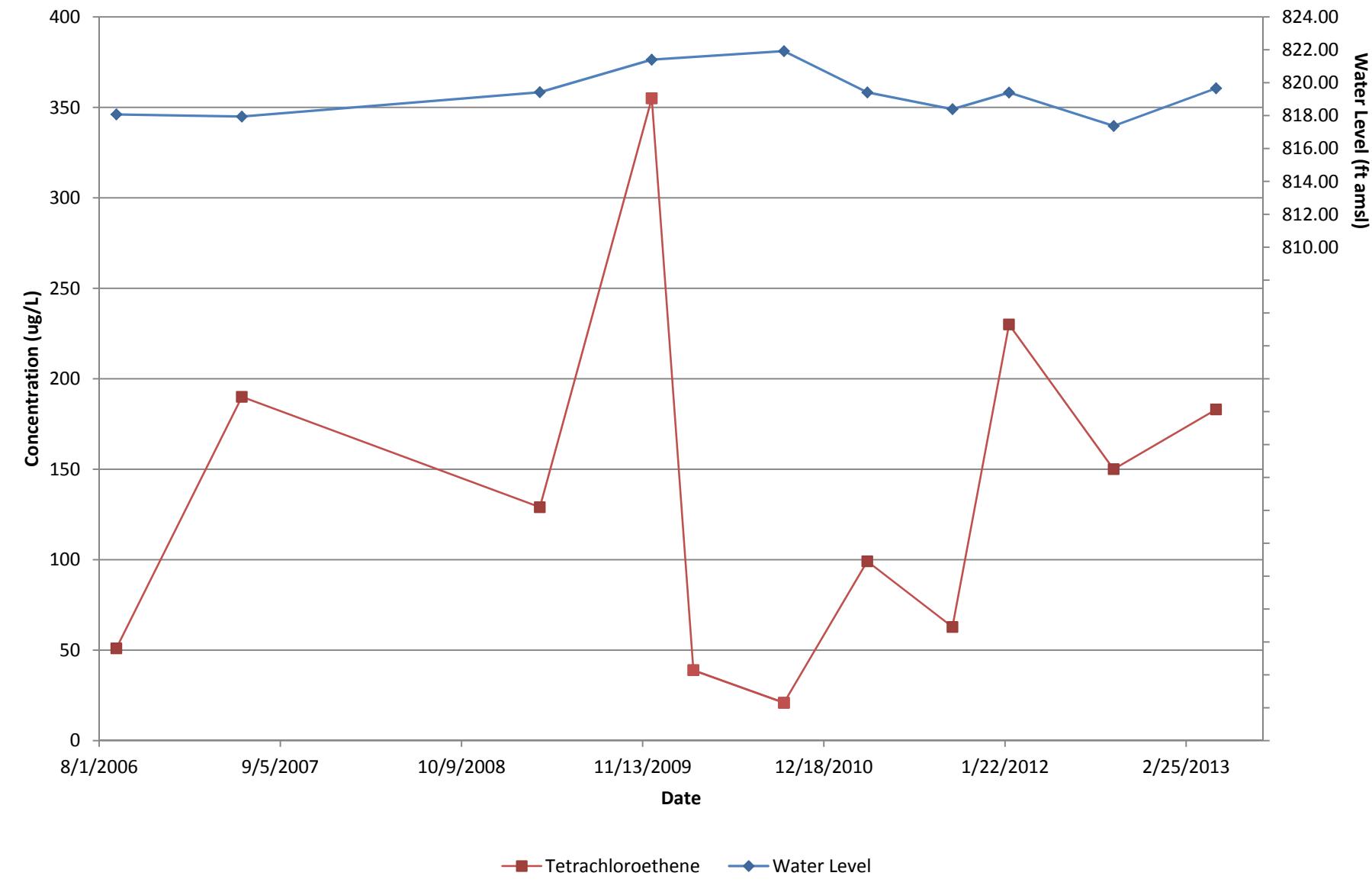
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**Conyers, Georgia**



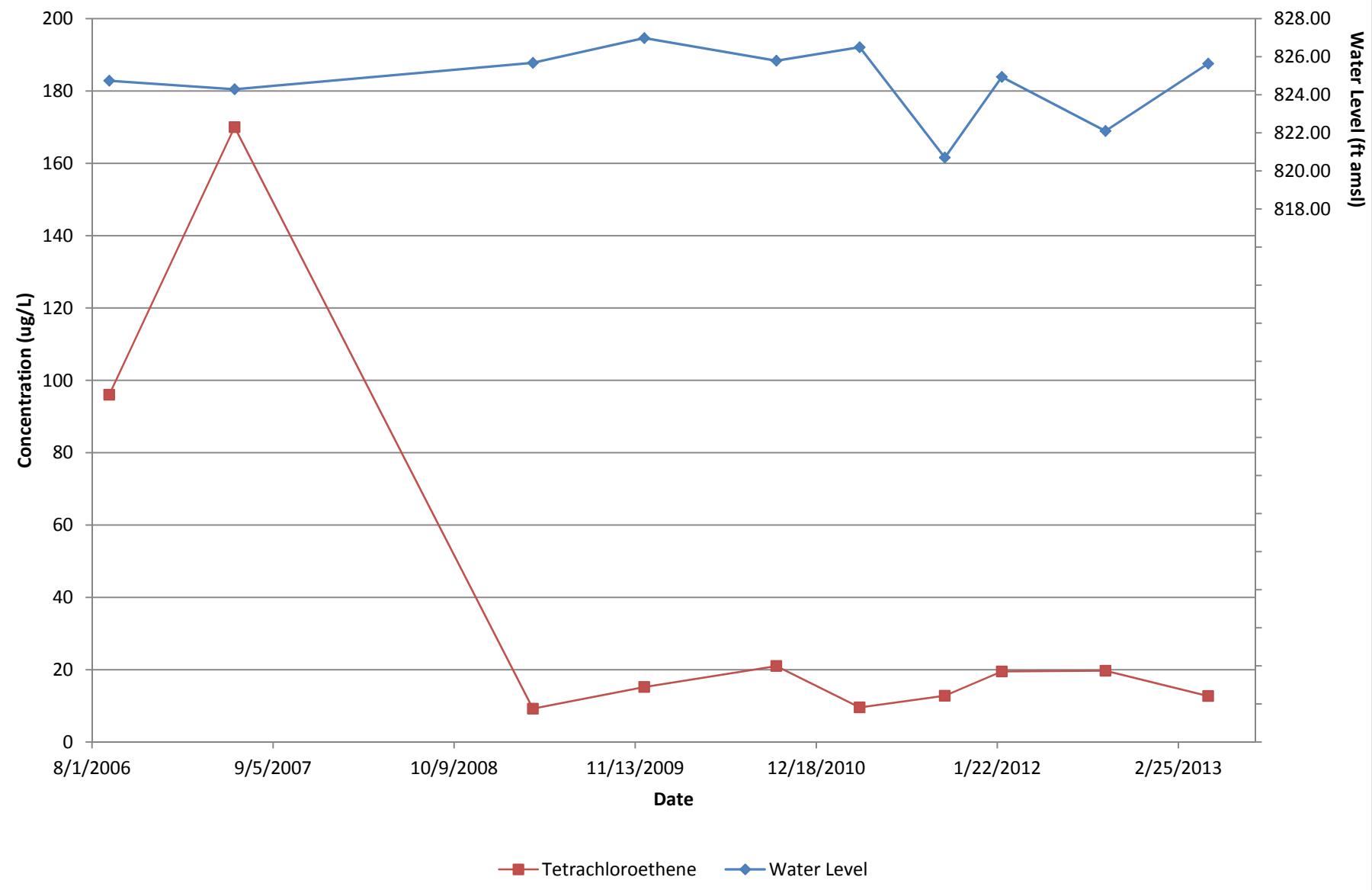
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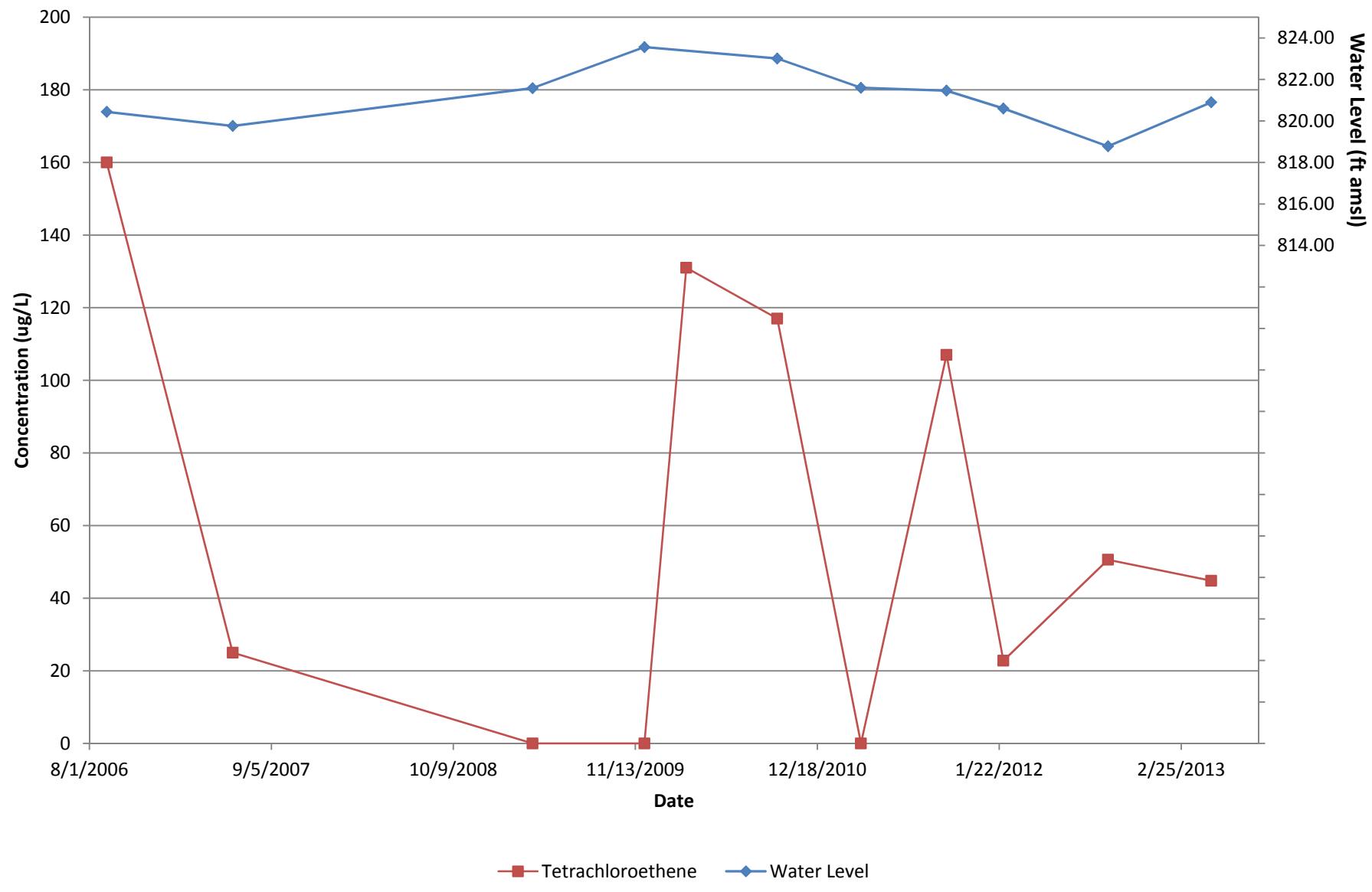
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**Conyers, Georgia**



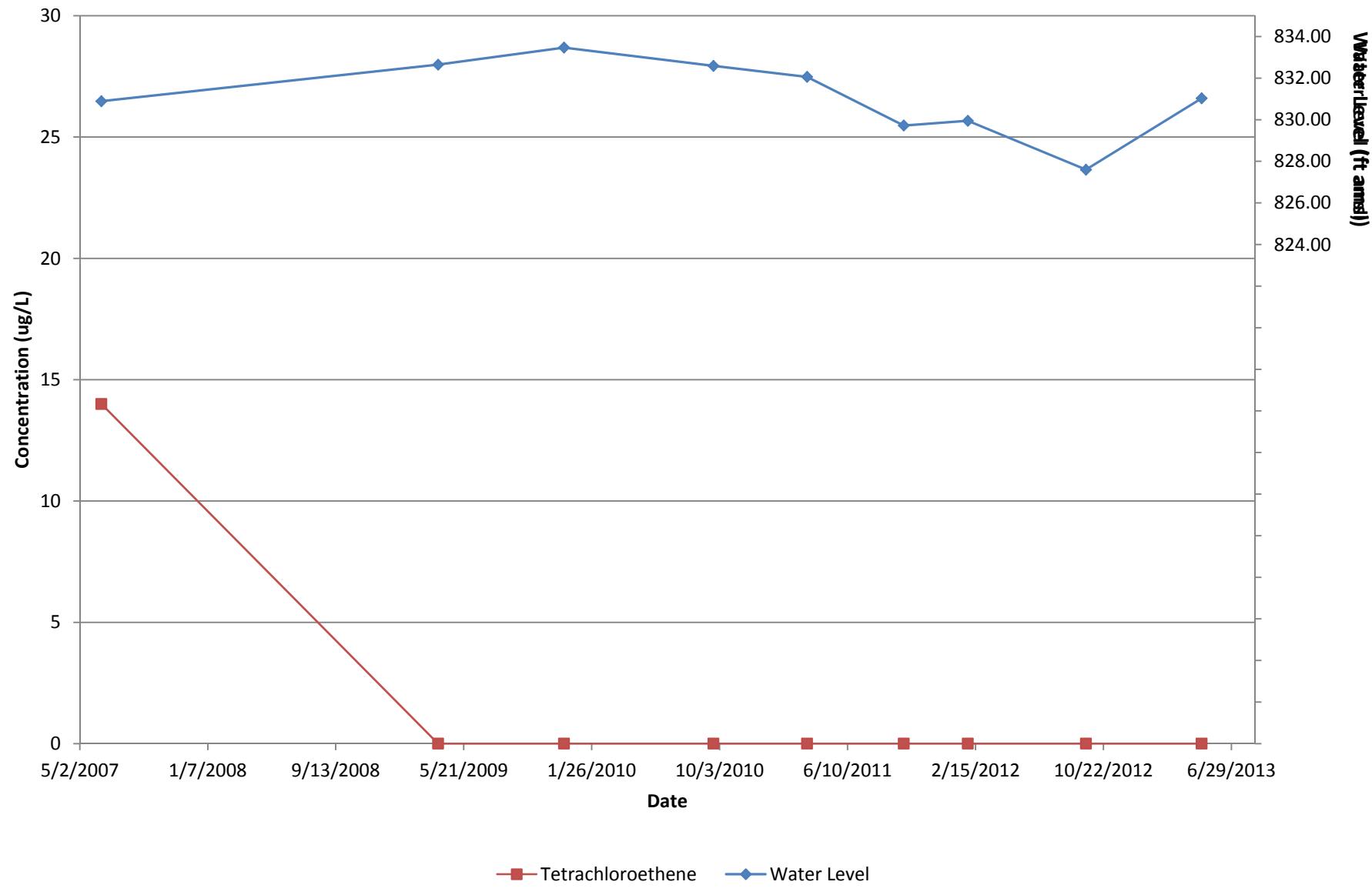
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**Conyers, Georgia**

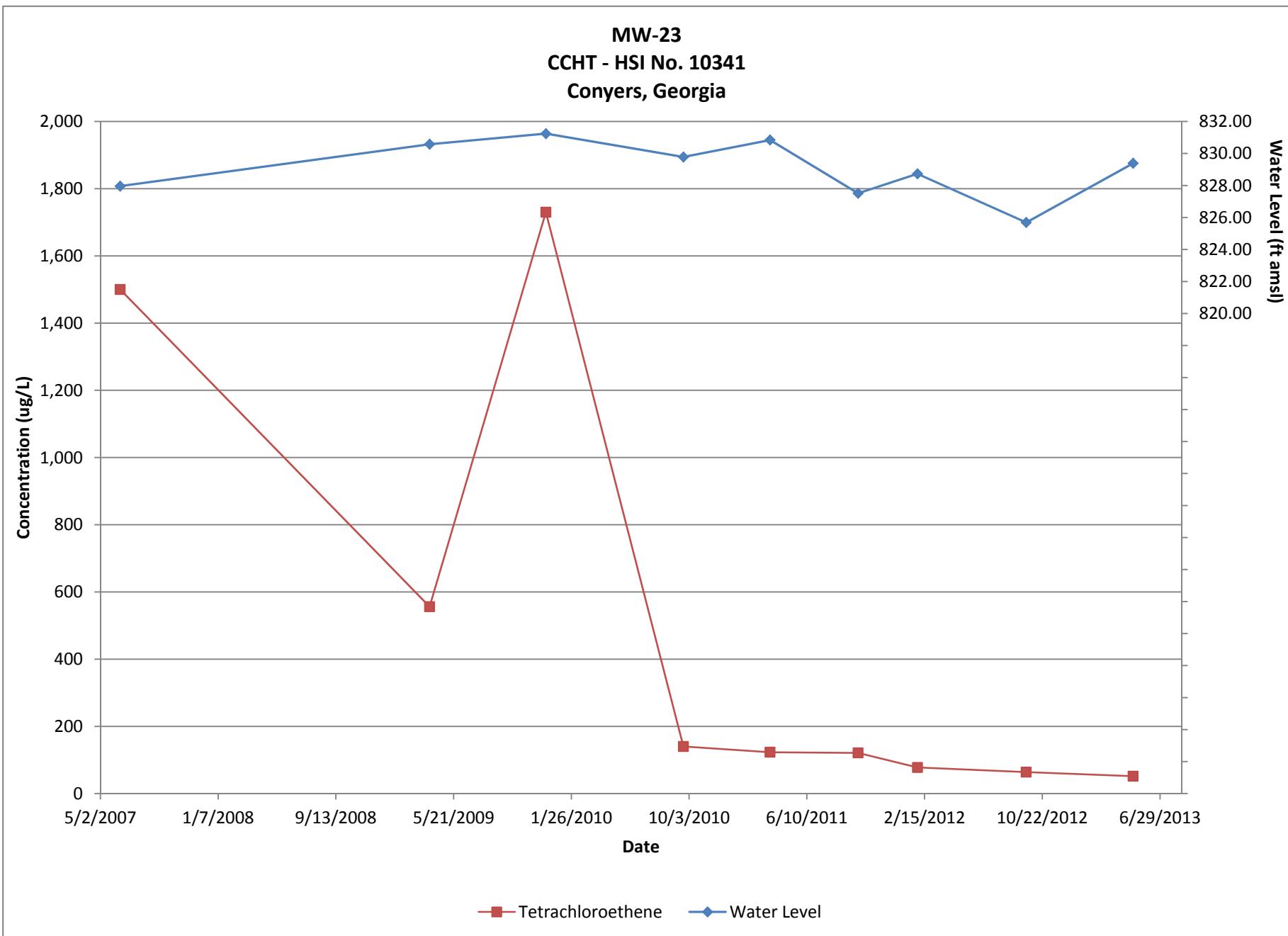


**MW-21**  
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**Conyers, Georgia**

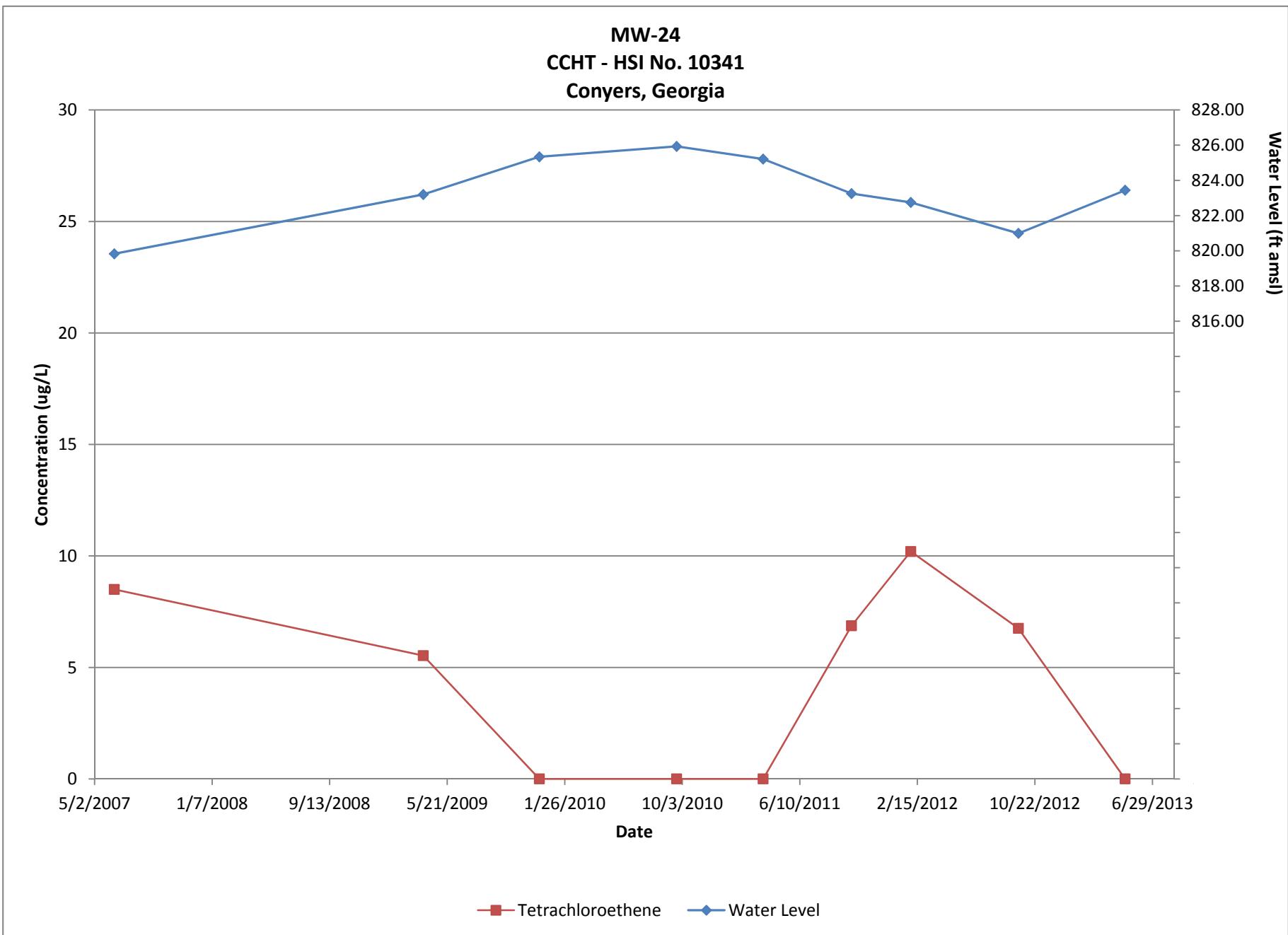


**MW-22**  
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**Conyers, Georgia**

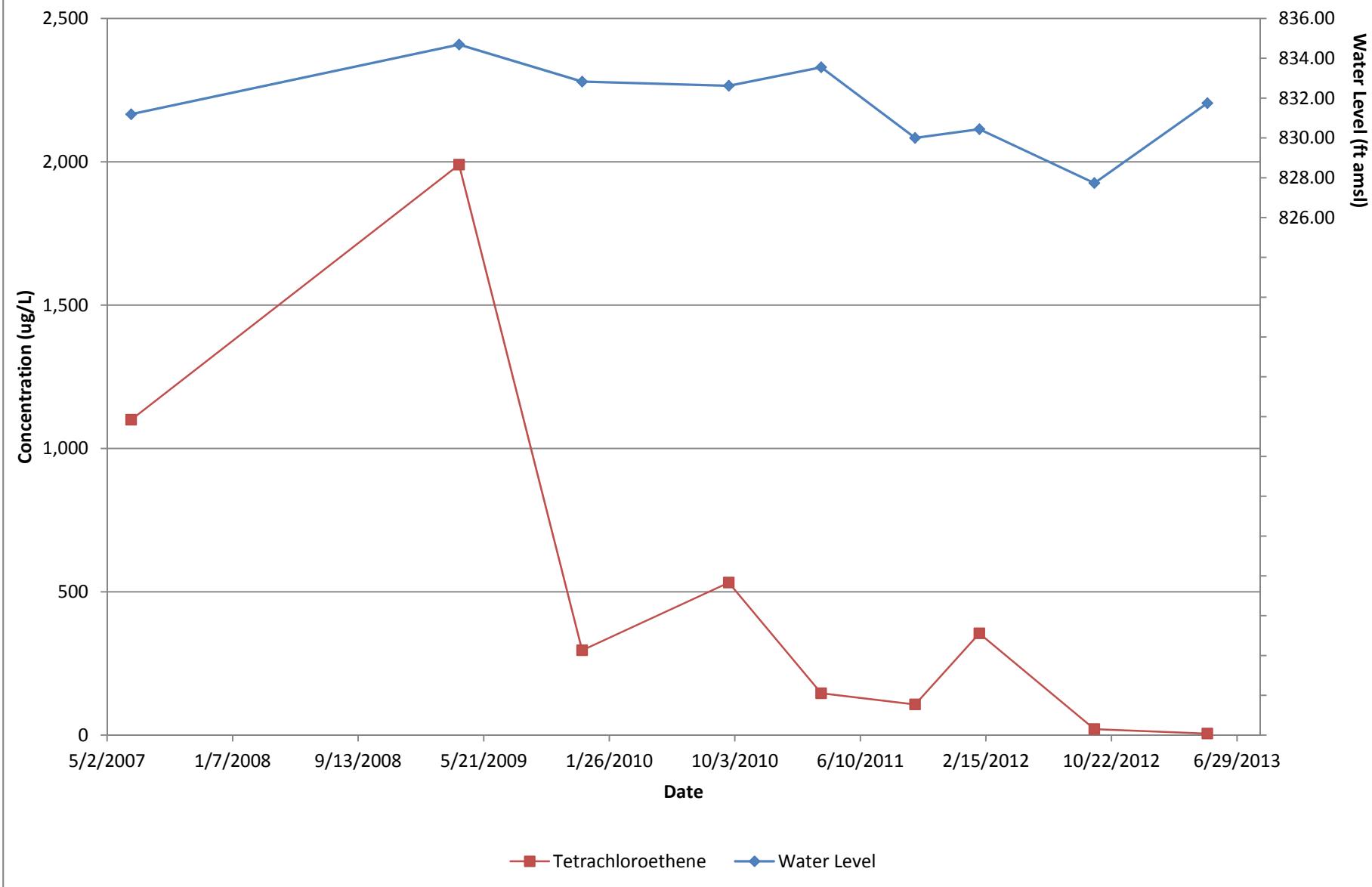


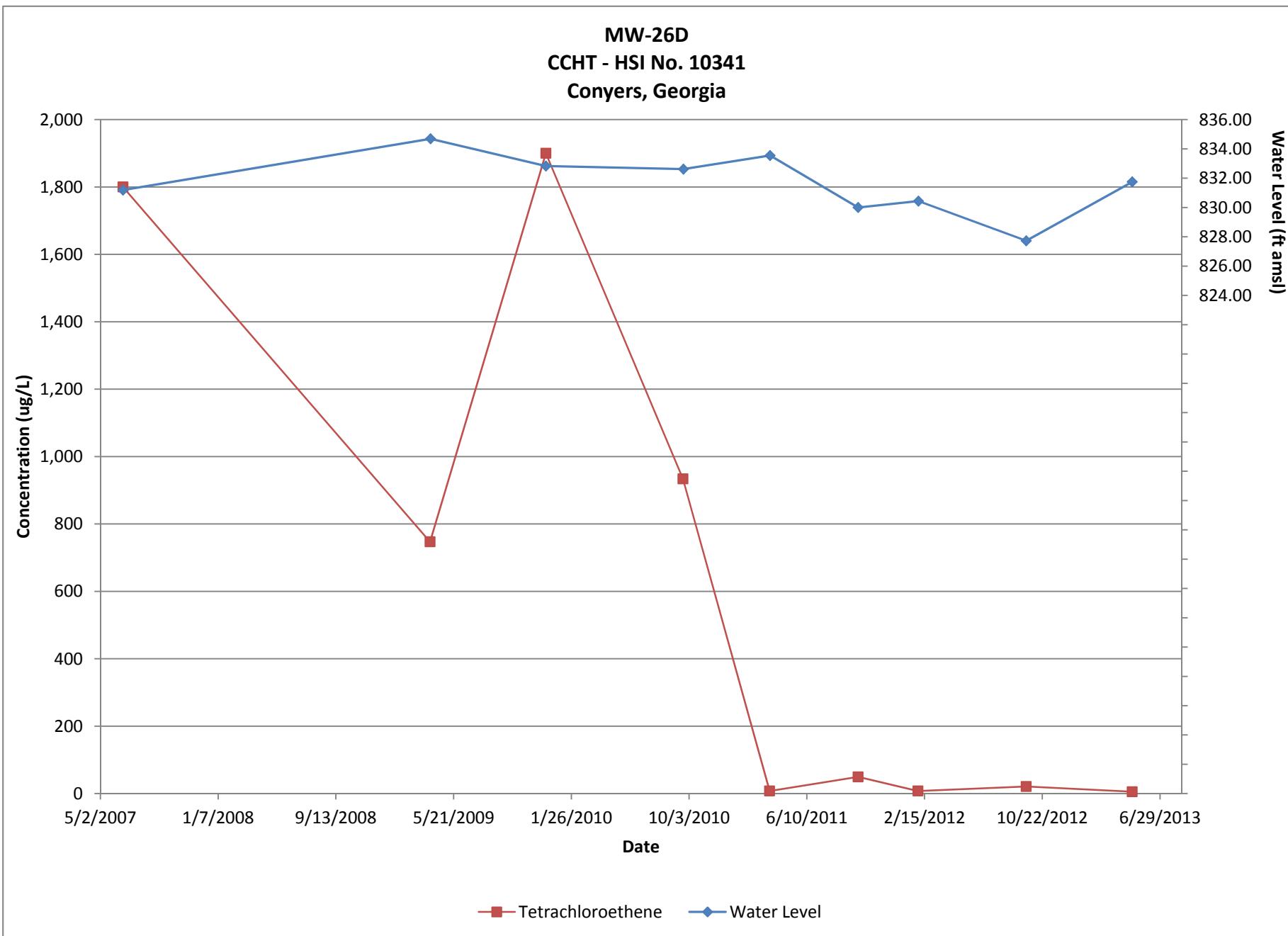


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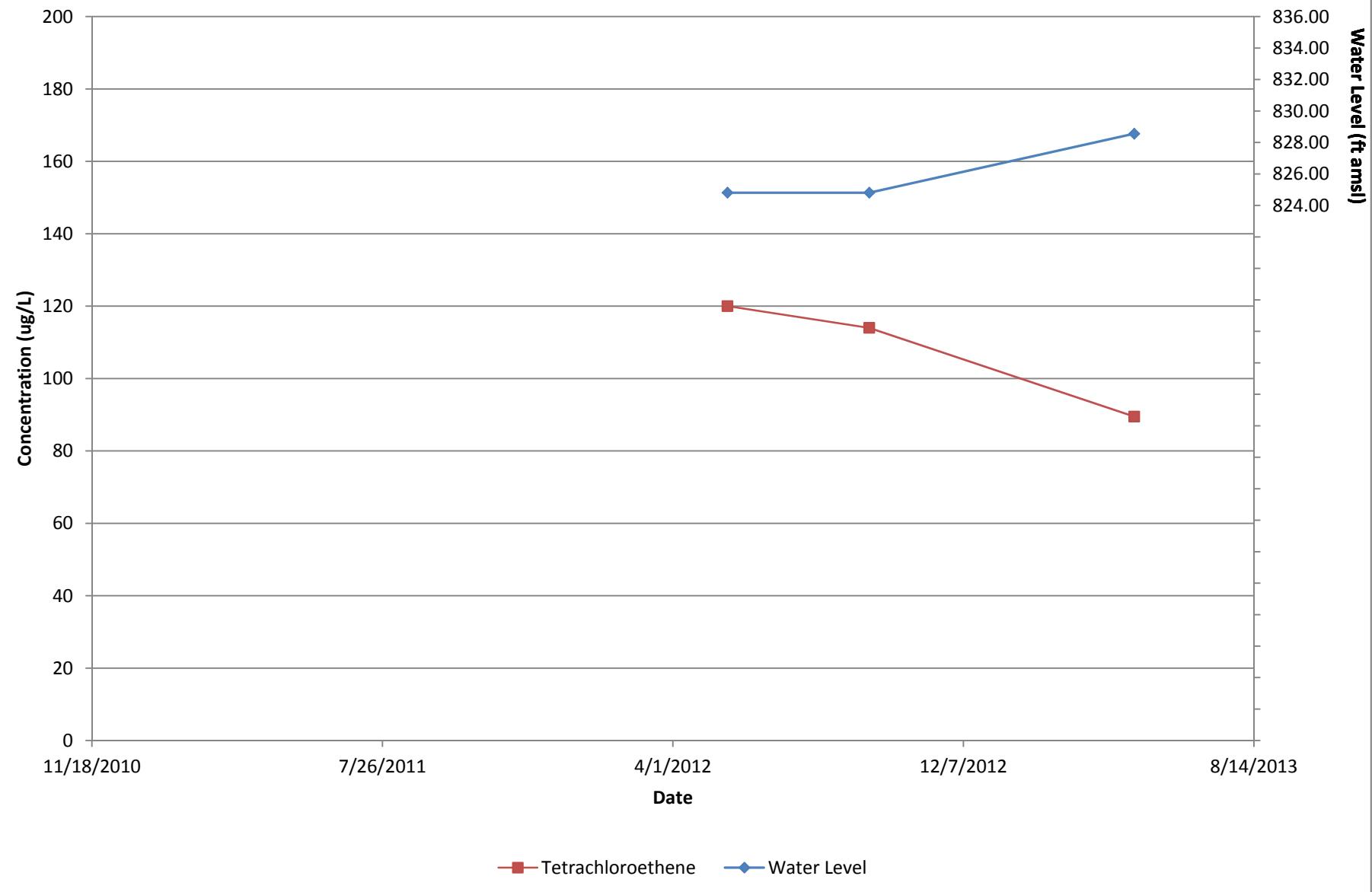


**MW-25D**  
**CCHT - HSI No. 10341**  
**Conyers, Georgia**





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



**Appendix C**  
**Groundwater Analytical Data**

**NELAP CERTIFICATE NUMBER 01955  
DOD ELAP CERTIFICATE NUMBER ADE - 1482**

# **ANALYTICAL RESULTS**

**PERFORMED BY**

**GULF COAST ANALYTICAL LABORATORIES, INC.**

**7979 GSRI Avenue  
Baton Rouge, LA 70820**

**Report Date** 05/13/2013

**GCAL Report** 213050419



**Deliver To** ENVIRON  
1600 Parkwood Circle  
Suite 310  
Atlanta, GA 30339  
678-388-1663

**Attn** Ryan Slakman

**Project** CCHT/07-21924K

## Case Narrative

**Client:** ENVIRON International Corp

**Report:** 213050419

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference 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.

### **VOLATILES MASS SPECTROMETRY**

In the SW-846 8260B analysis, samples 21305041924 (MW-25D) and 21305041918 (MW-19) 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.

In the SW-846 8260B analysis for analytical batch 506802, the LCS and/or LCSD recoveries are above the upper control limit for Vinyl Acetate and 2,2-Dichloropropane. These compounds were not detected in the associated samples.

# 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 Utilized in this Report

<b>ND</b>	Indicates the result was Not Detected at the specified RDL
<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>PQL</b>	Practical Quantitation Limit
<b>MDL</b>	Method Detection Limit
<b>RDL</b>	Reporting Detection Limit
<b>00:00</b>	Reported as a time equivalent to 12:00 AM

## Reporting Flags Utilized in this Report

<b>J</b>	Indicates the result is between the MDL and RDL
<b>U</b>	Indicates the compound was analyzed for but not detected
<b>B</b>	Indicates the analyte was detected in the associated Method Blank

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 standard 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.

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Authorized Signature  
**GCAL REPORT 213050419**

# Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041901	MW-01	Water	05/01/2013 17:12	05/04/2013 09:45
21305041902	MW-03	Water	05/01/2013 17:57	05/04/2013 09:45
21305041903	MW-04	Water	05/03/2013 11:05	05/07/2013 09:20
21305041904	MW-05	Water	05/02/2013 09:10	05/04/2013 09:45
21305041905	MW-06	Water	05/02/2013 08:00	05/04/2013 09:45
21305041906	MW-07	Water	05/02/2013 16:00	05/04/2013 09:45
21305041907	MW-08R	Water	05/01/2013 12:28	05/04/2013 09:45
21305041908	MW-09R	Water	05/01/2013 18:30	05/04/2013 09:45
21305041909	MW-10	Water	05/01/2013 15:22	05/04/2013 09:45
21305041910	MW-11	Water	05/03/2013 09:42	05/04/2013 09:45
21305041911	MW-12	Water	05/02/2013 11:40	05/04/2013 09:45
21305041912	MW-13	Water	05/01/2013 16:08	05/04/2013 09:45
21305041913	MW-14	Water	05/02/2013 15:00	05/04/2013 09:45
21305041914	MW-15	Water	05/02/2013 17:00	05/04/2013 09:45
21305041915	MW-16	Water	05/02/2013 17:40	05/04/2013 09:45
21305041916	MW-17	Water	05/02/2013 08:25	05/04/2013 09:45
21305041917	MW-18	Water	05/01/2013 15:07	05/04/2013 09:45
21305041918	MW-19	Water	05/02/2013 10:22	05/04/2013 09:45
21305041919	MW-20	Water	05/02/2013 11:30	05/04/2013 09:45
21305041920	MW-21	Water	05/02/2013 09:30	05/04/2013 09:45
21305041921	MW-22	Water	05/02/2013 12:25	05/04/2013 09:45
21305041922	MW-23	Water	05/03/2013 09:05	05/04/2013 09:45
21305041923	MW-24	Water	05/02/2013 15:52	05/04/2013 09:45
21305041924	MW-25D	Water	05/02/2013 15:00	05/04/2013 09:45
21305041925	MW-26D	Water	05/01/2013 15:50	05/04/2013 09:45
21305041926	MW-28D	Water	05/03/2013 15:50	05/04/2013 09:45
21305041927	TWP 13-1	Water	05/03/2013 11:00	05/04/2013 09:45
21305041928	TWP 13-2	Water	05/03/2013 10:30	05/04/2013 09:45
21305041929	MW-29D	Water	05/03/2013 11:30	05/04/2013 09:45
21305041930	TRIP BLANK	Water	05/03/2013 00:00	05/04/2013 09:45
21305041931	DUP-01	Water	05/03/2013 00:00	05/04/2013 09:45
21305041932	DUP-02	Water	05/03/2013 00:00	05/04/2013 09:45
21305041933	MW-27D	Water	05/03/2013 11:17	05/07/2013 09:20

# Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041905	MW-06	Water	05/02/2013 08:00	05/04/2013 09:45

SW-846 8260B

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	13.2	5.00		ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041907	MW-08R	Water	05/01/2013 12:28	05/04/2013 09:45

SW-846 8260B

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	16.7	5.00		ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041911	MW-12	Water	05/02/2013 11:40	05/04/2013 09:45

SW-846 8260B

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	5.27	5.00		ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041913	MW-14	Water	05/02/2013 15:00	05/04/2013 09:45

SW-846 8260B

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	17.3	5.00		ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041914	MW-15	Water	05/02/2013 17:00	05/04/2013 09:45

SW-846 8260B

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	171	5.00		ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041918	MW-19	Water	05/02/2013 10:22	05/04/2013 09:45

SW-846 8260B

CAS#	Parameter	Result	RDL	REG LIMIT	Units
75-35-4	1,1-Dichloroethene	5.81	5.00		ug/L

## Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041918	MW-19	Water	05/02/2013 10:22	05/04/2013 09:45

SW-846 8260B

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	183	25.0		ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041919	MW-20	Water	05/02/2013 11:30	05/04/2013 09:45

SW-846 8260B

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	12.7	5.00		ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041920	MW-21	Water	05/02/2013 09:30	05/04/2013 09:45

SW-846 8260B

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	44.8	5.00		ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041922	MW-23	Water	05/03/2013 09:05	05/04/2013 09:45

SW-846 8260B

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	51.7	5.00		ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041924	MW-25D	Water	05/02/2013 15:00	05/04/2013 09:45

SW-846 8260B

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	318	25.0		ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041925	MW-26D	Water	05/01/2013 15:50	05/04/2013 09:45

SW-846 8260B

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	5.45	5.00		ug/L

## Summary of Compounds Detected (con't)

GCAL ID 21305041929	Client ID MW-29D	Matrix Water	Collect Date/Time 05/03/2013 11:30	Receive Date/Time 05/04/2013 09:45
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SW-846 8260B

CAS# 67-66-3	Parameter Chloroform	Result 8.05	RDL 5.00	REG LIMIT	Units ug/L
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GCAL ID 21305041931	Client ID DUP-01	Matrix Water	Collect Date/Time 05/03/2013 00:00	Receive Date/Time 05/04/2013 09:45
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SW-846 8260B

CAS# 127-18-4	Parameter Tetrachloroethene	Result 15.6	RDL 5.00	REG LIMIT	Units ug/L
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GCAL ID 21305041932	Client ID DUP-02	Matrix Water	Collect Date/Time 05/03/2013 00:00	Receive Date/Time 05/04/2013 09:45
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SW-846 8260B

CAS# 127-18-4	Parameter Tetrachloroethene	Result 5.05	RDL 5.00	REG LIMIT	Units ug/L
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GCAL ID 21305041933	Client ID MW-27D	Matrix Water	Collect Date/Time 05/03/2013 11:17	Receive Date/Time 05/07/2013 09:20
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SW-846 8260B

CAS# 67-66-3 127-18-4	Parameter Chloroform Tetrachloroethene	Result 5.00 89.5	RDL 5.00 5.00	REG LIMIT	Units ug/L ug/L
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GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041901	MW-01	Water	05/01/2013 17:12	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 04:05	By CLH	Analytical Batch 506693
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041901	MW-01	Water	05/01/2013 17:12	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 04:05	CLH	506693

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	52.4	ug/L	105	78 - 130
1868-53-7	Dibromofluoromethane	50	53.4	ug/L	107	77 - 127
2037-26-5	Toluene d8	50	52.2	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	51	ug/L	102	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041902	MW-03	Water	05/01/2013 17:57	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 04:27	By CLH	Analytical Batch 506693
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041902	MW-03	Water	05/01/2013 17:57	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 04:27	CLH	506693

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51.9	ug/L	104	78 - 130
1868-53-7	Dibromofluoromethane	50	54.3	ug/L	109	77 - 127
2037-26-5	Toluene d8	50	51.7	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.7	ug/L	101	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041903	MW-04	Water	05/03/2013 11:05	05/07/2013 09:20

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/10/2013 18:46	By CLH	Analytical Batch 507106
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041903	MW-04	Water	05/03/2013 11:05	05/07/2013 09:20

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/10/2013 18:46	CLH	507106

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.8	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	50.1	ug/L	100	77 - 127
2037-26-5	Toluene d8	50	51.5	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.7	ug/L	101	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041904	MW-05	Water	05/02/2013 09:10	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 04:50	By CLH	Analytical Batch 506693
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041904	MW-05	Water	05/02/2013 09:10	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 04:50	CLH	506693

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	52.5	ug/L	105	78 - 130
1868-53-7	Dibromofluoromethane	50	53.3	ug/L	107	77 - 127
2037-26-5	Toluene d8	50	52.6	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.8	ug/L	100	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041905	MW-06	Water	05/02/2013 08:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 05:12	By CLH	Analytical Batch 506693
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041905	MW-06	Water	05/02/2013 08:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 05:12	CLH	506693

CAS#	Parameter	Result	RDL	REG LIMIT	Units
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>13.2</b>	<b>5.00</b>		<b>ug/L</b>
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	53.5	ug/L	107	78 - 130
1868-53-7	Dibromofluoromethane	50	54.1	ug/L	108	77 - 127
2037-26-5	Toluene d8	50	52.3	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.8	ug/L	102	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041906	MW-07	Water	05/02/2013 16:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 05:35	By CLH	Analytical Batch 506693
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041906	MW-07	Water	05/02/2013 16:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 05:35	CLH	506693

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	52.9	ug/L	106	78 - 130
1868-53-7	Dibromofluoromethane	50	54.2	ug/L	108	77 - 127
2037-26-5	Toluene d8	50	52.7	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.1	ug/L	100	71 - 127

GCAL ID 21305041907	Client ID MW-08R	Matrix Water	Collect Date/Time 05/01/2013 12:28	Receive Date/Time 05/04/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 05:57	By CLH	Analytical Batch 506693
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041907	MW-08R	Water	05/01/2013 12:28	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 05:57	CLH	506693

CAS#	Parameter	Result	RDL	REG LIMIT	Units
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>16.7</b>	<b>5.00</b>		<b>ug/L</b>
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	52.4	ug/L	105	78 - 130
1868-53-7	Dibromofluoromethane	50	54.6	ug/L	109	77 - 127
2037-26-5	Toluene d8	50	52.9	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.7	ug/L	99	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041908	MW-09R	Water	05/01/2013 18:30	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
CAS#	Parameter		1	05/06/2013 06:21	CLH	506693
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		<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
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
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
100-42-5	Styrene		<5.00	5.00		ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041908	MW-09R	Water	05/01/2013 18:30	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 06:21	CLH	506693

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	53.1	ug/L	106	78 - 130
1868-53-7	Dibromofluoromethane	50	53	ug/L	106	77 - 127
2037-26-5	Toluene d8	50	53.5	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	51.7	ug/L	103	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041909	MW-10	Water	05/01/2013 15:22	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 06:43	By CLH	Analytical Batch 506693
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041909	MW-10	Water	05/01/2013 15:22	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 06:43	CLH	506693

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	52.1	ug/L	104	78 - 130
1868-53-7	Dibromofluoromethane	50	53.8	ug/L	108	77 - 127
2037-26-5	Toluene d8	50	52.3	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.8	ug/L	102	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041910	MW-11	Water	05/03/2013 09:42	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 07:05	By CLH	Analytical Batch 506693
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041910	MW-11	Water	05/03/2013 09:42	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 07:05	CLH	506693

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	52.3	ug/L	105	78 - 130
1868-53-7	Dibromofluoromethane	50	53.7	ug/L	107	77 - 127
2037-26-5	Toluene d8	50	52.9	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.9	ug/L	100	71 - 127

GCAL ID 21305041911	Client ID MW-12	Matrix Water	Collect Date/Time 05/02/2013 11:40	Receive Date/Time 05/04/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 12:24	By AMD	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041911	MW-12	Water	05/02/2013 11:40	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 12:24	AMD	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>5.27</b>	<b>5.00</b>	<b>5.00</b>	<b>ug/L</b>
108-88-3	Toluene	<5.00	5.00	5.00	ug/L
79-01-6	Trichloroethene	<5.00	5.00	5.00	ug/L
75-69-4	Trichlorofluoromethane	<5.00	5.00	5.00	ug/L
76-13-1	Trichlorotrifluoroethane	<5.00	5.00	5.00	ug/L
108-05-4	Vinyl acetate	<5.00	5.00	5.00	ug/L
75-01-4	Vinyl chloride	<5.00	5.00	5.00	ug/L
1330-20-7	Xylene (total)	<15.0	15.0	15.0	ug/L
156-59-2	cis-1,2-Dichloroethene	<5.00	5.00	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	<5.00	5.00	5.00	ug/L
136777-61-2	m,p-Xylene	<10.0	10.0	10.0	ug/L
104-51-8	n-Butylbenzene	<5.00	5.00	5.00	ug/L
103-65-1	n-Propylbenzene	<5.00	5.00	5.00	ug/L
95-47-6	o-Xylene	<5.00	5.00	5.00	ug/L
135-98-8	sec-Butylbenzene	<5.00	5.00	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	<5.00	5.00	5.00	ug/L
98-06-6	tert-Butylbenzene	<5.00	5.00	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	<5.00	5.00	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	<5.00	5.00	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	<5.00	5.00	5.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	50	48	ug/L	96	77 - 127
2037-26-5	Toluene d8	50	53.2	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	47.9	ug/L	96	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041912	MW-13	Water	05/01/2013 16:08	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 12:46	By AMD	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041912	MW-13	Water	05/01/2013 16:08	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 12:46	AMD	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.1	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	50	48	ug/L	96	77 - 127
2037-26-5	Toluene d8	50	53.8	ug/L	108	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.3	ug/L	97	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041913	MW-14	Water	05/02/2013 15:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 13:07	By AMD	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041913	MW-14	Water	05/02/2013 15:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 13:07	AMD	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>17.3</b>	<b>5.00</b>	<b>5.00</b>	<b>ug/L</b>
108-88-3	Toluene	<5.00	5.00	5.00	ug/L
79-01-6	Trichloroethene	<5.00	5.00	5.00	ug/L
75-69-4	Trichlorofluoromethane	<5.00	5.00	5.00	ug/L
76-13-1	Trichlorotrifluoroethane	<5.00	5.00	5.00	ug/L
108-05-4	Vinyl acetate	<5.00	5.00	5.00	ug/L
75-01-4	Vinyl chloride	<5.00	5.00	5.00	ug/L
1330-20-7	Xylene (total)	<15.0	15.0	15.0	ug/L
156-59-2	cis-1,2-Dichloroethene	<5.00	5.00	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	<5.00	5.00	5.00	ug/L
136777-61-2	m,p-Xylene	<10.0	10.0	10.0	ug/L
104-51-8	n-Butylbenzene	<5.00	5.00	5.00	ug/L
103-65-1	n-Propylbenzene	<5.00	5.00	5.00	ug/L
95-47-6	o-Xylene	<5.00	5.00	5.00	ug/L
135-98-8	sec-Butylbenzene	<5.00	5.00	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	<5.00	5.00	5.00	ug/L
98-06-6	tert-Butylbenzene	<5.00	5.00	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	<5.00	5.00	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	<5.00	5.00	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	<5.00	5.00	5.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.3	ug/L	99	78 - 130
1868-53-7	Dibromofluoromethane	50	47	ug/L	94	77 - 127
2037-26-5	Toluene d8	50	53.7	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	47.6	ug/L	95	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041914	MW-15	Water	05/02/2013 17:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 13:28	By AMD	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041914	MW-15	Water	05/02/2013 17:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 13:28	AMD	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>171</b>	<b>5.00</b>		<b>ug/L</b>
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.9	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	50	48	ug/L	96	77 - 127
2037-26-5	Toluene d8	50	53.4	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.9	ug/L	98	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041915	MW-16	Water	05/02/2013 17:40	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 13:50	By AMD	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041915	MW-16	Water	05/02/2013 17:40	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 13:50	AMD	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	50	47.8	ug/L	96	77 - 127
2037-26-5	Toluene d8	50	53.3	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.1	ug/L	96	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041916	MW-17	Water	05/02/2013 08:25	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 14:11	By JCK	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041916	MW-17	Water	05/02/2013 08:25	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 14:11	JCK	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.4	ug/L	99	78 - 130
1868-53-7	Dibromofluoromethane	50	47.4	ug/L	95	77 - 127
2037-26-5	Toluene d8	50	54	ug/L	108	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	47.4	ug/L	95	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041917	MW-18	Water	05/01/2013 15:07	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 14:32	By JCK	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041917	MW-18	Water	05/01/2013 15:07	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 14:32	JCK	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	50	47.2	ug/L	94	77 - 127
2037-26-5	Toluene d8	50	53.6	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.3	ug/L	97	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041918	MW-19	Water	05/02/2013 10:22	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 14:53	By AMD	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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
<b>75-35-4</b>	<b>1,1-Dichloroethene</b>			<b>5.81</b>	<b>5.00</b>	<b>ug/L</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
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
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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041918	MW-19	Water	05/02/2013 10:22	05/04/2013 09:45

## SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 14:53	AMD	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.8	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	50	48.1	ug/L	96	77 - 127
2037-26-5	Toluene d8	50	53.1	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	47.7	ug/L	95	71 - 127

## SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	05/07/2013 15:00	AMD	506802

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	183	25.0		ug/L
CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery
460-00-4	4-Bromofluorobenzene	250	226	ug/L	90
1868-53-7	Dibromofluoromethane	250	271	ug/L	108
2037-26-5	Toluene d8	250	224	ug/L	90
17060-07-0	1,2-Dichloroethane-d4	250	270	ug/L	108

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041919	MW-20	Water	05/02/2013 11:30	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/07/2013 13:40	By AMD	Analytical Batch 506802
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041919	MW-20	Water	05/02/2013 11:30	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/07/2013 13:40	AMD	506802

CAS#	Parameter	Result	RDL	REG LIMIT	Units
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>12.7</b>	<b>5.00</b>		<b>ug/L</b>
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	45.9	ug/L	92	78 - 130
1868-53-7	Dibromofluoromethane	50	53.5	ug/L	107	77 - 127
2037-26-5	Toluene d8	50	46.3	ug/L	93	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	55.1	ug/L	110	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041920	MW-21	Water	05/02/2013 09:30	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/07/2013 14:00	By AMD	Analytical Batch 506802
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041920	MW-21	Water	05/02/2013 09:30	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/07/2013 14:00	AMD	506802

CAS#	Parameter	Result	RDL	REG LIMIT	Units
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>44.8</b>	<b>5.00</b>		<b>ug/L</b>
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	46.7	ug/L	93	78 - 130
1868-53-7	Dibromofluoromethane	50	53.4	ug/L	107	77 - 127
2037-26-5	Toluene d8	50	45.5	ug/L	91	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	53.5	ug/L	107	71 - 127

GCAL ID 21305041921	Client ID MW-22	Matrix Water	Collect Date/Time 05/02/2013 12:25	Receive Date/Time 05/04/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 15:57	By CLH	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041921	MW-22	Water	05/02/2013 12:25	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 15:57	CLH	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.6	ug/L	99	78 - 130
1868-53-7	Dibromofluoromethane	50	47.7	ug/L	95	77 - 127
2037-26-5	Toluene d8	50	54.4	ug/L	109	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	47.1	ug/L	94	71 - 127

GCAL ID 21305041922	Client ID MW-23	Matrix Water	Collect Date/Time 05/03/2013 09:05	Receive Date/Time 05/04/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 16:39	By CLH	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041922	MW-23	Water	05/03/2013 09:05	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 16:39	CLH	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>51.7</b>	<b>5.00</b>	<b>5.00</b>	<b>ug/L</b>
108-88-3	Toluene	<5.00	5.00	5.00	ug/L
79-01-6	Trichloroethene	<5.00	5.00	5.00	ug/L
75-69-4	Trichlorofluoromethane	<5.00	5.00	5.00	ug/L
76-13-1	Trichlorotrifluoroethane	<5.00	5.00	5.00	ug/L
108-05-4	Vinyl acetate	<5.00	5.00	5.00	ug/L
75-01-4	Vinyl chloride	<5.00	5.00	5.00	ug/L
1330-20-7	Xylene (total)	<15.0	15.0	15.0	ug/L
156-59-2	cis-1,2-Dichloroethene	<5.00	5.00	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	<5.00	5.00	5.00	ug/L
136777-61-2	m,p-Xylene	<10.0	10.0	10.0	ug/L
104-51-8	n-Butylbenzene	<5.00	5.00	5.00	ug/L
103-65-1	n-Propylbenzene	<5.00	5.00	5.00	ug/L
95-47-6	o-Xylene	<5.00	5.00	5.00	ug/L
135-98-8	sec-Butylbenzene	<5.00	5.00	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	<5.00	5.00	5.00	ug/L
98-06-6	tert-Butylbenzene	<5.00	5.00	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	<5.00	5.00	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	<5.00	5.00	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	<5.00	5.00	5.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.1	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	50	47.6	ug/L	95	77 - 127
2037-26-5	Toluene d8	50	53.2	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.1	ug/L	96	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041923	MW-24	Water	05/02/2013 15:52	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 17:01	By CLH	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041923	MW-24	Water	05/02/2013 15:52	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 17:01	CLH	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.5	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	50	48	ug/L	96	77 - 127
2037-26-5	Toluene d8	50	53.3	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	47.7	ug/L	95	71 - 127

GCAL ID 21305041924	Client ID MW-25D	Matrix Water	Collect Date/Time 05/02/2013 15:00	Receive Date/Time 05/04/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 5	Analyzed 05/06/2013 17:22	By CLH	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
630-20-6	1,1,1,2-Tetrachloroethane			<25.0	25.0	ug/L
71-55-6	1,1,1-Trichloroethane			<25.0	25.0	ug/L
79-34-5	1,1,2,2-Tetrachloroethane			<25.0	25.0	ug/L
79-00-5	1,1,2-Trichloroethane			<25.0	25.0	ug/L
75-34-3	1,1-Dichloroethane			<25.0	25.0	ug/L
75-35-4	1,1-Dichloroethene			<25.0	25.0	ug/L
563-58-6	1,1-Dichloropropene			<25.0	25.0	ug/L
96-18-4	1,2,3-Trichloropropane			<25.0	25.0	ug/L
120-82-1	1,2,4-Trichlorobenzene			<25.0	25.0	ug/L
95-63-6	1,2,4-Trimethylbenzene			<25.0	25.0	ug/L
96-12-8	1,2-Dibromo-3-chloropropane			<25.0	25.0	ug/L
106-93-4	1,2-Dibromoethane			<25.0	25.0	ug/L
95-50-1	1,2-Dichlorobenzene			<25.0	25.0	ug/L
107-06-2	1,2-Dichloroethane			<25.0	25.0	ug/L
540-59-0	1,2-Dichloroethene(Total)			<50.0	50.0	ug/L
78-87-5	1,2-Dichloropropane			<25.0	25.0	ug/L
108-67-8	1,3,5-Trimethylbenzene			<25.0	25.0	ug/L
541-73-1	1,3-Dichlorobenzene			<25.0	25.0	ug/L
142-28-9	1,3-Dichloropropane			<25.0	25.0	ug/L
106-46-7	1,4-Dichlorobenzene			<25.0	25.0	ug/L
594-20-7	2,2-Dichloropropane			<25.0	25.0	ug/L
78-93-3	2-Butanone			<25.0	25.0	ug/L
95-49-8	2-Chlorotoluene			<25.0	25.0	ug/L
591-78-6	2-Hexanone			<25.0	25.0	ug/L
106-43-4	4-Chlorotoluene			<25.0	25.0	ug/L
99-87-6	4-Isopropyltoluene			<25.0	25.0	ug/L
108-10-1	4-Methyl-2-pentanone			<25.0	25.0	ug/L
67-64-1	Acetone			<25.0	25.0	ug/L
71-43-2	Benzene			<25.0	25.0	ug/L
108-86-1	Bromobenzene			<25.0	25.0	ug/L
74-97-5	Bromochloromethane			<25.0	25.0	ug/L
75-27-4	Bromodichloromethane			<25.0	25.0	ug/L
75-25-2	Bromoform			<25.0	25.0	ug/L
74-83-9	Bromomethane			<25.0	25.0	ug/L
75-15-0	Carbon disulfide			<25.0	25.0	ug/L
56-23-5	Carbon tetrachloride			<25.0	25.0	ug/L
108-90-7	Chlorobenzene			<25.0	25.0	ug/L
75-00-3	Chloroethane			<25.0	25.0	ug/L
67-66-3	Chloroform			<25.0	25.0	ug/L
74-87-3	Chloromethane			<25.0	25.0	ug/L
124-48-1	Dibromochloromethane			<25.0	25.0	ug/L
74-95-3	Dibromomethane			<25.0	25.0	ug/L
75-71-8	Dichlorodifluoromethane			<25.0	25.0	ug/L
100-41-4	Ethylbenzene			<25.0	25.0	ug/L
87-68-3	Hexachlorobutadiene			<25.0	25.0	ug/L
98-82-8	Isopropylbenzene (Cumene)			<25.0	25.0	ug/L
74-88-4	Methyl iodide			<25.0	25.0	ug/L
75-09-2	Methylene chloride			<25.0	25.0	ug/L
91-20-3	Naphthalene			<25.0	25.0	ug/L
100-42-5	Styrene			<25.0	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041924	MW-25D	Water	05/02/2013 15:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	05/06/2013 17:22	CLH	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>318</b>	<b>25.0</b>		<b>ug/L</b>
108-88-3	Toluene	<25.0	25.0		ug/L
79-01-6	Trichloroethene	<25.0	25.0		ug/L
75-69-4	Trichlorofluoromethane	<25.0	25.0		ug/L
76-13-1	Trichlorotrifluoroethane	<25.0	25.0		ug/L
108-05-4	Vinyl acetate	<25.0	25.0		ug/L
75-01-4	Vinyl chloride	<25.0	25.0		ug/L
1330-20-7	Xylene (total)	<75.0	75.0		ug/L
156-59-2	cis-1,2-Dichloroethene	<25.0	25.0		ug/L
10061-01-5	cis-1,3-Dichloropropene	<25.0	25.0		ug/L
136777-61-2	m,p-Xylene	<50.0	50.0		ug/L
104-51-8	n-Butylbenzene	<25.0	25.0		ug/L
103-65-1	n-Propylbenzene	<25.0	25.0		ug/L
95-47-6	o-Xylene	<25.0	25.0		ug/L
135-98-8	sec-Butylbenzene	<25.0	25.0		ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	<25.0	25.0		ug/L
98-06-6	tert-Butylbenzene	<25.0	25.0		ug/L
156-60-5	trans-1,2-Dichloroethene	<25.0	25.0		ug/L
10061-02-6	trans-1,3-Dichloropropene	<25.0	25.0		ug/L
110-57-6	trans-1,4-Dichloro-2-butene	<25.0	25.0		ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	250	244	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	250	239	ug/L	96	77 - 127
2037-26-5	Toluene d8	250	265	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	250	244	ug/L	98	71 - 127

GCAL ID 21305041925	Client ID MW-26D	Matrix Water	Collect Date/Time 05/01/2013 15:50	Receive Date/Time 05/04/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 17:43	By CLH	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041925	MW-26D	Water	05/01/2013 15:50	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 17:43	CLH	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>5.45</b>	<b>5.00</b>		<b>ug/L</b>
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.1	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	47.2	ug/L	94	77 - 127
2037-26-5	Toluene d8	50	52.9	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.2	ug/L	96	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041926	MW-28D	Water	05/03/2013 15:50	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 18:04	By CLH	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041926	MW-28D	Water	05/03/2013 15:50	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 18:04	CLH	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.7	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	50	47.8	ug/L	96	77 - 127
2037-26-5	Toluene d8	50	53.3	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.7	ug/L	97	71 - 127

GCAL ID 21305041927	Client ID TWP 13-1	Matrix Water	Collect Date/Time 05/03/2013 11:00	Receive Date/Time 05/04/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 18:26	By CLH	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041927	TWP 13-1	Water	05/03/2013 11:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 18:26	CLH	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.3	ug/L	99	78 - 130
1868-53-7	Dibromofluoromethane	50	48.3	ug/L	97	77 - 127
2037-26-5	Toluene d8	50	53.4	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49	ug/L	98	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041928	TWP 13-2	Water	05/03/2013 10:30	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 18:47	By CLH	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041928	TWP 13-2	Water	05/03/2013 10:30	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 18:47	CLH	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.5	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	50	47.3	ug/L	95	77 - 127
2037-26-5	Toluene d8	50	52.9	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.2	ug/L	96	71 - 127

GCAL ID 21305041929	Client ID MW-29D	Matrix Water	Collect Date/Time 05/03/2013 11:30	Receive Date/Time 05/04/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 19:08	By CLH	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
<b>67-66-3</b>	<b>Chloroform</b>			<b>8.05</b>	<b>5.00</b>	<b>ug/L</b>
74-87-3	Chloromethane			<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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041929	MW-29D	Water	05/03/2013 11:30	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 19:08	CLH	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.1	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	50	47.5	ug/L	95	77 - 127
2037-26-5	Toluene d8	50	53.4	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.2	ug/L	96	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041930	TRIP BLANK	Water	05/03/2013 00:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/06/2013 19:30	By CLH	Analytical Batch 506717
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041930	TRIP BLANK	Water	05/03/2013 00:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2013 19:30	CLH	506717

CAS#	Parameter	Result	RDL	REG LIMIT	Units
127-18-4	Tetrachloroethene	<5.00	5.00		ug/L
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	50	47.5	ug/L	95	77 - 127
2037-26-5	Toluene d8	50	53.5	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	47.4	ug/L	95	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041931	DUP-01	Water	05/03/2013 00:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/07/2013 14:20	By AMD	Analytical Batch 506802
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041931	DUP-01	Water	05/03/2013 00:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/07/2013 14:20	AMD	506802

CAS#	Parameter	Result	RDL	REG LIMIT	Units
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>15.6</b>	<b>5.00</b>		<b>ug/L</b>
108-88-3	Toluene	<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	<5.00	5.00		ug/L
1330-20-7	Xylene (total)	<15.0	15.0		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
136777-61-2	m,p-Xylene	<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
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
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

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	46.8	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	50	55.1	ug/L	110	77 - 127
2037-26-5	Toluene d8	50	45.8	ug/L	92	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	54.7	ug/L	109	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041932	DUP-02	Water	05/03/2013 00:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/07/2013 14:40	By AMD	Analytical Batch 506802
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041932	DUP-02	Water	05/03/2013 00:00	05/04/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/07/2013 14:40	AMD	506802

CAS#	Parameter	Result	RDL	REG LIMIT	Units
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>5.05</b>	<b>5.00</b>	<b>5.00</b>	<b>ug/L</b>
108-88-3	Toluene	<5.00	5.00	5.00	ug/L
79-01-6	Trichloroethene	<5.00	5.00	5.00	ug/L
75-69-4	Trichlorofluoromethane	<5.00	5.00	5.00	ug/L
76-13-1	Trichlorotrifluoroethane	<5.00	5.00	5.00	ug/L
108-05-4	Vinyl acetate	<5.00	5.00	5.00	ug/L
75-01-4	Vinyl chloride	<5.00	5.00	5.00	ug/L
1330-20-7	Xylene (total)	<15.0	15.0	15.0	ug/L
156-59-2	cis-1,2-Dichloroethene	<5.00	5.00	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	<5.00	5.00	5.00	ug/L
136777-61-2	m,p-Xylene	<10.0	10.0	10.0	ug/L
104-51-8	n-Butylbenzene	<5.00	5.00	5.00	ug/L
103-65-1	n-Propylbenzene	<5.00	5.00	5.00	ug/L
95-47-6	o-Xylene	<5.00	5.00	5.00	ug/L
135-98-8	sec-Butylbenzene	<5.00	5.00	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	<5.00	5.00	5.00	ug/L
98-06-6	tert-Butylbenzene	<5.00	5.00	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	<5.00	5.00	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	<5.00	5.00	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	<5.00	5.00	5.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	46.2	ug/L	92	78 - 130
1868-53-7	Dibromofluoromethane	50	54.4	ug/L	109	77 - 127
2037-26-5	Toluene d8	50	45.7	ug/L	91	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	55.9	ug/L	112	71 - 127

GCAL ID 21305041933	Client ID MW-27D	Matrix Water	Collect Date/Time 05/03/2013 11:17	Receive Date/Time 05/07/2013 09:20
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/10/2013 19:07	By CLH	Analytical Batch 507106
CAS#	Parameter			Result	RDL	REG LIMIT
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			<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
<b>67-66-3</b>	<b>Chloroform</b>			<b>5.00</b>	<b>5.00</b>	<b>ug/L</b>
74-87-3	Chloromethane			<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
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
100-42-5	Styrene			<5.00	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21305041933	MW-27D	Water	05/03/2013 11:17	05/07/2013 09:20

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/10/2013 19:07	CLH	507106

CAS#	Parameter	Result	RDL	REG LIMIT	Units
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>89.5</b>	<b>5.00</b>	<b>5.00</b>	<b>ug/L</b>
108-88-3	Toluene	<5.00	5.00	5.00	ug/L
79-01-6	Trichloroethene	<5.00	5.00	5.00	ug/L
75-69-4	Trichlorofluoromethane	<5.00	5.00	5.00	ug/L
76-13-1	Trichlorotrifluoroethane	<5.00	5.00	5.00	ug/L
108-05-4	Vinyl acetate	<5.00	5.00	5.00	ug/L
75-01-4	Vinyl chloride	<5.00	5.00	5.00	ug/L
1330-20-7	Xylene (total)	<15.0	15.0	15.0	ug/L
156-59-2	cis-1,2-Dichloroethene	<5.00	5.00	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	<5.00	5.00	5.00	ug/L
136777-61-2	m,p-Xylene	<10.0	10.0	10.0	ug/L
104-51-8	n-Butylbenzene	<5.00	5.00	5.00	ug/L
103-65-1	n-Propylbenzene	<5.00	5.00	5.00	ug/L
95-47-6	o-Xylene	<5.00	5.00	5.00	ug/L
135-98-8	sec-Butylbenzene	<5.00	5.00	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	<5.00	5.00	5.00	ug/L
98-06-6	tert-Butylbenzene	<5.00	5.00	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	<5.00	5.00	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	<5.00	5.00	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	<5.00	5.00	5.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	45.4	ug/L	91	78 - 130
1868-53-7	Dibromofluoromethane	50	49.3	ug/L	99	77 - 127
2037-26-5	Toluene d8	50	51.1	ug/L	102	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.8	ug/L	102	71 - 127

# GC/MS Volatiles Quality Control Summary

Analytical Batch 506693 Prep Batch N/A		Client ID MB506693 GCAL ID 1188874 Sample Type Method Blank Analytical Date 05/05/2013 22:50 Matrix Water			LCS506693 1188875 LCS 05/05/2013 21:18 Water				LCSD506693 1188876 LCSD 05/05/2013 21:42 Water			
SW-846 8260B		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit	
67-64-1	Acetone	<5.00	5.00	50.0	61.6	123	44 - 156	68.4	137	10	30	
74-97-5	Bromochloromethane	<5.00	5.00	50.0	56.7	113	76 - 130	55.7	111	2	30	
75-27-4	Bromodichloromethane	<5.00	5.00	50.0	52.1	104	74 - 125	51.0	102	2	30	
75-25-2	Bromoform	<5.00	5.00	50.0	51.6	103	64 - 122	51.6	103	0	30	
74-83-9	Bromomethane	<5.00	5.00	50.0	41.1	82	47 - 138	46.7	93	13	30	
75-15-0	Carbon disulfide	<5.00	5.00	50.0	53.9	108	69 - 136	48.5	97	11	30	
56-23-5	Carbon tetrachloride	<5.00	5.00	50.0	52.1	104	76 - 128	49.1	98	6	30	
75-00-3	Chloroethane	<5.00	5.00	50.0	51.7	103	62 - 141	49.0	98	5	30	
136777-61-2	m,p-Xylene	<10.0	10.0	100	107	107	74 - 126	99.6	100	7	30	
67-66-3	Chloroform	<5.00	5.00	50.0	51.4	103	75 - 122	50.1	100	3	30	
74-87-3	Chloromethane	<5.00	5.00	50.0	45.0	90	59 - 132	53.0	106	16	30	
124-48-1	Dibromochloromethane	<5.00	5.00	50.0	49.9	100	71 - 123	51.3	103	3	30	
74-95-3	Dibromomethane	<5.00	5.00	50.0	51.2	102	72 - 129	50.5	101	1	30	
75-71-8	Dichlorodifluoromethane	<5.00	5.00	50.0	52.1	104	58 - 140	53.8	108	3	30	
75-34-3	1,1-Dichloroethane	<5.00	5.00	50.0	49.6	99	74 - 127	48.4	97	2	30	
107-06-2	1,2-Dichloroethane	<5.00	5.00	50.0	50.9	102	71 - 129	50.1	100	2	30	
156-59-2	cis-1,2-Dichloroethene	<5.00	5.00	50.0	49.8	100	73 - 130	48.8	98	2	30	
156-60-5	trans-1,2-Dichloroethene	<5.00	5.00	50.0	49.9	100	69 - 132	48.0	96	4	30	
75-09-2	Methylene chloride	<5.00	5.00	50.0	47.1	94	68 - 132	45.4	91	4	30	
78-87-5	1,2-Dichloropropane	<5.00	5.00	50.0	48.8	98	72 - 128	48.0	96	2	30	
10061-01-5	cis-1,3-Dichloropropene	<5.00	5.00	50.0	52.5	105	71 - 132	51.4	103	2	30	
10061-02-6	trans-1,3-Dichloropropene	<5.00	5.00	50.0	53.4	107	71 - 131	52.0	104	3	30	
100-41-4	Ethylbenzene	<5.00	5.00	50.0	50.4	101	74 - 126	48.0	96	5	30	
591-78-6	2-Hexanone	<5.00	5.00	50.0	51.1	102	50 - 135	56.1	112	9	30	
98-82-8	Isopropylbenzene (Cumene)	<5.00	5.00	50.0	57.6	115	71 - 125	51.8	104	11	30	
78-93-3	2-Butanone	<5.00	5.00	50.0	55.2	110	58 - 137	60.6	121	9	30	
74-88-4	Methyl iodide	<5.00	5.00	50.0	53.5	107	57 - 141	54.7	109	2	30	
108-10-1	4-Methyl-2-pentanone	<5.00	5.00	50.0	49.4	99	57 - 132	51.3	103	4	30	
103-65-1	n-Propylbenzene	<5.00	5.00	50.0	44.8	90	75 - 129	43.0	86	4	30	
100-42-5	Styrene	<5.00	5.00	50.0	55.3	111	71 - 127	52.4	105	5	30	
127-18-4	Tetrachloroethene	<5.00	5.00	50.0	55.0	110	68 - 128	51.5	103	7	30	
630-20-6	1,1,1,2-Tetrachloroethane	<5.00	5.00	50.0	53.2	106	75 - 124	52.0	104	2	30	
79-34-5	1,1,2,2-Tetrachloroethane	<5.00	5.00	50.0	42.0	84	70 - 122	46.6	93	10	30	

# GC/MS Volatiles Quality Control Summary

Analytical Batch Prep Batch	506693 N/A	Client ID GCAL ID	MB506693 1188874	Sample Type	Method Blank	LCS506693 1188875 LCS 05/05/2013 21:18	LCSD506693 1188876 LCSD 05/05/2013 21:42	Water			
SW-846 8260B		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
120-82-1	1,2,4-Trichlorobenzene	<5.00	5.00	50.0	53.3	107	61 - 135	50.5	101	5	30
71-55-6	1,1,1-Trichloroethane	<5.00	5.00	50.0	52.9	106	76 - 126	50.3	101	5	30
79-00-5	1,1,2-Trichloroethane	<5.00	5.00	50.0	47.1	94	72 - 121	47.7	95	1	30
75-69-4	Trichlorofluoromethane	<5.00	5.00	50.0	51.5	103	72 - 136	50.6	101	2	30
96-18-4	1,2,3-Trichloropropane	<5.00	5.00	50.0	38.4	77	70 - 120	45.3	91	16	30
95-63-6	1,2,4-Trimethylbenzene	<5.00	5.00	50.0	49.7	99	74 - 125	48.1	96	3	30
108-67-8	1,3,5-Trimethylbenzene	<5.00	5.00	50.0	48.3	97	71 - 132	46.7	93	3	30
75-01-4	Vinyl chloride	<5.00	5.00	50.0	49.2	98	68 - 132	53.5	107	8	30
95-47-6	o-Xylene	<5.00	5.00	50.0	54.5	109	73 - 130	52.1	104	5	30
96-12-8	1,2-Dibromo-3-chloropropane	<5.00	5.00	50.0	45.4	91	57 - 121	52.1	104	14	30
106-93-4	1,2-Dibromoethane	<5.00	5.00	50.0	45.9	92	70 - 124	48.3	97	5	30
108-05-4	Vinyl acetate	<5.00	5.00	50.0	35.0	70	54 - 147	35.7	71	2	30
1634-04-4	tert-Butyl methyl ether (MTBE)	<5.00	5.00	50.0	50.4	101	71 - 125	51.7	103	3	30
540-59-0	1,2-Dichloroethene(Total)	<10.0	10.0	100	99.7	100	74 - 128	96.9	97	3	30
99-87-6	4-Isopropyltoluene	<5.00	5.00	50.0	51.2	102	71 - 129	47.0	94	9	30
1330-20-7	Xylene (total)	<15.0	15.0	150	161	107	74 - 127	152	101	6	30
110-57-6	trans-1,4-Dichloro-2-butene	<5.00	5.00	50.0	44.0	88	56 - 132	47.9	96	8	30
594-20-7	2,2-Dichloropropane	<5.00	5.00	50.0	51.7	103	77 - 124	48.7	97	6	30
76-13-1	Trichlorotrifluoroethane	<5.00	5.00	50.0	53.0	106	72 - 136	49.0	98	8	30
563-58-6	1,1-Dichloropropene	<5.00	5.00	50.0	51.4	103	72 - 131	49.3	99	4	30
142-28-9	1,3-Dichloropropane	<5.00	5.00	50.0	47.6	95	74 - 122	49.0	98	3	30
108-86-1	Bromobenzene	<5.00	5.00	50.0	42.7	85	71 - 120	43.7	87	2	30
95-49-8	2-Chlorotoluene	<5.00	5.00	50.0	46.6	93	72 - 127	45.8	92	2	30
106-43-4	4-Chlorotoluene	<5.00	5.00	50.0	46.9	94	75 - 126	46.6	93	0.6	30
98-06-6	tert-Butylbenzene	<5.00	5.00	50.0	49.7	99	72 - 126	46.3	93	7	30
135-98-8	sec-Butylbenzene	<5.00	5.00	50.0	49.5	99	70 - 136	45.5	91	8	30
541-73-1	1,3-Dichlorobenzene	<5.00	5.00	50.0	50.3	101	74 - 126	48.5	97	4	30
106-46-7	1,4-Dichlorobenzene	<5.00	5.00	50.0	49.0	98	72 - 122	47.4	95	3	30
104-51-8	n-Butylbenzene	<5.00	5.00	50.0	50.7	101	69 - 134	45.5	91	11	30
95-50-1	1,2-Dichlorobenzene	<5.00	5.00	50.0	50.3	101	71 - 126	49.4	99	2	30
87-68-3	Hexachlorobutadiene	<5.00	5.00	50.0	53.8	108	61 - 144	48.3	97	11	30
91-20-3	Naphthalene	<5.00	5.00	50.0	39.9	80	57 - 138	43.2	86	8	35
75-35-4	1,1-Dichloroethene	<5.00	5.00	50.0	48.2	96	69 - 129	47.5	95	1	20

# GC/MS Volatiles Quality Control Summary

<b>Analytical Batch</b> 506693 <b>Prep Batch</b> N/A	<b>Client ID</b> MB506693 <b>GCAL ID</b> 1188874 <b>Sample Type</b> Method Blank <b>Analytical Date</b> 05/05/2013 22:50 <b>Matrix</b> Water	<b>LCS</b> 506693 1188875 LCS 05/05/2013 21:18 Water	<b>LCSD</b> 506693 1188876 LCSD 05/05/2013 21:42 Water
<b>SW-846 8260B</b>	<b>Units</b> <b>Result</b>	<b>ug/L</b> <b>RDL</b>	<b>Spike</b> <b>Added</b>
71-43-2 Benzene	<5.00	5.00	50.0
79-01-6 Trichloroethene	<5.00	5.00	50.0
108-88-3 Toluene	<5.00	5.00	50.0
108-90-7 Chlorobenzene	<5.00	5.00	50.0
<b>Surrogate</b>			
460-00-4 4-Bromofluorobenzene	52.6	105	50
1868-53-7 Dibromofluoromethane	53.1	106	50
2037-26-5 Toluene d8	52.1	104	50
17060-07-0 1,2-Dichloroethane-d4	51.1	102	50

<b>Analytical Batch</b> 506717 <b>Prep Batch</b> N/A	<b>Client ID</b> MB506717 <b>GCAL ID</b> 1188939 <b>Sample Type</b> Method Blank <b>Analytical Date</b> 05/06/2013 12:03 <b>Matrix</b> Water	<b>LCS</b> 506717 1188940 LCS 05/06/2013 08:42 Water	<b>LCSD</b> 506717 1188941 LCSD 05/06/2013 09:40 Water
<b>SW-846 8260B</b>	<b>Units</b> <b>Result</b>	<b>ug/L</b> <b>RDL</b>	<b>Spike</b> <b>Added</b>
67-64-1 Acetone	<5.00	5.00	50.0
74-97-5 Bromochloromethane	<5.00	5.00	50.0
75-27-4 Bromodichloromethane	<5.00	5.00	50.0
75-25-2 Bromoform	<5.00	5.00	50.0
74-83-9 Bromomethane	<5.00	5.00	50.0
75-15-0 Carbon disulfide	<5.00	5.00	50.0
56-23-5 Carbon tetrachloride	<5.00	5.00	50.0
75-00-3 Chloroethane	<5.00	5.00	50.0
136777-61-2 m,p-Xylene	<10.0	10.0	100
67-66-3 Chloroform	<5.00	5.00	50.0
74-87-3 Chloromethane	<5.00	5.00	50.0
124-48-1 Dibromochloromethane	<5.00	5.00	50.0
74-95-3 Dibromomethane	<5.00	5.00	50.0
75-71-8 Dichlorodifluoromethane	<5.00	5.00	50.0
75-34-3 1,1-Dichloroethane	<5.00	5.00	50.0

# GC/MS Volatiles Quality Control Summary

Analytical Batch 506717 Prep Batch N/A		Client ID GCAL ID Sample Type Analytical Date Matrix			LCS506717 1188940 LCS 05/06/2013 08:42 Water				LCSD506717 1188941 LCSD 05/06/2013 09:40 Water			
SW-846 8260B		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit	
107-06-2	1,2-Dichloroethane	<5.00	5.00	50.0	49.6	99	71 - 129	48.5	97	2	30	
156-59-2	cis-1,2-Dichloroethene	<5.00	5.00	50.0	48.6	97	73 - 130	48.9	98	0.6	30	
156-60-5	trans-1,2-Dichloroethene	<5.00	5.00	50.0	46.4	93	69 - 132	47.3	95	2	30	
75-09-2	Methylene chloride	<5.00	5.00	50.0	44.3	89	68 - 132	44.7	89	0.9	30	
78-87-5	1,2-Dichloropropane	<5.00	5.00	50.0	48.8	98	72 - 128	48.8	98	0	30	
10061-01-5	cis-1,3-Dichloropropene	<5.00	5.00	50.0	50.0	100	71 - 132	50.0	100	0	30	
10061-02-6	trans-1,3-Dichloropropene	<5.00	5.00	50.0	50.3	101	71 - 131	50.3	101	0	30	
100-41-4	Ethylbenzene	<5.00	5.00	50.0	48.7	97	74 - 126	51.1	102	5	30	
591-78-6	2-Hexanone	<5.00	5.00	50.0	43.7	87	50 - 135	40.3	81	8	30	
98-82-8	Isopropylbenzene (Cumene)	<5.00	5.00	50.0	51.5	103	71 - 125	53.7	107	4	30	
78-93-3	2-Butanone	<5.00	5.00	50.0	43.4	87	58 - 137	38.5	77	12	30	
74-88-4	Methyl iodide	<5.00	5.00	50.0	38.2	76	57 - 141	39.7	79	4	30	
108-10-1	4-Methyl-2-pentanone	<5.00	5.00	50.0	44.4	89	57 - 132	40.1	80	10	30	
103-65-1	n-Propylbenzene	<5.00	5.00	50.0	47.7	95	75 - 129	51.5	103	8	30	
100-42-5	Styrene	<5.00	5.00	50.0	51.4	103	71 - 127	53.1	106	3	30	
127-18-4	Tetrachloroethene	<5.00	5.00	50.0	46.7	93	68 - 128	49.4	99	6	30	
630-20-6	1,1,1,2-Tetrachloroethane	<5.00	5.00	50.0	50.5	101	75 - 124	51.7	103	2	30	
79-34-5	1,1,2,2-Tetrachloroethane	<5.00	5.00	50.0	52.6	105	70 - 122	50.3	101	4	30	
120-82-1	1,2,4-Trichlorobenzene	<5.00	5.00	50.0	50.6	101	61 - 135	51.6	103	2	30	
71-55-6	1,1,1-Trichloroethane	<5.00	5.00	50.0	46.1	92	76 - 126	46.6	93	1	30	
79-00-5	1,1,2-Trichloroethane	<5.00	5.00	50.0	50.2	100	72 - 121	49.3	99	2	30	
75-69-4	Trichlorofluoromethane	<5.00	5.00	50.0	41.3	83	72 - 136	40.2	80	3	30	
96-18-4	1,2,3-Trichloropropane	<5.00	5.00	50.0	48.4	97	70 - 120	43.8	88	10	30	
95-63-6	1,2,4-Trimethylbenzene	<5.00	5.00	50.0	47.9	96	74 - 125	52.1	104	8	30	
108-67-8	1,3,5-Trimethylbenzene	<5.00	5.00	50.0	48.0	96	71 - 132	50.9	102	6	30	
75-01-4	Vinyl chloride	<5.00	5.00	50.0	42.5	85	68 - 132	41.3	83	3	30	
95-47-6	o-Xylene	<5.00	5.00	50.0	51.2	102	73 - 130	53.7	107	5	30	
96-12-8	1,2-Dibromo-3-chloropropane	<5.00	5.00	50.0	46.3	93	57 - 121	42.1	84	10	30	
106-93-4	1,2-Dibromoethane	<5.00	5.00	50.0	48.8	98	70 - 124	47.8	96	2	30	
108-05-4	Vinyl acetate	<5.00	5.00	50.0	30.6	61	54 - 147	29.3	59	4	30	
1634-04-4	tert-Butyl methyl ether (MTBE)	<5.00	5.00	50.0	45.5	91	71 - 125	43.1	86	5	30	
540-59-0	1,2-Dichloroethene(Total)	<10.0	10.0	100	95.0	95	74 - 128	96.2	96	1	30	
99-87-6	4-Isopropyltoluene	<5.00	5.00	50.0	48.2	96	71 - 129	51.8	104	7	30	

# GC/MS Volatiles Quality Control Summary

Analytical Batch 506717 Prep Batch N/A		Client ID GCAL ID Sample Type Analytical Date Matrix			LCS506717 1188940 LCS 05/06/2013 08:42 Water				LCSD506717 1188941 LCSD 05/06/2013 09:40 Water			
SW-846 8260B		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit	
1330-20-7	Xylene (total)	<15.0	15.0	150	151	101	74 - 127	158	105	5	30	
110-57-6	trans-1,4-Dichloro-2-butene	<5.00	5.00	50.0	42.8	86	56 - 132	42.2	84	1	30	
594-20-7	2,2-Dichloropropane	<5.00	5.00	50.0	46.6	93	77 - 124	47.6	95	2	30	
76-13-1	Trichlorotrifluoroethane	<5.00	5.00	50.0	40.4	81	72 - 136	40.6	81	0.5	30	
563-58-6	1,1-Dichloropropene	<5.00	5.00	50.0	48.1	96	72 - 131	48.8	98	1	30	
142-28-9	1,3-Dichloropropane	<5.00	5.00	50.0	49.1	98	74 - 122	48.4	97	1	30	
108-86-1	Bromobenzene	<5.00	5.00	50.0	48.6	97	71 - 120	50.6	101	4	30	
95-49-8	2-Chlorotoluene	<5.00	5.00	50.0	48.1	96	72 - 127	51.3	103	6	30	
106-43-4	4-Chlorotoluene	<5.00	5.00	50.0	48.7	97	75 - 126	53.1	106	9	30	
98-06-6	tert-Butylbenzene	<5.00	5.00	50.0	47.6	95	72 - 126	51.2	102	7	30	
135-98-8	sec-Butylbenzene	<5.00	5.00	50.0	49.3	99	70 - 136	53.4	107	8	30	
541-73-1	1,3-Dichlorobenzene	<5.00	5.00	50.0	50.9	102	74 - 126	52.8	106	4	30	
106-46-7	1,4-Dichlorobenzene	<5.00	5.00	50.0	49.3	99	72 - 122	52.5	105	6	30	
104-51-8	n-Butylbenzene	<5.00	5.00	50.0	49.7	99	69 - 134	53.6	107	8	30	
95-50-1	1,2-Dichlorobenzene	<5.00	5.00	50.0	50.6	101	71 - 126	52.5	105	4	30	
87-68-3	Hexachlorobutadiene	<5.00	5.00	50.0	49.9	100	61 - 144	55.2	110	10	30	
91-20-3	Naphthalene	<5.00	5.00	50.0	48.9	98	57 - 138	46.1	92	6	35	
75-35-4	1,1-Dichloroethene	<5.00	5.00	50.0	41.0	82	69 - 129	39.6	79	3	20	
71-43-2	Benzene	<5.00	5.00	50.0	50.0	100	70 - 129	50.7	101	1	20	
79-01-6	Trichloroethene	<5.00	5.00	50.0	50.3	101	76 - 129	51.2	102	2	20	
108-88-3	Toluene	<5.00	5.00	50.0	49.0	98	72 - 120	50.8	102	4	20	
108-90-7	Chlorobenzene	<5.00	5.00	50.0	50.1	100	74 - 123	51.8	104	3	20	
<b>Surrogate</b>												
460-00-4	4-Bromofluorobenzene	49.3	99	50	51.4	103	78 - 130	50.8	102			
1868-53-7	Dibromofluoromethane	47.6	95	50	48.6	97	77 - 127	48.3	97			
2037-26-5	Toluene d8	53.9	108	50	48.8	98	76 - 134	49.9	100			
17060-07-0	1,2-Dichloroethane-d4	47.5	95	50	48.6	97	71 - 127	47	94			

# GC/MS Volatiles Quality Control Summary

Analytical Batch 506802 Prep Batch N/A		Client ID MB506802 GCAL ID 1189240 Sample Type Method Blank Analytical Date 05/07/2013 10:00 Matrix Water			LCS506802 1189241 LCS 05/07/2013 08:27 Water				LCSD506802 1189242 LCSD 05/07/2013 08:48 Water			
SW-846 8260B		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit	
67-64-1	Acetone	<5.00	5.00	50.0	56.9	114	44 - 156	60.9	122	7	30	
74-97-5	Bromochloromethane	<5.00	5.00	50.0	56.9	114	76 - 130	57.8	116	2	30	
75-27-4	Bromodichloromethane	<5.00	5.00	50.0	59.7	119	74 - 125	60.0	120	0.5	30	
75-25-2	Bromoform	<5.00	5.00	50.0	42.0	84	64 - 122	43.1	86	3	30	
74-83-9	Bromomethane	<5.00	5.00	50.0	36.6	73	47 - 138	40.6	81	10	30	
75-15-0	Carbon disulfide	<5.00	5.00	50.0	57.6	115	69 - 136	54.0	108	6	30	
56-23-5	Carbon tetrachloride	<5.00	5.00	50.0	59.1	118	76 - 128	57.3	115	3	30	
75-00-3	Chloroethane	<5.00	5.00	50.0	52.8	106	62 - 141	53.6	107	2	30	
136777-61-2	m,p-Xylene	<10.0	10.0	100	91.9	92	74 - 126	87.6	88	5	30	
67-66-3	Chloroform	<5.00	5.00	50.0	57.2	114	75 - 122	56.7	113	0.9	30	
74-87-3	Chloromethane	<5.00	5.00	50.0	42.4	85	59 - 132	41.7	83	2	30	
124-48-1	Dibromochloromethane	<5.00	5.00	50.0	42.5	85	71 - 123	42.3	85	0.5	30	
74-95-3	Dibromomethane	<5.00	5.00	50.0	55.7	111	72 - 129	55.2	110	0.9	30	
75-71-8	Dichlorodifluoromethane	<5.00	5.00	50.0	36.0	72	58 - 140	36.4	73	1	30	
75-34-3	1,1-Dichloroethane	<5.00	5.00	50.0	59.7	119	74 - 127	57.4	115	4	30	
107-06-2	1,2-Dichloroethane	<5.00	5.00	50.0	52.8	106	71 - 129	52.4	105	0.8	30	
156-59-2	cis-1,2-Dichloroethene	<5.00	5.00	50.0	56.7	113	73 - 130	54.7	109	4	30	
156-60-5	trans-1,2-Dichloroethene	<5.00	5.00	50.0	56.4	113	69 - 132	55.6	111	1	30	
75-09-2	Methylene chloride	<5.00	5.00	50.0	53.7	107	68 - 132	53.0	106	1	30	
78-87-5	1,2-Dichloropropane	<5.00	5.00	50.0	58.3	117	72 - 128	58.8	118	0.9	30	
10061-01-5	cis-1,3-Dichloropropene	<5.00	5.00	50.0	58.7	117	71 - 132	59.4	119	1	30	
10061-02-6	trans-1,3-Dichloropropene	<5.00	5.00	50.0	58.7	117	71 - 131	59.4	119	1	30	
100-41-4	Ethylbenzene	<5.00	5.00	50.0	44.0	88	74 - 126	42.5	85	3	30	
591-78-6	2-Hexanone	<5.00	5.00	50.0	37.7	75	50 - 135	41.6	83	10	30	
98-82-8	Isopropylbenzene (Cumene)	<5.00	5.00	50.0	49.4	99	71 - 125	45.8	92	8	30	
78-93-3	2-Butanone	<5.00	5.00	50.0	50.8	102	58 - 137	54.7	109	7	30	
74-88-4	Methyl iodide	<5.00	5.00	50.0	48.5	97	57 - 141	51.6	103	6	30	
108-10-1	4-Methyl-2-pentanone	<5.00	5.00	50.0	46.5	93	57 - 132	51.2	102	10	30	
103-65-1	n-Propylbenzene	<5.00	5.00	50.0	47.7	95	75 - 129	44.7	89	6	30	
100-42-5	Styrene	<5.00	5.00	50.0	46.4	93	71 - 127	46.0	92	0.9	30	
127-18-4	Tetrachloroethene	<5.00	5.00	50.0	46.8	94	68 - 128	45.7	91	2	30	
630-20-6	1,1,1,2-Tetrachloroethane	<5.00	5.00	50.0	48.1	96	75 - 124	46.2	92	4	30	
79-34-5	1,1,2,2-Tetrachloroethane	<5.00	5.00	50.0	42.7	85	70 - 122	43.4	87	2	30	

# GC/MS Volatiles Quality Control Summary

Analytical Batch 506802 Prep Batch N/A		Client ID MB506802 GCAL ID 1189240 Sample Type Method Blank Analytical Date 05/07/2013 10:00 Matrix Water			LCS506802 1189241 LCS 05/07/2013 08:27 Water				LCSD506802 1189242 LCSD 05/07/2013 08:48 Water			
SW-846 8260B		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit	
120-82-1	1,2,4-Trichlorobenzene	<5.00	5.00	50.0	42.4	85	61 - 135	42.0	84	0.9	30	
71-55-6	1,1,1-Trichloroethane	<5.00	5.00	50.0	58.4	117	76 - 126	56.3	113	4	30	
79-00-5	1,1,2-Trichloroethane	<5.00	5.00	50.0	44.4	89	72 - 121	46.8	94	5	30	
75-69-4	Trichlorofluoromethane	<5.00	5.00	50.0	55.2	110	72 - 136	51.8	104	6	30	
96-18-4	1,2,3-Trichloropropane	<5.00	5.00	50.0	41.0	82	70 - 120	42.7	85	4	30	
95-63-6	1,2,4-Trimethylbenzene	<5.00	5.00	50.0	47.4	95	74 - 125	44.4	89	7	30	
108-67-8	1,3,5-Trimethylbenzene	<5.00	5.00	50.0	47.8	96	71 - 132	44.2	88	8	30	
75-01-4	Vinyl chloride	<5.00	5.00	50.0	47.3	95	68 - 132	47.9	96	1	30	
95-47-6	o-Xylene	<5.00	5.00	50.0	45.9	92	73 - 130	44.4	89	3	30	
96-12-8	1,2-Dibromo-3-chloropropane	<5.00	5.00	50.0	36.2	72	57 - 121	38.7	77	7	30	
106-93-4	1,2-Dibromoethane	<5.00	5.00	50.0	45.0	90	70 - 124	45.7	91	2	30	
108-05-4	Vinyl acetate	<5.00	5.00	50.0	91.1	182*	54 - 147	89.9	180*	1	30	
1634-04-4	tert-Butyl methyl ether (MTBE)	<5.00	5.00	50.0	53.4	107	71 - 125	55.5	111	4	30	
540-59-0	1,2-Dichloroethene(Total)	<10.0	10.0	100	113	113	74 - 128	110	110	3	30	
99-87-6	4-Isopropyltoluene	<5.00	5.00	50.0	49.6	99	71 - 129	44.6	89	11	30	
1330-20-7	Xylene (total)	<15.0	15.0	150	138	92	74 - 127	132	88	4	30	
110-57-6	trans-1,4-Dichloro-2-butene	<5.00	5.00	50.0	39.8	80	56 - 132	41.8	84	5	30	
594-20-7	2,2-Dichloropropane	<5.00	5.00	50.0	63.0	126*	77 - 124	60.7	121	4	30	
76-13-1	Trichlorotrifluoroethane	<5.00	5.00	50.0	57.1	114	72 - 136	55.2	110	3	30	
563-58-6	1,1-Dichloropropene	<5.00	5.00	50.0	60.1	120	72 - 131	58.1	116	3	30	
142-28-9	1,3-Dichloropropane	<5.00	5.00	50.0	45.2	90	74 - 122	45.5	91	0.7	30	
108-86-1	Bromobenzene	<5.00	5.00	50.0	43.3	87	71 - 120	42.1	84	3	30	
95-49-8	2-Chlorotoluene	<5.00	5.00	50.0	50.1	100	72 - 127	42.2	84	17	30	
106-43-4	4-Chlorotoluene	<5.00	5.00	50.0	45.9	92	75 - 126	43.1	86	6	30	
98-06-6	tert-Butylbenzene	<5.00	5.00	50.0	46.1	92	72 - 126	42.1	84	9	30	
135-98-8	sec-Butylbenzene	<5.00	5.00	50.0	49.9	100	70 - 136	44.3	89	12	30	
541-73-1	1,3-Dichlorobenzene	<5.00	5.00	50.0	46.1	92	74 - 126	44.2	88	4	30	
106-46-7	1,4-Dichlorobenzene	<5.00	5.00	50.0	44.6	89	72 - 122	43.1	86	3	30	
104-51-8	n-Butylbenzene	<5.00	5.00	50.0	47.6	95	69 - 134	42.4	85	12	30	
95-50-1	1,2-Dichlorobenzene	<5.00	5.00	50.0	44.9	90	71 - 126	43.9	88	2	30	
87-68-3	Hexachlorobutadiene	<5.00	5.00	50.0	48.6	97	61 - 144	42.9	86	12	30	
91-20-3	Naphthalene	<5.00	5.00	50.0	37.0	74	57 - 138	38.9	78	5	35	
75-35-4	1,1-Dichloroethene	<5.00	5.00	50.0	53.3	107	69 - 129	51.5	103	3	20	

# GC/MS Volatiles Quality Control Summary

<b>Analytical Batch</b> 506802 <b>Prep Batch</b> N/A	<b>Client ID</b> MB506802 <b>GCAL ID</b> 1189240 <b>Sample Type</b> Method Blank <b>Analytical Date</b> 05/07/2013 10:00 <b>Matrix</b> Water	<b>LCS</b> 506802 1189241 LCS 05/07/2013 08:27 Water	<b>LCSD</b> 506802 1189242 LCSD 05/07/2013 08:48 Water								
	<b>SW-846 8260B</b>	<b>Units</b> <b>Result</b>	<b>ug/L</b> <b>RDL</b>	<b>Spike</b> <b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Control</b> <b>Limits % R</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b> <b>Limit</b>
71-43-2	Benzene	<5.00	5.00	50.0	55.7	111	70 - 129	54.8	110	2	20
79-01-6	Trichloroethene	<5.00	5.00	50.0	57.6	115	76 - 129	56.2	112	2	20
108-88-3	Toluene	<5.00	5.00	50.0	46.9	94	72 - 120	45.4	91	3	20
108-90-7	Chlorobenzene	<5.00	5.00	50.0	46.9	94	74 - 123	45.5	91	3	20
<b>Surrogate</b>											
460-00-4	4-Bromofluorobenzene	48.6	97	50	48.7	97	78 - 130	48.4	97		
1868-53-7	Dibromofluoromethane	53.1	106	50	54	108	77 - 127	54.2	108		
2037-26-5	Toluene d8	47.2	94	50	44.7	89	76 - 134	43.8	88		
17060-07-0	1,2-Dichloroethane-d4	53.8	108	50	52	104	71 - 127	52	104		

<b>Analytical Batch</b> 507106 <b>Prep Batch</b> N/A	<b>Client ID</b> MB507106 <b>GCAL ID</b> 1190815 <b>Sample Type</b> Method Blank <b>Analytical Date</b> 05/10/2013 18:26 <b>Matrix</b> Water	<b>LCS</b> 507106 1190816 LCS 05/10/2013 17:04 Water	<b>LCSD</b> 507106 1190817 LCSD 05/10/2013 17:26 Water								
	<b>SW-846 8260B</b>	<b>Units</b> <b>Result</b>	<b>ug/L</b> <b>RDL</b>	<b>Spike</b> <b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Control</b> <b>Limits % R</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b> <b>Limit</b>
67-64-1	Acetone	<5.00	5.00	50.0	45.0	90	44 - 156	48.4	97	7	30
74-97-5	Bromochloromethane	<5.00	5.00	50.0	51.9	104	76 - 130	52.2	104	0.6	30
75-27-4	Bromodichloromethane	<5.00	5.00	50.0	51.3	103	74 - 125	51.7	103	0.8	30
75-25-2	Bromoform	<5.00	5.00	50.0	47.9	96	64 - 122	50.4	101	5	30
74-83-9	Bromomethane	<5.00	5.00	50.0	40.1	80	47 - 138	44.9	90	11	30
75-15-0	Carbon disulfide	<5.00	5.00	50.0	56.3	113	69 - 136	52.2	104	8	30
56-23-5	Carbon tetrachloride	<5.00	5.00	50.0	52.9	106	76 - 128	51.6	103	2	30
75-00-3	Chloroethane	<5.00	5.00	50.0	54.4	109	62 - 141	51.6	103	5	30
136777-61-2	m,p-Xylene	<10.0	10.0	100	102	102	74 - 126	98.4	98	4	30
67-66-3	Chloroform	<5.00	5.00	50.0	50.8	102	75 - 122	50.1	100	1	30
74-87-3	Chloromethane	<5.00	5.00	50.0	52.2	104	59 - 132	51.5	103	1	30
124-48-1	Dibromochloromethane	<5.00	5.00	50.0	46.8	94	71 - 123	47.4	95	1	30
74-95-3	Dibromomethane	<5.00	5.00	50.0	50.2	100	72 - 129	49.7	99	1	30
75-71-8	Dichlorodifluoromethane	<5.00	5.00	50.0	53.6	107	58 - 140	52.7	105	2	30
75-34-3	1,1-Dichloroethane	<5.00	5.00	50.0	52.8	106	74 - 127	51.5	103	2	30

# GC/MS Volatiles Quality Control Summary

Analytical Batch 507106 Prep Batch N/A		Client ID MB507106 GCAL ID 1190815 Sample Type Method Blank Analytical Date 05/10/2013 18:26 Matrix Water			LCS507106 1190816 LCS 05/10/2013 17:04 Water			LCSD507106 1190817 LCSD 05/10/2013 17:26 Water			
SW-846 8260B		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
107-06-2	1,2-Dichloroethane	<5.00	5.00	50.0	46.6	93	71 - 129	46.7	93	0.2	30
156-59-2	cis-1,2-Dichloroethene	<5.00	5.00	50.0	49.9	100	73 - 130	49.7	99	0.4	30
156-60-5	trans-1,2-Dichloroethene	<5.00	5.00	50.0	50.6	101	69 - 132	49.2	98	3	30
75-09-2	Methylene chloride	<5.00	5.00	50.0	49.6	99	68 - 132	47.3	95	5	30
78-87-5	1,2-Dichloropropane	<5.00	5.00	50.0	51.1	102	72 - 128	50.3	101	2	30
10061-01-5	cis-1,3-Dichloropropene	<5.00	5.00	50.0	50.5	101	71 - 132	50.5	101	0	30
10061-02-6	trans-1,3-Dichloropropene	<5.00	5.00	50.0	49.9	100	71 - 131	51.1	102	2	30
100-41-4	Ethylbenzene	<5.00	5.00	50.0	49.8	100	74 - 126	47.6	95	5	30
591-78-6	2-Hexanone	<5.00	5.00	50.0	40.5	81	50 - 135	43.3	87	7	30
98-82-8	Isopropylbenzene (Cumene)	<5.00	5.00	50.0	53.8	108	71 - 125	49.5	99	8	30
78-93-3	2-Butanone	<5.00	5.00	50.0	43.6	87	58 - 137	44.7	89	2	30
74-88-4	Methyl iodide	<5.00	5.00	50.0	50.7	101	57 - 141	51.2	102	1	30
108-10-1	4-Methyl-2-pentanone	<5.00	5.00	50.0	41.2	82	57 - 132	42.8	86	4	30
103-65-1	n-Propylbenzene	<5.00	5.00	50.0	52.6	105	75 - 129	47.9	96	9	30
100-42-5	Styrene	<5.00	5.00	50.0	51.5	103	71 - 127	50.5	101	2	30
127-18-4	Tetrachloroethene	<5.00	5.00	50.0	55.1	110	68 - 128	52.3	105	5	30
630-20-6	1,1,1,2-Tetrachloroethane	<5.00	5.00	50.0	53.5	107	75 - 124	53.9	108	0.7	30
79-34-5	1,1,2,2-Tetrachloroethane	<5.00	5.00	50.0	47.4	95	70 - 122	47.8	96	0.8	30
120-82-1	1,2,4-Trichlorobenzene	<5.00	5.00	50.0	50.4	101	61 - 135	47.9	96	5	30
71-55-6	1,1,1-Trichloroethane	<5.00	5.00	50.0	51.9	104	76 - 126	50.3	101	3	30
79-00-5	1,1,2-Trichloroethane	<5.00	5.00	50.0	51.8	104	72 - 121	51.2	102	1	30
75-69-4	Trichlorofluoromethane	<5.00	5.00	50.0	52.9	106	72 - 136	51.4	103	3	30
96-18-4	1,2,3-Trichloropropane	<5.00	5.00	50.0	44.1	88	70 - 120	44.6	89	1	30
95-63-6	1,2,4-Trimethylbenzene	<5.00	5.00	50.0	52.0	104	74 - 125	48.3	97	7	30
108-67-8	1,3,5-Trimethylbenzene	<5.00	5.00	50.0	52.5	105	71 - 132	47.9	96	9	30
75-01-4	Vinyl chloride	<5.00	5.00	50.0	54.1	108	68 - 132	49.5	99	9	30
95-47-6	o-Xylene	<5.00	5.00	50.0	50.6	101	73 - 130	48.5	97	4	30
96-12-8	1,2-Dibromo-3-chloropropane	<5.00	5.00	50.0	41.0	82	57 - 121	42.9	86	5	30
106-93-4	1,2-Dibromoethane	<5.00	5.00	50.0	49.3	99	70 - 124	51.5	103	4	30
108-05-4	Vinyl acetate	<5.00	5.00	50.0	49.7	99	54 - 147	49.5	99	0.4	30
1634-04-4	tert-Butyl methyl ether (MTBE)	<5.00	5.00	50.0	49.0	98	71 - 125	49.7	99	1	30
540-59-0	1,2-Dichloroethene(Total)	<10.0	10.0	100	100	100	74 - 128	98.9	99	1	30
99-87-6	4-Isopropyltoluene	<5.00	5.00	50.0	54.2	108	71 - 129	48.0	96	12	30

# GC/MS Volatiles Quality Control Summary

Analytical Batch 507106 Prep Batch N/A		Client ID MB507106 GCAL ID 1190815 Sample Type Method Blank Analytical Date 05/10/2013 18:26 Matrix Water			LCS507106 1190816 LCS 05/10/2013 17:04 Water				LCSD507106 1190817 LCSD 05/10/2013 17:26 Water			
SW-846 8260B		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit	
1330-20-7	Xylene (total)	<15.0	15.0	150	152	101	74 - 127	147	98	3	30	
110-57-6	trans-1,4-Dichloro-2-butene	<5.00	5.00	50.0	43.0	86	56 - 132	44.0	88	2	30	
594-20-7	2,2-Dichloropropane	<5.00	5.00	50.0	58.2	116	77 - 124	56.0	112	4	30	
76-13-1	Trichlorotrifluoroethane	<5.00	5.00	50.0	55.1	110	72 - 136	52.9	106	4	30	
563-58-6	1,1-Dichloropropene	<5.00	5.00	50.0	52.8	106	72 - 131	50.7	101	4	30	
142-28-9	1,3-Dichloropropane	<5.00	5.00	50.0	49.3	99	74 - 122	50.0	100	1	30	
108-86-1	Bromobenzene	<5.00	5.00	50.0	47.6	95	71 - 120	46.3	93	3	30	
95-49-8	2-Chlorotoluene	<5.00	5.00	50.0	49.4	99	72 - 127	45.9	92	7	30	
106-43-4	4-Chlorotoluene	<5.00	5.00	50.0	50.1	100	75 - 126	46.7	93	7	30	
98-06-6	tert-Butylbenzene	<5.00	5.00	50.0	50.3	101	72 - 126	44.7	89	12	30	
135-98-8	sec-Butylbenzene	<5.00	5.00	50.0	53.6	107	70 - 136	47.4	95	12	30	
541-73-1	1,3-Dichlorobenzene	<5.00	5.00	50.0	52.2	104	74 - 126	48.4	97	8	30	
106-46-7	1,4-Dichlorobenzene	<5.00	5.00	50.0	50.9	102	72 - 122	48.0	96	6	30	
104-51-8	n-Butylbenzene	<5.00	5.00	50.0	50.8	102	69 - 134	44.1	88	14	30	
95-50-1	1,2-Dichlorobenzene	<5.00	5.00	50.0	50.6	101	71 - 126	48.2	96	5	30	
87-68-3	Hexachlorobutadiene	<5.00	5.00	50.0	56.0	112	61 - 144	47.8	96	16	30	
91-20-3	Naphthalene	<5.00	5.00	50.0	43.2	86	57 - 138	42.1	84	3	35	
75-35-4	1,1-Dichloroethene	<5.00	5.00	50.0	49.8	100	69 - 129	49.1	98	1	20	
71-43-2	Benzene	<5.00	5.00	50.0	49.6	99	70 - 129	48.2	96	3	20	
79-01-6	Trichloroethene	<5.00	5.00	50.0	52.6	105	76 - 129	51.4	103	2	20	
108-88-3	Toluene	<5.00	5.00	50.0	51.9	104	72 - 120	50.8	102	2	20	
108-90-7	Chlorobenzene	<5.00	5.00	50.0	52.0	104	74 - 123	51.7	103	0.6	20	
<b>Surrogate</b>												
460-00-4	4-Bromofluorobenzene	48.6	97	50	51.1	102	78 - 130	50.4	101			
1868-53-7	Dibromofluoromethane	50.7	101	50	48.5	97	77 - 127	50.3	101			
2037-26-5	Toluene d8	52.7	105	50	49.8	100	76 - 134	50.4	101			
17060-07-0	1,2-Dichloroethane-d4	50.6	101	50	49.7	99	71 - 127	50	100			



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# CHAIN OF CUSTODY RECORD

## GCAL USE ONLY

ENVIRON / 4447/213240519/5/09/13  
504  
PPD  
5/4/13

### Report to:

Client: ENVIRON International  
Address: 1600 Parkwood Circle  
Suite 310, Atlanta, GA  
Contact: 404 - 354 - 2950  
Phone: # Keith Cole  
E-mail: Kcole@environcorp.com

P.O. Number

Project Name/Number

CCHT 107-21924K

Sampled By:

Patrick Ceres / Heather Thompson

### Bill to:

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

### Analytical Requests & Method

Non Chlorinated VOCs

### GCAL use only:

Custody Seal  
used  yes  no  
intact  yes  no

Temperature °C 2.6 (E20)

Dissolved Analysis Requested  
 Field filtered  
 Lab filtered

Matrix <sup>1</sup>	Date	Time (2400)	Comp	Grab	Sample Description	No Containers ↓	Preservative ←	↓
GW	5.1.13	1712		X	MW-01	3 X		1
GW	5.1.13	1757			MW-03	1 X		2
GW	5.3.13	1105			MW-04	X		3
GW	5.2.13	0910			MW-05	X		4
GW	5.2.13	0800			MW-06	X		5
GW	5.2.13	1600			MW-07	X		6
GW	5.1.13	1228			MW-08R	X		7
GW	5.1.13	1830			MW-9R	X		8
GW	5.1.13	1522			MW-10	X		9
GW	5.3.13	0942			MW-11	X		10
GW	5.2.13	1110			MW-12	X		11
GW	5.1.13	1608			MW-13	X		12
GW	5.2.13	1500		↓	MW-14	↓ X		13

Air Bill No: 7996 8115 0962 5/4/13

Turn Around Time (Business Days):  24h\*  48h\*  3 days\*  1 week\*  Standard (Per Contract/Quote)

Relinquished by: (Signature) <i>Heather</i>	Date: 05-03-13 Time: 1605	Received by: (Signature) <i>Brett Luchan</i>	Date: 5/3/13 Time: 1605	Note:
Relinquished by: (Signature) <i>Zack</i>	Date: 5/4/13 Time: 0945	Received by: (Signature) <i>Todd</i>	Date: 5/4/13 Time: 0945	
Relinquished by: (Signature)	Date:	Received by: (Signature)	Date:	Time:

By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.

Matrix<sup>1</sup>: W = water, S = solid, L = liquid, T = tissue

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# CHAIN OF CUSTODY RECORD

ENVIRON/4447/2130504PA/5/09/13

**GCAL USE ONLY**

Report to:		Bill to:		Analytical Requests & Method										GCAL use only:				
Client: ENVIRON International Address: 1600 Parkwood Circle Suite 310, Atlanta, GA Contact: Keith Cole Phone: 404 - 354 - 2950 E-mail: Kcole@environcorp.com		Client: SAME Address: Contact: Phone: E-mail:		Non-Chlorinated VOC										Custody Seal used <input checked="" type="checkbox"/> yes <input type="checkbox"/> no intact <input checked="" type="checkbox"/> yes <input type="checkbox"/> no Temperature °C 2.6 (120)				
P.O. Number CCNT 1 07-21924K		Sample Description												No Containers ↓				
Sampled By: Patrick Ceres / Heather Thompson				4											<input type="checkbox"/> Dissolved Analysis Requested <input type="checkbox"/> Field filtered <input type="checkbox"/> Lab filtered			
Matrix <sup>1</sup>	Date	Time (2400)	Comp	Grab	MW-15	3											Preservative ← 5/4	
GW	5.2.13	1700	X		MW-16	1											14	
GW	5.2.13	1740			MW-17	1											15	
GW	5.2.13	0825			MW-18	1											16	
GW	5.1.13	1507			MW-19	1											17	
GW	5.2.13	1522			MW-20	1											18	
GW	5.2.13	1130			MW-21	1											19	
GW	5.2.13	0930			MW-22	1											20	
GW	5.2.13	1225			MW-23	1											21	
GW	5.3.13	0905			MW-24	1											22	
GW	5.2.13	1552			MW-25D	1											23	
GW	5.2.13	1500			MW-26D	1											24	
GW	5.1.13	1550			MW-27D	1											25	
GW	5.3.13	1117																
Air Bill No:																		
Turn Around Time (Business Days): <input type="checkbox"/> 24h* <input type="checkbox"/> 48h* <input type="checkbox"/> 3 days* <input type="checkbox"/> 1 week* <input type="checkbox"/> Standard (Per Contract/Quote)																		
Relinquished by: (Signature) <i>Heather Thompson</i>		Date: 05.03.13	Time: 1605	Received by: (Signature) <i>Sadie Sheehan</i>		Date: 5/3/13	Time: 1605	Note:										
Relinquished by: (Signature) <i>Edie</i>		Date: 5/4/13	Time: 0945	Received by: (Signature) <i>Edie</i>		Date: 5/4/13	Time: 0945											
Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)		Date:	Time:	By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.										

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT



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# CHAIN OF CUSTODY RECORD

ENVIRON/4447/213D50419/5/09/13

**GCAL USE ONLY**

Report to:		Bill to:		Analytical Requests & Method										GCAL use only:	
Client: ENVIRON International Address: 1600 Parkwood Circle Suite 310 Contact: Keith Cole Phone: 404-334-2950 E-mail: Kcole@environcorp.com		Client: SAME Address: Contact: Phone: E-mail:												Custody Seal used <input checked="" type="checkbox"/> yes <input type="checkbox"/> no intact <input checked="" type="checkbox"/> yes <input type="checkbox"/> no Temperature °C 26 (E20)	
P.O. Number		Project Name/Number CLHT 07-21924K												<input type="checkbox"/> Dissolved Analysis Requested <input type="checkbox"/> Field filtered <input type="checkbox"/> Lab filtered	
Sampled By: Patrick Ceres / Heather Thompson															
Matrix <sup>1</sup>	Date	Time (2400)	Comp	Grab	Sample Description		No Containers	HCl		Preservative					
GW	5.3.13	1550		X	MW - 28D		3	X		5/4		26			
GW	5.3.13	1100		X	TWP 13-1			X				27			
GW	5.3.13	10:30		X	TWP 13-2			X				28			
GW	5.3.13	1130		X	MW-29D			X				29			
	5/3			X	Trip Blank			X				30			
	5/3	68		X	Dup - 01			X				31			
	5/3			X	Dup - 02			X				32			
Air Bill No:															

Turn Around Time (Business Days):  24h\*  48h\*  3 days\*  1 week\*  Standard (Per Contract/Quote)

Relinquished by: (Signature) <i>Heather</i>	Date: 05/03/13	Time: 1605	Received by: (Signature) <i>Brad Jackson</i>	Date: 5/5/13	Time: 1605	Note:
Relinquished by: (Signature) <i>Heather</i>	Date: 5/4/13	Time: 0945	Received by: (Signature) <i>[Signature]</i>	Date: 5/4/13	Time: 0945	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.

Matrix<sup>1</sup>: W = water, S = solid, L = liquid, T = tissue

\*Requires prior approval, rush charges may apply.

We cannot accept verbal changes. Please email written changes to your PM.



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# **CHAIN OF CUSTODY RECORD**

**GCAL USE ONLY**

Enron / 4447 / 213050419 / 5/9/13

WHITE: CIENTIFICAL REPORT - CANARY CLIENT

Air Bill No:

Turn Around Time (Business Days):  24h\*  48h\*  3 days\*  1 week\*  Standard (Per Contract/Quote)

Relinquished by: (Signature)	Date: 05-06-13	Time: 1336	Received by: (Signature) <i>Edie Shuckin</i>	Date: 5/6/13	Time: 1336	Note:
Relinquished by: (Signature) <i>Fed Ex</i>	Date: 5/7/13	Time: 920	Received by: (Signature) <i>Cancer</i>	Date: 5/7/13	Time: 920	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.

Matrix<sup>1</sup>: W = water, S = solid, L = liquid, T = tissue

\*Requires prior approval. Rush charges may apply.

We cannot accept verbal changes. Please email written changes to your PM.



## SAMPLE RECEIVING CHECKLIST



\* 2 1 3 0 5 0 4 1 9 \*

SAMPLE DELIVERY GROUP <b>213050419</b>		CHECKLIST			
Client 4447 - ENVIRON International Corp	Transport Method FEDEX	Were all samples received using proper thermal preservation?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
Profile Number 229430	Received By Pfeifer, Ben J.	When used, were all custody seals intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
Line Item(s) 1 - Waters	Receive Date(s) 05/04/13	Were all samples received in proper containers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
		Were all samples received using proper chemical preservation?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
		Was preservative added to any container at the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA
		Were all containers received in good condition?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA
		Were all VOA vials received with no head space?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
		Do all sample labels match the Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
		Did the Chain of Custody list the sampling technician?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
		Was the COC maintained i.e. all signatures, dates and time of receipt included?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
COOLERS		DISCREPANCIES	LABORATORY PRESERVATIONS		
Airbill 7996 8115 0962	Temp(oC) 2.6 (E20)	21305041911 - MW-12 - Broken Container	None		
NOTES	MW-12: 1 vial broken upon receipt; 2 remain for 8260 analysis.				

**Appendix D**  
**Ecological Assessment**

This characterization of the environmental setting is based on a field survey conducted in January 2012 by a qualified environmental biologist/Certified Ecologist.

### ***1. Environmental Setting (Problem Formulation)***

The swale (which in the past has been mislabeled as a creek) is an ephemeral stormwater conveyance flows from Georgia 138 just northeast of the CCHT facility on the southeast side of the road, southeast past O'Reilly's Auto Parts and Carpenter Insulation, to a small pond just southeast of Carpenter Insulation (Figure 1). This path is approximately 600 feet, but only the last 100 feet appears to be consistently inundated. The pond that the swale feeds is irregularly shaped, but is approximately 700 feet by 470 feet (approximately 7 to 8 acres in size).

#### Dry Drainage Swale

The dry swale is an incised channel that is quite shallow near the road (a few inches deep) to much more deeply incised downstream (five to eight feet deep west of Carpenter Insulation). The swale channel bed sediment is unconsolidated erosional material mixed with leaves and coarse woody debris. The upstream portions of the swale were completely dry, and showed no evidence of having held water recently (Figure 2A-B). There are no aquatic wildlife receptors in this portion of the swale.

#### Wet Drainage Swale

The last 100 feet (approximately) of the swale have some water, most of which is essentially stagnant backflow from the pond. This most downstream portions of the swale are likely to be consistently inundated as long as the surface water level of the pond is high enough to backfill them. The water was not flowing during the January 2012 field reconnaissance and surface water sampling. Water in the swale channel was between a few inches and about one foot deep, and the inundated portion was between a foot and a few feet wide. Near the pond, the swale broadened out into braided channels at the same elevation as the pond (Figure 2C-E). The sediment is an unconsolidated silty mud mixed with decaying leaves. This very small fish, tadpoles, and insects were sighted in this area of the swale. This area may also provide habitat for reptiles and amphibians.

#### Pond

The pond is approximately 7 to 8 acres in size, and is of unknown depth. The shoreline showed that the high water mark was several feet above the current water level. There are tree stumps with gnaw-marks consistent with beaver activity, as well as a dam near where the swale enters the pond, but no beavers were sighted during the site reconnaissance (Figures 2F-I). Wading birds, geese, ducks, and splashes from fish were noted during the site reconnaissance. The pond likely supports a variety of plants, insects, crustaceans, amphibians, reptiles, fish, and birds as well as beavers.

## Downstream

A water control structure drains the pond through a spillway to a channel on the east side of Conyers Station Road NE (Figure 2J). This spillway likely connects with Quigg Branch (creek) and drains into Weaver Lake to the east.

## Wetlands

The National Wetlands Inventory (NWI, 2012) was queried to see if there were wetlands in the project area (Figure 3A-B). While wetlands exist in the larger watershed, they are a mile or more away from the pond.

## Protected Species Information

The US Fish and Wildlife Service (USFWS) Information Planning and Conservation System (iPAC, report in Appendix A) was consulted to determine the potential threatened and endangered species that may be present in this area. Three species are Federally listed for this area. These three species are unlikely to be found in the project area as habitat to support them is not present (Coder, 1994 and Appendix A).

- Black spored quillwort (*Isoetes melanospora*) an endangered species;
- Little amphianthus (*Amphianthus pusillus*) a threatened species; and
- Michaux's sumac (*Rhus michauxii*) an endangered species.

Black spored quillwort grows in mountain meadows and light woodlands with basic to neutral soils. Light competition from shrubs and mid-story trees can lead to losses as can lack of small local disturbances which bares mineral soil. This habitat is not found in the project area.

Little Amphianthus and Michaux's sumac are found in open, upland woods, along forest edges and maintained right-of-ways. These plants prefer the more droughty, full sun areas that have limited competition from taller plants. They grow on sandy and rocky sites and along ridge lines and requires periodic disturbance of surrounding vegetation. Michaux's sumac and Little Amphianthus are found historically near Coastal Plain sandhills and across the Piedmont. This habitat is not found in the project area.

## **2. Sampling (Exposure Assessment)**

Two surface water samples were collected for this project. One was collected in the most upstream area of the swale where it joins the pond (CCHT-SW01-US). This sample was intended to characterize the wet area of the swale. The other was collected from the pond, downstream of the first sample by about 20 feet (CCHT-SW02-DS). This sample was intended to characterize the pond area. Figure 4 shows where the samples were collected.

Samples were collected via a peristaltic pump on a very low setting. Tubing was gently placed halfway between the surface of the water and the sediment. A handheld multiparameter water

quality instrument was used to measure temperature, conductivity, oxidation-reduction potential, dissolved oxygen, and pH.

Temperature	8.32	10.29	C
Conductivity	0.058	0.073	mS/cm
DO	6.19	8.48	mg/L
pH	5.90	6.49	SU
ORP	8.41	98.3	ORP

Once measurements were stable, a water sample was collected into a preserved volatile organics analysis (VOA) vial which was completely filled so that there was no headspace, chilled, and delivered to the laboratory for analysis of volatile organic compounds (VOCs). The only VOC that was detected was tetrachloroethene (tetrachloroethylene, perchloroethylene, or perc) in the upstream sample. It was not detected in the downstream sample.

Sample	CAS number	Constituent	Result	Detection Limit	Units
CCHT-SW01-US	127-18-4	Tetrachloroethene	5.37	3	µg/L
CCHT-SW02-DS	127-18-4	Tetrachloroethene	<3.3		µg/L

### **3. Effects Assessment**

VOCs in general and tetrachloroethene in specific are known to have deleterious effects on wildlife receptors. VOCs and other weakly hydrophobic organic chemicals are not typically considered to be persistent sediment contaminants, because of their volatility and solubility (Fuschman 2003). These constituents tend to volatilize from sediment and water into air and are diluted to below detectable limits much more rapidly than other constituents. The ecotoxicology of VOCs is poorly studied and mostly focuses on the vapor inhalation pathway. Some effects of VOC exposure on fossorial wildlife can include sublethal histopathological changes or biochemical changes. Sufficient exposures can lead to decreases in body weight, reproduction, growth and adult survival (Gallegos et. al. 2007).

Table 1 shows a variety of USEPA and international criteria for tetrachloroethene in surface water. Included are a variety of effects based criteria that describe effects on aquatic invertebrates, plants, and fish. Criteria range from 0.045 to 816 mg/L. Perhaps the most appropriate criterion for comparison at this particular site for the purpose of screening the water concentrations for ecological risk in a conservative fashion is the USEPA Region 4 chronic surface water screening benchmark which is 0.084 mg/L. Figure 5 summarizes ecological relevant criteria

Additionally, Figure 6 summarizes the 2 to 4 day toxicity test data from the Ecotox database (USEPA, 2012). The test data are LC50s, or the concentration of tetrachloroethene that kills 50% of the population of test organisms in 2 to 4 days. The test data is detailed in Appendix B.

#### **4. Risk Characterization**

The ecological reconnaissance indicated that wildlife receptors are present in the most downstream portions of the swale and the pond. Sampling indicated that constituents are present in these areas. Therefore, a potentially complete exposure pathway exists for these wildlife receptors exposed to tetrachloroethene.

Figures 5 and 6 as well as Table 1 show the concentration of tetrachloroethene detected at CCHT (0.00537 mg/L, 5.37 µg/L) to criteria and toxicity information. The concentration detected at CCHT is well below the lowest criteria and toxicity information. The ratio of the CCHT concentration to the USEPA Region 4 criterion is 0.06. This indicates that the concentration of tetrachloroethene is extremely unlikely to pose unacceptable risks to wildlife receptors.

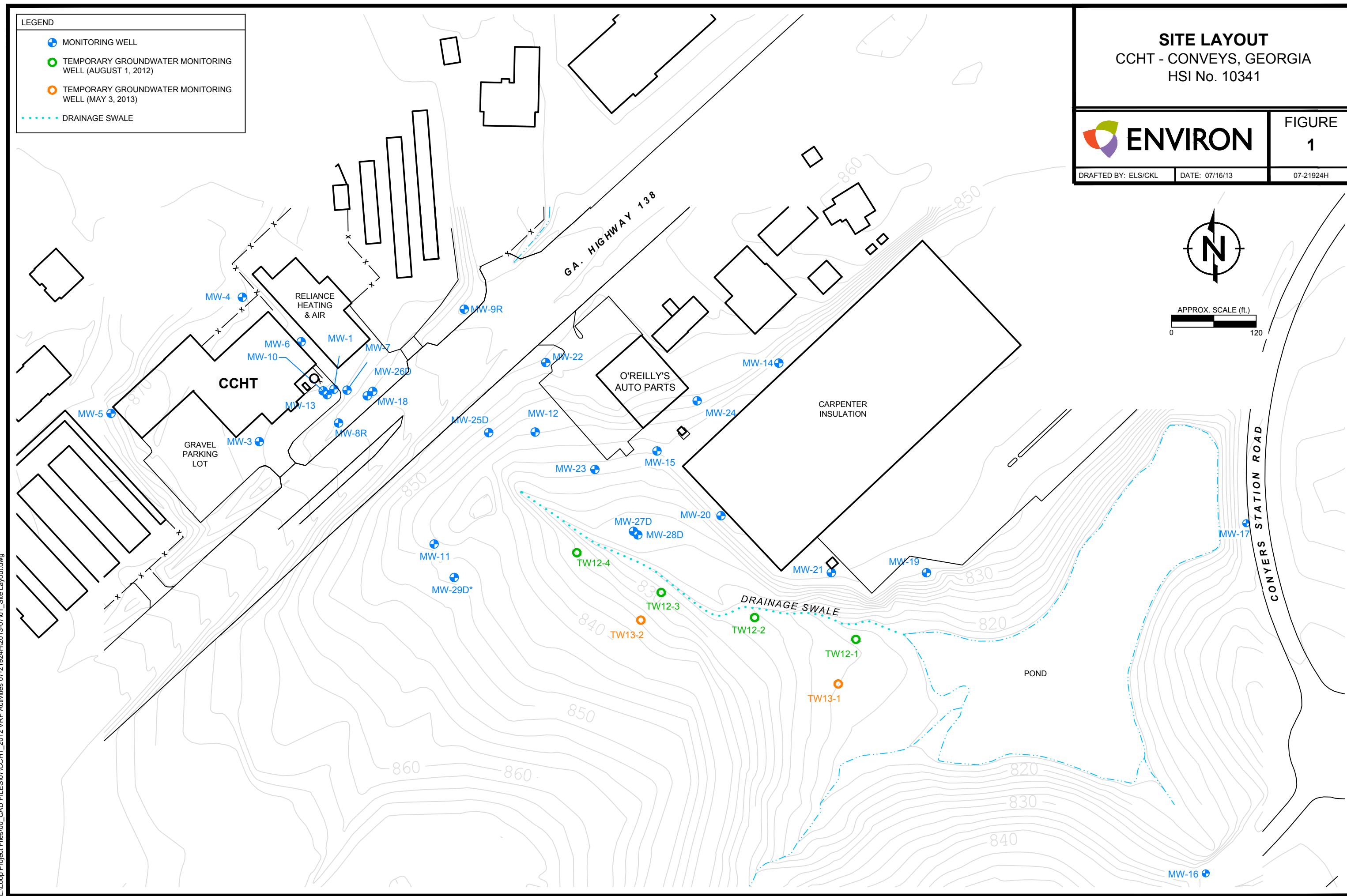
Coder, K.D. 1994. "Federally Protected Species Fact Sheets for the Southeastern United States" for Black spored quillwort (*Isoetes melanospora*), Little amphianthus (*Amphianthus pusillus*), and Michaux's sumac (*Rhus michauxii*). Warnell School of Forest Resources, The University of Georgia.

<http://warnell.forestry.uga.edu/service/library/index.php3?docID=202&docHistory%5B%5D=5&docHistory%5B%5D=202&docHistory%5B%5D=359&docHistory%5B%5D=64>

Fuchsman, P.C. 2003. Modification of the Equilibrium Partitioning Approach for Volatile Organic Compounds in Sediment. Environmental Toxicology and Chemistry 22 (7): 1532 – 1534.

Gallegos, P., Lutz, J., Markwiese, J., Rytí, R., and Mirenda, R. 2007. Wildlife ecological screening levels for inhalation of volatile organic chemicals. Environ Toxicol Chem. 2007 Jun ;26 (6):1299-1303

USEPA. 2012. Ecotox Database. <http://cfpub.epa.gov/ecotox/>



**Figure 2**

Photographs of the Swale and Pond  
Carolina Commercial Heat Treating  
Conyers, Georgia, HSI No. 10341

**A: Dry Drainage Swale**

This is the drainage swale near GA Highway 138.

**B: Dry Drainage Swale**

This is the drainage swale near O'Reilly's Auto Parts.

**Figure 2**

Photographs of the Swale and Pond  
Carolina Commercial Heat Treating  
Conyers, Georgia, HSI No. 10341

**C: Wet Drainage Swale**

This is some of the most upstream wet area of the swale between Hwy. 138 and the pond.

**D: Wet Drainage Swale**

This is the highly incised drainage swale west of Carpenter Insulation.

**Figure 2**

Photographs of the Swale and Pond  
Carolina Commercial Heat Treating  
Conyers, Georgia, HSI No. 10341

**E: Wet Drainage Swale**

This is the drainage swale directly adjacent to Carpenter Insulation. The storm water outfall from Carpenter Insulation is visible in the left side of the picture.

**F: Pond**

This is the most downstream area of the swale where it broadens out and joins with the pond. Picture is taken facing southeast. A beaverdam is visible in the distance.

**Figure 2**

Photographs of the Swale and Pond  
Carolina Commercial Heat Treating  
Conyers, Georgia, HSI No. 10341

**G: Pond**

This picture is taken standing on the northeast side of the beaver dam, looking southwest. These pictures were taken during the January field reconnaissance so the trees do not have leaves.

**H: Pond**

This tree is on the shoreline northeast of the beaver dam and shows recent evidence of beaver activity.

**Figure 2**

Photographs of the Swale and Pond  
Carolina Commercial Heat Treating  
Conyers, Georgia, HSI No. 10341

**I: Pond**

This picture was taken on the southeast shore of the pond looking northwest towards Carpenter Insulation. The shoreline shows evidence of a change in water level. The water level is several feet lower than the high water mark. The water drain to the downstream area is visible in the pond.

**J: Downstream**

The pond drains through a spillway to the east side of Conyers Station Road NE. The picture is taken from Conyers Station Road looking east.

**Figure 3A**

National Wetland Inventory Map  
Carolina Commercial Heat Treating  
Conyers, Georgia, HSI No. 10341

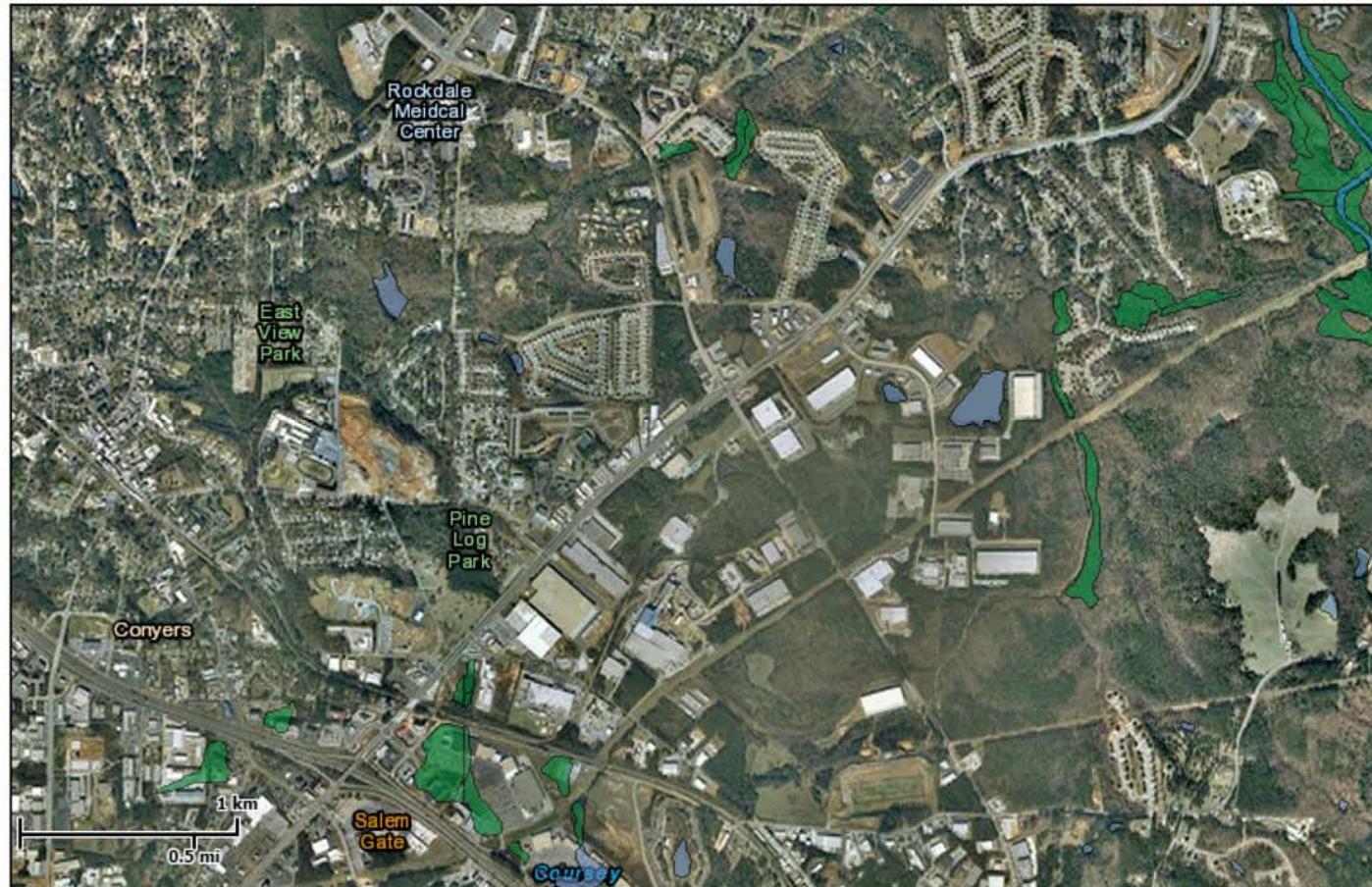


U.S. Fish and Wildlife Service

# National Wetlands Inventory

CCHT Large Scale

Jul 12, 2012



## Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

## Riparian

- Herbaceous
- Forested/Shrub

**Figure 3B**

National Wetland Inventory Map  
Carolina Commercial Heat Treating  
Conyers, Georgia, HSI No. 10341



**U.S. Fish and Wildlife Service**  
**National Wetlands Inventory**

CCHT Smaller  
Scale

Jul 12, 2012

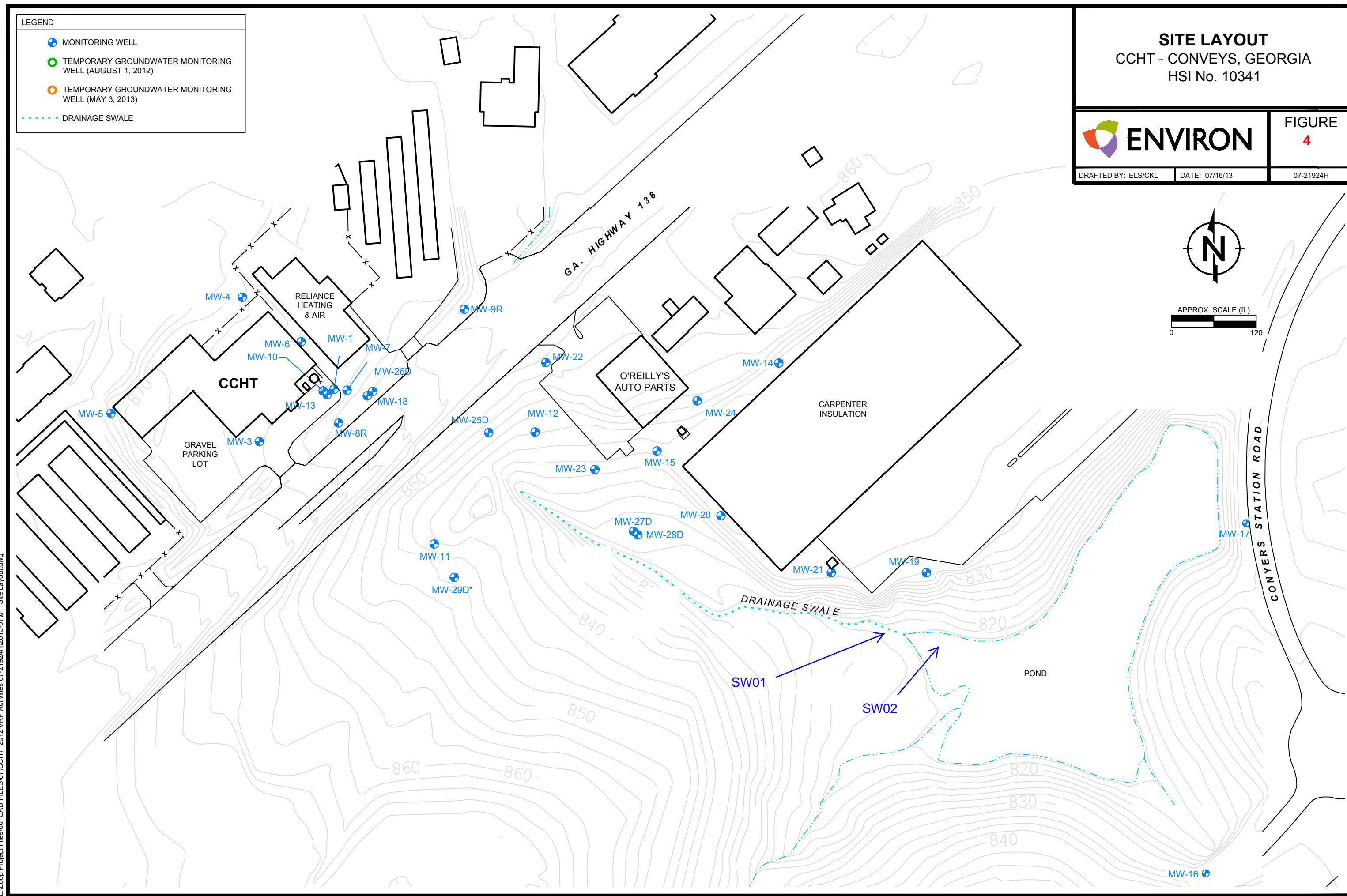
**Wetlands**

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

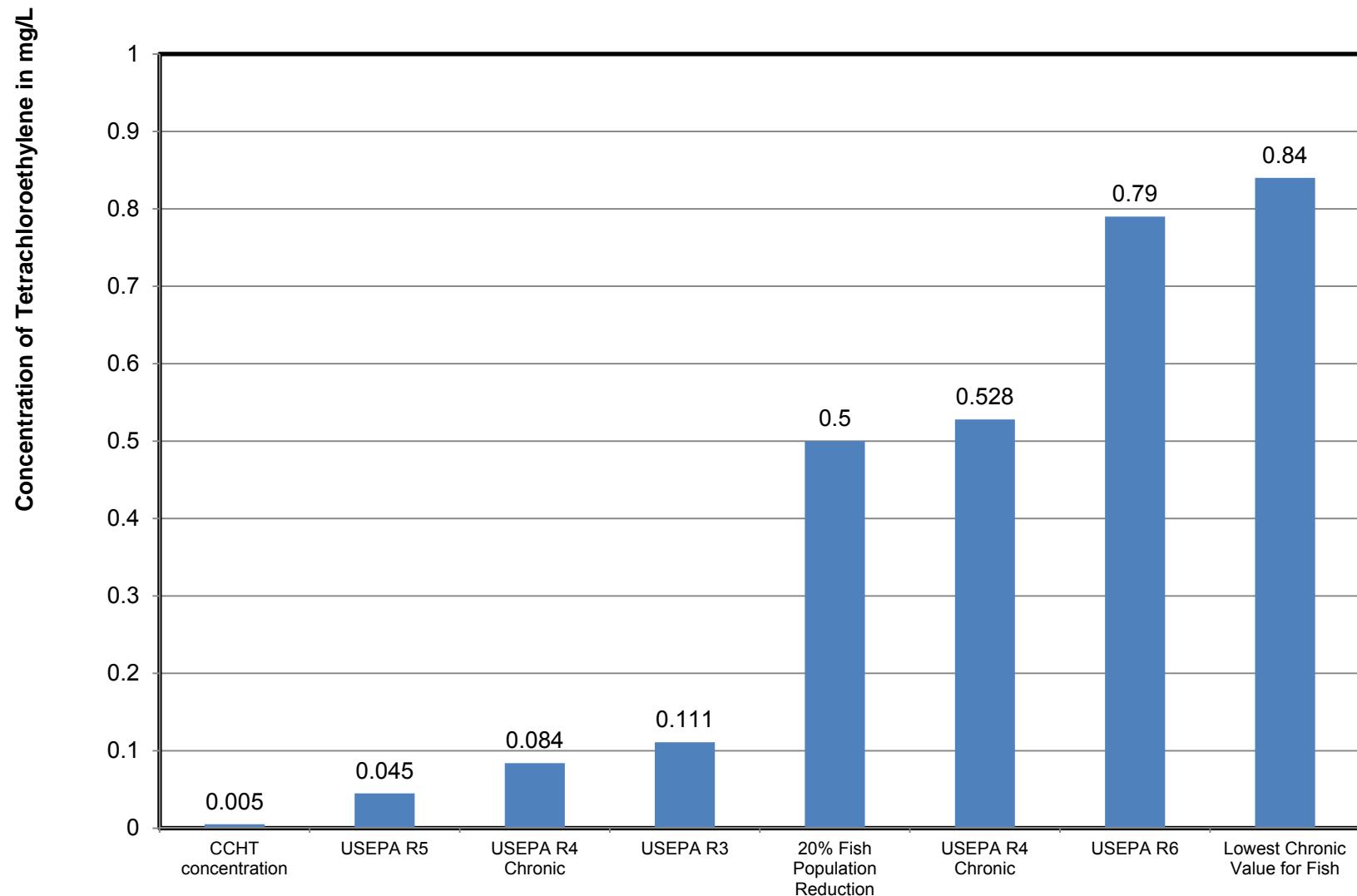
**Riparian**

- Herbaceous
- Forested/Shrub

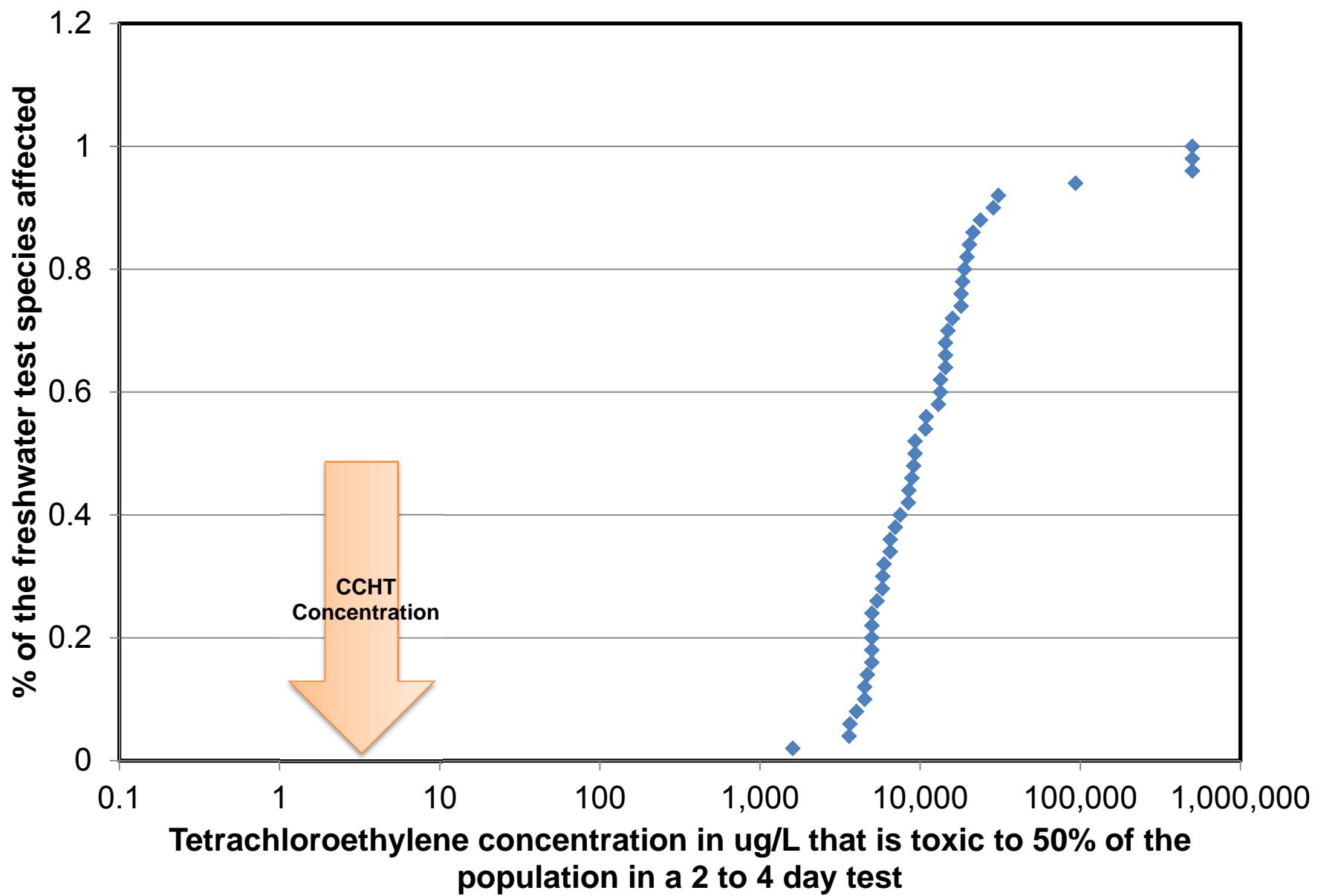




**Figure 5: Comparison of Concentrations of Tetrachloroethylene at CCHT to Various Ecologically Relevant Criteria**



**Figure 6: Tetrachloroethylene Species Sensitivity Distribution**



**Table 1**  
**Tetrachloroethylene Criteria Compared to CCHT Concentration**

Tetrachloroethylene	mg/L
<b>CCHT concentration</b>	<b>0.00537</b>
USEPA Region 5 Ecological Screening Level Surface Water Screening Benchmark	0.045
Effect Concentration 25% Bass Population Surface Water Screening Benchmark	0.05
<b>USEPA Region 4 Chronic Surface Water Screening Benchmark</b>	<b>0.084</b>
Tier II Secondary Chronic Value Surface Water Screening Benchmark	0.098
Canadian Water Quality Guideline Surface Water Screening Benchmark	0.11
USEPA Region 3 Biological Technical Assessment Group Freshwater Screening Benchmarks	0.111
Office of Solid Waste and Emergency Response Tier II Secondary Surface Water Screening Benchmark	0.12
Effective Concentration 20% Fish Surface Water Screening Benchmark	0.5
Effective Concentration 20% Daphnids Surface Water Screening Benchmark	0.51
USEPA Region 4 Acute Surface Water Screening Benchmark	0.528
Least Chronic Value Daphnids Surface Water Screening Benchmark	0.75
USEPA Region 6 Surface Water Screening Benchmark	0.79
Tier II Submerged Aquatic Vegetation Surface Water Screening Benchmark	0.83
Least Chronic Value Fish Surface Water Screening Benchmark	0.84
Least Chronic Value Aquatic Plants Surface Water Screening Benchmark	816

Values from Risk Assessment Information System, 2012. [http://rais.ornl.gov/tools/eco\\_search.php](http://rais.ornl.gov/tools/eco_search.php)



U.S. Fish and Wildlife Service

## Natural Resources of Concern

**This resource list is to be used for planning purposes only — it is not an official species list.**

**Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:**

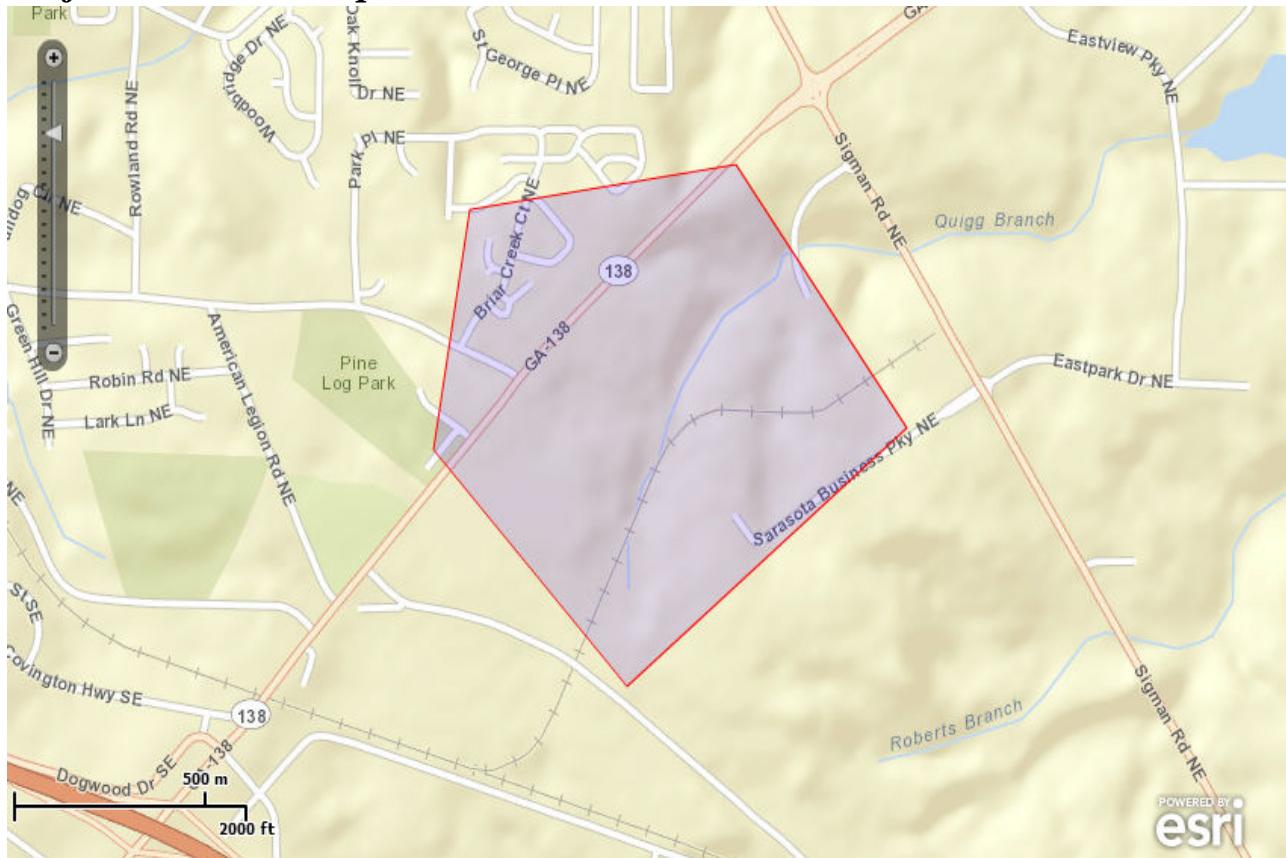
**GEORGIA ECOLOGICAL SERVICES FIELD OFFICE**  
105 WESTPARK DRIVE  
WESTPARK CENTER SUITE D  
ATHENS, GA 30606  
(706) 613-9493



U.S. Fish and Wildlife Service

## Natural Resources of Concern

### ***Project Location Map:***



### ***Project Counties:***

Rockdale, GA

### ***Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83):***

MULTIPOLYGON (((-83.988974 33.6678894, -83.9841245 33.6622459, -83.9920639 33.6567093, -83.9975592 33.6617816, -83.9965292 33.666925, -83.988974 33.6678894)))

### ***Project Type:***

\*\* Other \*\*



## Natural Resources of Concern

### ***Endangered Species Act Species List***

There are a total of 3 species in your species list

#### **Species that may be affected by your project:**

Ferns and Allies			
Black Spored quillwort ( <i>Isoetes melanospora</i> )	Endangered	<a href="#">species info</a>	Georgia Ecological Services Field Office
Flowering Plants			
Little amphianthus ( <i>Amphianthus pusillus</i> )	Threatened	<a href="#">species info</a>	Georgia Ecological Services Field Office
Michaux's sumac ( <i>Rhus michauxii</i> )	Endangered	<a href="#">species info</a>	Georgia Ecological Services Field Office

### ***FWS National Wildlife Refuges***

There are no refuges found within the vicinity of your project.

### ***FWS Migratory Birds***

Not yet available through IPaC.

### ***FWS Delineated Wetlands***

Not yet available through IPaC.

# Black-spored Quillwort (*Isoetes melanospora*)

**Kim D. Coder**

**Professor, Silvics/Ecology**

**Warnell School of Forest Resources**

**The University of Georgia**

**Photographic Credit:**

**Kim D. Coder**

**April, 1994**

This fact sheet is not for official taxonomic identification or species location purposes. It is intended to help landowners become aware of federally designated and protected species.

The list of federally protected species categorized as endangered or threatened is always changing. What is endangered in one geographic location may not be endangered in another. For more information, contact the U.S. Fish and Wildlife Service, Division of Endangered Species, 452 ARLS, Washington, DC 20240. Your state natural resource organization also maintains lists of state protected species.

Grateful acknowledgement is made to the U.S. Dept. of the Interior, Fish & Wildlife Service, Office of Extension and Publications for providing partial funding for this publication.

**Quillwort Family**

## Description

Aquatic plant 3 - 8 centimeters (1.2 - 3.2 in) tall that reproduces by spores. Has five to 10 pointed, stiff and needle-like leaves, about 5 - 7 centimeters (2 - 2.8 in) long and 1 millimeter (0.04 in) wide. Leaves have light green tops that yellow toward the base.

Spores form in May through October. Spore cases are 1 - 3 millimeters (0.04 - 0.12 in) long with spotted brown walls. Larger black warty or ridged megaspores are 5 millimeters (0.2 in) long and develop in a cavity in the leaf base.

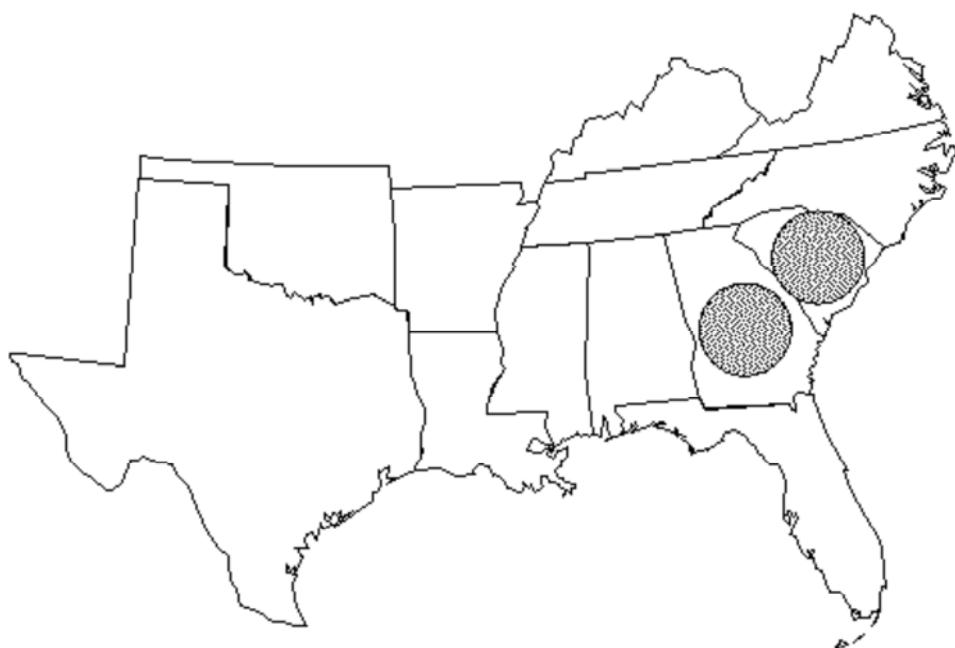
**Similar Species:** Many quillworts look alike; spore characteristics can only be determined by a microscope.



Black-spored Quillwort (*Isoetes melanospora*)

## Habitat

Mountain meadows and light woodlands with basic to neutral soils. Light competition from shrubs and mid-story trees can lead to losses as can lack of small local disturbances which bares mineral soil.



General Location of Species

## Why Protect Endangered Species?

Many Americans – and their elected representatives – feel natural resource use and ownership carry responsibilities as well as privileges. Conserving endangered species is part of that responsibility.

### **Endangered species are part of our land ethic.**

Land managers make decisions critical to the future of their land, its living and non-living resources, and its productivity. But, over the long run, these private land values have been considered common property.

### **Endangered species are part of life.**

We have only a limited number of available species, or gene combinations. Genetic materials from wild, living things are now used to revitalize species that have been domesticated for centuries.

### **Endangered species are environmental monitors.**

The loss of biodiversity can harm our own life in ways that may be hard to determine. Accelerating extinction rates are a powerful message that ecosystems surrounding us are being severely damaged.

### **Endangered species are valuable.**

Benefits of species preservation include opportunities for improved crop production through crossbreeding with related wild species or new medicines and industrial chemicals from substances found naturally only in the wild. Biodiversity is becoming economically valuable.

### **Endangered species are protected by law.**

Under current legislation and regulations, harming and harassing an endangered plant or animal, destroying its critical habitat, or ignoring pesticide label instructions, can carry severe penalties.

# Dwarf Sumac (*Rhus michauxii*)

**Kim D. Coder**

**Professor, Silvics/Ecology**

**Warnell School of Forest Resources**

**The University of Georgia**

**Photographic Credit:**

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**Carrot Family**

## Description

Small shrub that grows in clumps about 0.3 - 1 meter (1 - 3.3 ft) tall. Leaves are pinnately compound, with nine to 13 leaflets that have fairly large, coarse teeth evenly spaced along the leaflet edge. Leaflets are 5 - 9 centimeters (2 - 3.5 in) long and 2 - 5 centimeters (0.2 - 2 in) wide, with a sharp point. Leaves and twigs are heavily covered with hairs. The end-most leaflet will often have a winged stalk. The remainder of the leaflets are attached in pairs along the leaf stalks.

The dense, strongly conical-shaped, terminal clusters flower in June. Flowers of different sexes are on different plants. Whole clumps are usually of one sex only. Each small flower has four to five minute, greenish-yellow petals.

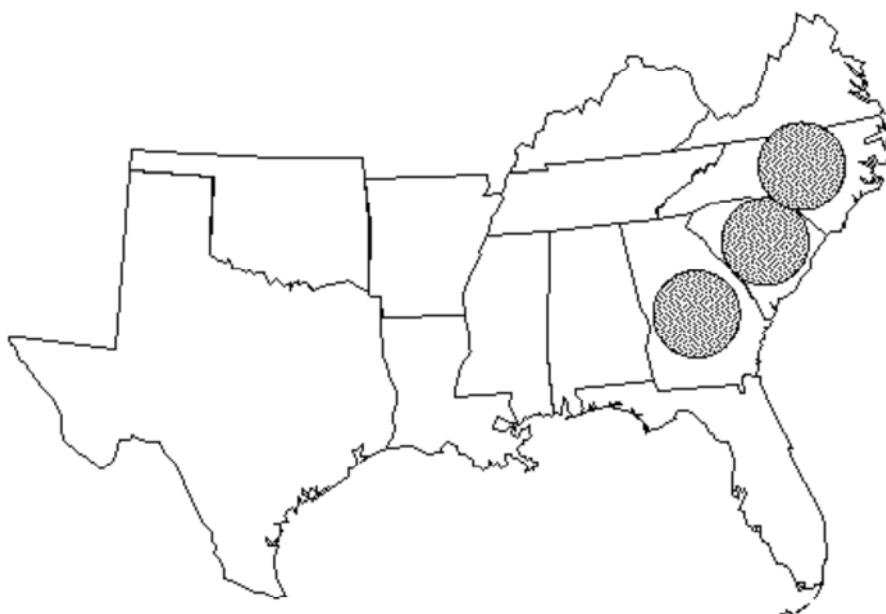
Fruits in August and September. Fruit is dark red, very hairy and about 5 millimeters (0.2 in) wide.



Dwarf Sumac (*Rhus michauxii*)

## Habitat

Found in open, upland woods, along forest edges and maintained right-of-ways. Prefers the more droughty, full sun areas that have limited competition from taller plants. Grows on sandy and rocky sites and along ridge lines. Requires periodic disturbance of surrounding vegetation. Found historically near Coastal Plain sandhills and across the Piedmont.



General Location of Species

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## **Endangered species are valuable.**

Benefits of species preservation include opportunities for improved crop production through crossbreeding with related wild species or new medicines and industrial chemicals from substances found naturally only in the wild. Biodiversity is becoming economically valuable.

## **Endangered species are protected by law.**

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# Little Amphianthus (*Amphianthus pusillus*)

**Kim D. Coder**

**Professor, Silvics/Ecology**

**Warnell School of Forest Resources**

**The University of Georgia**

**Photographic Credit:**

**Kim D. Coder**

**April, 1994**

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**Figwort Family**

## Description

Small, delicate, greenish-purple aquatic annual 5 - 10 centimeters (2 - 4 in) tall. The lower, submerged leaves are thin and narrow, about 1 centimeter (0.4 in) long, and grow from the stem base.

Slender branches grow from the top of the submerged stem. They are tipped with a pair of broad, rounded, green, purple-edged, floating leaves--about 4 - 8 millimeters (0.16 - 0.32 in) long and 3 - 5 millimeters (0.12 - 0.2 in) wide--that surround a single white flower. Another flower is submerged on top of the main stem. This flower does not open and fertilizes itself. Flowers from March to April.

Fruits from April to May. Fruit is a capsule 2 - 3 millimeters (0.08 - 0.12 in) wide and 1 millimeter (0.04 in) long that contains many banana-shaped, dark brown seeds about 1 millimeter (0.04 in) long.

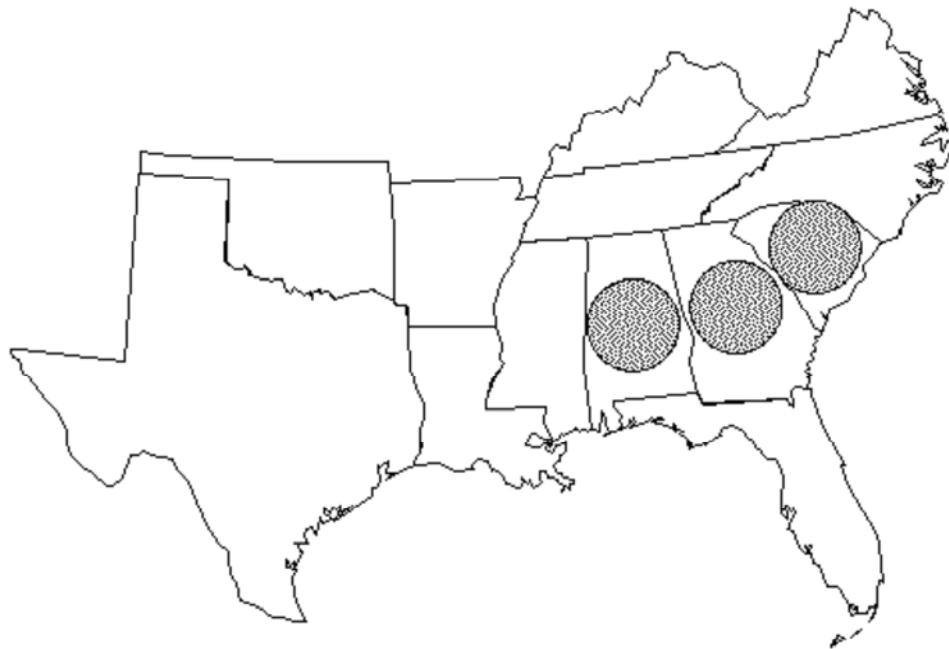


Little Amphianthus (*Amphianthus pusillus*)

## Habitat

Found in shallow pools on Piedmont granite outcrops in full sunlight. Pools dry out in summer. Seeds can lie dormant over several seasons until moisture is available.

Shade, drainage, and silting-in of pools will destroy habitat. Quarrying and pool vandalism are major threats. To protect habitat, overstory plants that shade pools need to be removed, and animal and human access restricted.



General Location of Species

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**Appendix B**  
**Studies Used in the Species Sensitivity Distribution**

Species Scientific Name	Species Common Name	Species Group	Endpoint	Effect	Effect Measurement	Exposure Duration (Days)	Exposure Type	Chemical Analysis	Trend	Conc 1 Type (ug/L)	Conc 1 Op (ug/L)	Conc 1 (mg/L)	%	Order	Media Type	Test Location	Reference Number	Author	Title	Source	Publication Year	
Oryzias latipes	Medaka, High-Eyes	Fish	LC50	MOR	MORT	2	S	U		F		1600	1.6	0.02	1	FW	LAB	12513	Yoshioka, Y., Y. Ose, and T. Sato	Correlation of the Five Test Methods to Assess Chemical Toxicity and Relation to Physical Properties	Ecotoxicol. Environ. Saf.12(1): 15-21	1986
Tallaperla maria	Stonefly	Insects Spiders	LC50	MOR	MORT	4	S	U	INC	F		3600	3.6	0.04	2	FW	LAB	14563	Horne, J.D., M.A. Swirsky, T.A. Hollister, B.R. Oblad, and J.H. Kennedy	5Aquatic Toxicity Studies of Five Priority Pollutants	Rep.No.4398, Final Report, EPA Contract No.68-01-6201, NUS Corp., Houston, TX: 196 p.	1983
Chlamydomonas reinhardtii	Green Algae	Algae, Moss, Fungi	EC50	POP	BMAS	3	S	U	DEC	F		3640	3.64	0.06	3	FW	LAB	92100	Brack, W., and H. Rottler	Toxicity Testing of Highly Volatile Chemicals with Green Algae - A New Assay	Environ. Sci. Pollut. Res. Int.1(4): 223-228	1994
Jordanella floridae	Flagfish	Fish	LC50	MOR	MORT	4	R	M		A		4000	4	0.08	4	FW	LAB	140	Smith, A.D., A. Bharath, C. Mallard, D. Orr, K. Smith, J.A. Sutton, J. Vukmanich, L.S. McCarty, and G.W. Ozburn	The Acute and Chronic Toxicity of Ten Chlorinated Organic Compounds to the American Flagfish (Jordanella floridae)	Arch. Environ. Contam. Toxicol.20(1): 94-102	1991
Oncorhynchus mykiss	Rainbow Trout	Fish	EC50	BEH	EQUL	4	F	M	DEC	A	Average	4500	4.5	0.1	5	FW	LAB	16044	Call, D.J., L.T. Brooke, and N. Ahmad	Toxicity, Bioconcentration and Metabolism of Selected Chemicals in Aquatic Organisms	Third Quarterly Prog.Rep.to EPA, EPA Coop.Agreement No.CR 806864020, Univ.of Wisconsin, Superior, WI: 38 p.	1979
Oncorhynchus mykiss	Rainbow Trout	Fish	LC50	MOR	MORT	4	F	M	INC	A	Average	4500	4.5	0.12	6	FW	LAB	16044	Call, D.J., L.T. Brooke, and N. Ahmad	Toxicity, Bioconcentration and Metabolism of Selected Chemicals in Aquatic Organisms	Third Quarterly Prog.Rep.to EPA, EPA Coop.Agreement No.CR 806864020, Univ.of Wisconsin, Superior, WI: 38 p.	1979
Oncorhynchus mykiss	Rainbow Trout	Fish	EC50	BEH	EQUL	4	F	U	DEC	F		4680	4.68	0.14	7	FW	LAB	16044	Call, D.J., L.T. Brooke, and N. Ahmad	Toxicity, Bioconcentration and Metabolism of Selected Chemicals in Aquatic Organisms	Third Quarterly Prog.Rep.to EPA, EPA Coop.Agreement No.CR 806864020, Univ.of Wisconsin, Superior, WI: 38 p.	1979
Oncorhynchus mykiss	Rainbow Trout	Fish	LC50	MOR	MORT	2	F	M		A		4990	4.99	0.16	8	FW	LAB	10579	Call, D.J., L.T. Brooke, N. Ahmad, and J.E. Richter	Toxicity and Metabolism Studies with EPA (Environmental Protection Agency) Priority Pollutants and Related Chemicals in Freshwater Organisms	EPA 600/3-83-095, U.S.EPA, Duluth, MN: 120 p.	1983
Oncorhynchus mykiss	Rainbow Trout	Fish	LC50	MOR	MORT	3	F	M		A		4990	4.99	0.18	9	FW	LAB	10579	Call, D.J., L.T. Brooke, N. Ahmad, and J.E. Richter	Toxicity and Metabolism Studies with EPA (Environmental Protection Agency) Priority Pollutants and Related Chemicals in Freshwater Organisms	EPA 600/3-83-095, U.S.EPA, Duluth, MN: 120 p.	1983
Oncorhynchus mykiss	Rainbow Trout	Fish	LC50	MOR	MORT	4	F	M	INC	A		4990	4.99	0.2	10	FW	LAB	10448	Shubat, P.J., S.H. Poirier, M.L. Knuth, and L.T. Brooke	Acute Toxicity of Tetrachloroethylene and Tetrachloroethylene with Dimethylformamide to Rainbow Trout ( <i>Salmo gairdneri</i> )	Bull. Environ. Contam. Toxicol.28(1): 7-10	1982
Oncorhynchus mykiss	Rainbow Trout	Fish	LC50	MOR	MORT	2	F	M	INC	A	~	5000	5	0.22	11	FW	LAB	10448	Shubat, P.J., S.H. Poirier, M.L. Knuth, and L.T. Brooke	Acute Toxicity of Tetrachloroethylene and Tetrachloroethylene with Dimethylformamide to Rainbow Trout ( <i>Salmo gairdneri</i> )	Bull. Environ. Contam. Toxicol.28(1): 7-10	1982
Oncorhynchus mykiss	Rainbow Trout	Fish	LC50	MOR	MORT	3	F	M	INC	A	~	5000	5	0.24	12	FW	LAB	10448	Shubat, P.J., S.H. Poirier, M.L. Knuth, and L.T. Brooke	Acute Toxicity of Tetrachloroethylene and Tetrachloroethylene with Dimethylformamide to Rainbow Trout ( <i>Salmo gairdneri</i> )	Bull. Environ. Contam. Toxicol.28(1): 7-10	1982
Oncorhynchus mykiss	Rainbow Trout	Fish	EC50	BEH	EQUL	4	F	U	DEC	F		5380	5.38	0.26	13	FW	LAB	16044	Call, D.J., L.T. Brooke, and N. Ahmad	Toxicity, Bioconcentration and Metabolism of Selected Chemicals in Aquatic Organisms	Third Quarterly Prog.Rep.to EPA, EPA Coop.Agreement No.CR 806864020, Univ.of Wisconsin, Superior, WI: 38 p.	1979

Species Scientific Name	Species Common Name	Species Group	Endpoint	Effect	Effect Measurement	Exposure Duration (Days)	Exposure Type	Chemical Analysis	Trend	Conc 1 Type (ug/L)	Conc 1 Op (ug/L)	Conc 1 (mg/L)	%	Order	Media Type	Test Location	Reference Number	Author	Title	Source	Publication Year	
Oncorhynchus mykiss	Rainbow Trout	Fish	LC50	MOR	MORT	3	F	M		A		5810	5.81	0.28	14	FW	LAB	10579	Call, D.J., L.T. Brooke, N. Ahmad, and J.E. Richter	Toxicity and Metabolism Studies with EPA (Environmental Protection Agency) Priority Pollutants and Related Chemicals in Freshwater Organisms	EPA 600/3-83-095, U.S.EPA, Duluth, MN: 120 p.	1983
Oncorhynchus mykiss	Rainbow Trout	Fish	LC50	MOR	MORT	4	F	M	INC	A		5840	5.84	0.3	15	FW	LAB	10448	Shubat, P.J., S.H. Poirier, M.L. Knuth, and L.T. Brooke	Acute Toxicity of Tetrachloroethylene and Tetrachloroethylene with Dimethylformamide to Rainbow Trout ( <i>Salmo gairdneri</i> )	Bull. Environ. Contam. Toxicol.28(1): 7-10	1982
Oncorhynchus mykiss	Rainbow Trout	Fish	LC50	MOR	MORT	2	F	M		A		5950	5.95	0.32	16	FW	LAB	10579	Call, D.J., L.T. Brooke, N. Ahmad, and J.E. Richter	Toxicity and Metabolism Studies with EPA (Environmental Protection Agency) Priority Pollutants and Related Chemicals in Freshwater Organisms	EPA 600/3-83-095, U.S.EPA, Duluth, MN: 120 p.	1983
Oncorhynchus mykiss	Rainbow Trout	Fish	LC50	MOR	MORT	2	F	M	INC	A	Average	6500	6.5	0.34	17	FW	LAB	10448	Shubat, P.J., S.H. Poirier, M.L. Knuth, and L.T. Brooke	Acute Toxicity of Tetrachloroethylene and Tetrachloroethylene with Dimethylformamide to Rainbow Trout ( <i>Salmo gairdneri</i> )	Bull. Environ. Contam. Toxicol.28(1): 7-10	1982
Oncorhynchus mykiss	Rainbow Trout	Fish	LC50	MOR	MORT	3	F	M	INC	A	Average	6500	6.5	0.36	18	FW	LAB	10448	Shubat, P.J., S.H. Poirier, M.L. Knuth, and L.T. Brooke	Acute Toxicity of Tetrachloroethylene and Tetrachloroethylene with Dimethylformamide to Rainbow Trout ( <i>Salmo gairdneri</i> )	Bull. Environ. Contam. Toxicol.28(1): 7-10	1982
Tanytarsus dissimilis	Midge	Insects Spiders	EC50	BEH	EQL	2	NR	U	DEC	F		7000	7	0.38	19	FW	LAB	16044	Call, D.J., L.T. Brooke, and N. Ahmad	Toxicity, Bioconcentration and Metabolism of Selected Chemicals in Aquatic Organisms	Third Quarterly Prog.Rep.to EPA, EPA Coop.Agreement No.CR 806864020, Univ.of Wisconsin, Superior, WI: 38 p.	1979
Daphnia magna	Water Flea	Crustaceans	EC50	ITX	IMBL	2	S	M		A		7500	7.5	0.4	20	FW	LAB	15981	Richter, J.E., S.F. Peterson, and C.F. Kleiner	Acute and Chronic Toxicity of some Chlorinated Benzenes, Chlorinated Ethanes, and Tetrachloroethylene to <i>Daphnia magna</i>	Arch. Environ. Contam. Toxicol.12(6): 679-684	1983
Jordanella floridae	Flagfish	Fish	LC50	MOR	MORT	4	F	M		A		8430	8.43	0.42	21	FW	LAB	140	Smith, A.D., A. Bharath, C. Mallard, D. Orr, K. Smith, J.A. Sutton, J. Vukmanich, L.S. McCarty, and G.W. Ozburn	The Acute and Chronic Toxicity of Ten Chlorinated Organic Compounds to the American Flagfish ( <i>Jordanella floridae</i> )	Arch. Environ. Contam. Toxicol.20(1): 94-102	1991
Daphnia magna	Water Flea	Crustaceans	EC50	ITX	IMBL	2	S	M		A		8500	8.5	0.44	22	FW	LAB	15981	Richter, J.E., S.F. Peterson, and C.F. Kleiner	Acute and Chronic Toxicity of some Chlorinated Benzenes, Chlorinated Ethanes, and Tetrachloroethylene to <i>Daphnia magna</i>	Arch. Environ. Contam. Toxicol.12(6): 679-684	1983
Jordanella floridae	Flagfish	Fish	LC50	MOR	MORT	3	F	M		A		8877	8.877	0.46	23	FW	LAB	140	Smith, A.D., A. Bharath, C. Mallard, D. Orr, K. Smith, J.A. Sutton, J. Vukmanich, L.S. McCarty, and G.W. Ozburn	The Acute and Chronic Toxicity of Ten Chlorinated Organic Compounds to the American Flagfish ( <i>Jordanella floridae</i> )	Arch. Environ. Contam. Toxicol.20(1): 94-102	1991
Daphnia magna	Water Flea	Crustaceans	LC50	MOR	MORT	2	S	M		A		9100	9.1	0.48	24	FW	LAB	15981	Richter, J.E., S.F. Peterson, and C.F. Kleiner	Acute and Chronic Toxicity of some Chlorinated Benzenes, Chlorinated Ethanes, and Tetrachloroethylene to <i>Daphnia magna</i>	Arch. Environ. Contam. Toxicol.12(6): 679-684	1983
Danio rerio	Zebra Danio	Fish	LC50	MOR	MORT	2	F	NR	INC	F	=	9300	9.3	0.5	25	FW	NR	56372	Roderer, G.	Testung Wassergefährdender Stoffe als Grundlage für Wasserqualitätsstandards	Testbericht: Wassergefährdende Stoffe, Fraunhofer-Institut für Umweltchemie und Okotoxikologie, Schmallenberg	1990
Danio rerio	Zebra Danio	Fish	LC50	MOR	MORT	4	F	NR	INC	F	=	9300	9.3	0.52	26	FW	NR	56372	Roderer, G.	Testung Wassergefährdender Stoffe als Grundlage für Wasserqualitätsstandards	Testbericht: Wassergefährdende Stoffe, Fraunhofer-Institut für Umweltchemie und Okotoxikologie, Schmallenberg	1990

Species Scientific Name	Species Common Name	Species Group	Endpoint	Effect	Effect Measurement	Exposure Duration (Days)	Exposure Type	Chemical Analysis	Trend	Conc 1 Type (ug/L)	Conc 1 Op (ug/L)	Conc 1 (mg/L)	%	Order	Media Type	Test Location	Reference Number	Author	Title	Source	Publication Year	
Pimephales promelas	Fathead Minnow	Fish	LC50	MOR	MORT	4	S	M	INC	A		10800	10.8	0.54	27	FW	LAB	14339	Brooke, L.	Report of the Flow-Through and Static Acute Test Comparisons with Fathead Minnows and Acute Tests with an Amphipod and a Cladoceran	Memo to L.Larson, Center for Lake Superior Environmental Studies dated August 31: 24 p.	1987
Jordanella floridae	Flagfish	Fish	LC50	MOR	MORT	2	R	M		A		10919	10.919	0.56	28	FW	LAB	140	Smith, A.D., A. Bharath, C. Mallard, D. Orr, K. Smith, J.A. Sutton, J. Vukmanich, L.S. McCarty, and G.W. Ozburn	The Acute and Chronic Toxicity of Ten Chlorinated Organic Compounds to the American Flagfish ( <i>Jordanella floridae</i> )	Arch. Environ. Contam. Toxicol.20(1): 94-102	1991
Lepomis macrochirus	Bluegill	Fish	LC50	MOR	MORT	4	S	U	INC	A		13000	13	0.58	29	FW	LAB	5590	Buccafusco, R.J., S.J. Ells, and G.A. LeBlanc	Acute Toxicity of Priority Pollutants to Bluegill ( <i>Lepomis macrochirus</i> )	Bull. Environ. Contam. Toxicol.26(4): 446-452	1981
Pimephales promelas	Fathead Minnow	Fish	LC50	MOR	MORT	4	F	M		A		13400	13.4	0.6	30	FW	LAB	12447	Geiger, D.L., C.E. Northcott, D.J. Call, and L.T. Brooke	Acute Toxicities of Organic Chemicals to Fathead Minnows (Pimephales promelas), Vol. II	Center for Lake Superior Environmental Studies, University of Wisconsin, Superior, WI: 326 p.	1985
Pimephales promelas	Fathead Minnow	Fish	LC50	MOR	MORT	4	F	M		A		13400	13.4	0.62	31	FW	LAB	11227	Walbridge, C.T., J.T. Fiandt, G.L. Phipps, and G.W. Holcombe	Acute Toxicity of Ten Chlorinated Aliphatic Hydrocarbons to the Fathead Minnow (Pimephales promelas)	Arch. Environ. Contam. Toxicol.12(6): 661-666	1983
Pimephales promelas	Fathead Minnow	Fish	EC50	ITX	IMBL	2	F	M		A		14400	14.4	0.64	32	FW	LAB	973	Alexander, H.C., W.M. McCarty, and E.A. Bartlett	Toxicity of Perchloroethylene, Trichloroethylene, 1,1,1-Trichloroethane, and Methylene Chloride to Fathead Minnows	Bull. Environ. Contam. Toxicol.20(3): 344-352	1978
Pimephales promelas	Fathead Minnow	Fish	EC50	ITX	IMBL	3	F	M		A		14400	14.4	0.66	33	FW	LAB	973	Alexander, H.C., W.M. McCarty, and E.A. Bartlett	Toxicity of Perchloroethylene, Trichloroethylene, 1,1,1-Trichloroethane, and Methylene Chloride to Fathead Minnows	Bull. Environ. Contam. Toxicol.20(3): 344-352	1978
Pimephales promelas	Fathead Minnow	Fish	EC50	ITX	IMBL	4	F	M		A		14400	14.4	0.68	34	FW	LAB	973	Alexander, H.C., W.M. McCarty, and E.A. Bartlett	Toxicity of Perchloroethylene, Trichloroethylene, 1,1,1-Trichloroethane, and Methylene Chloride to Fathead Minnows	Bull. Environ. Contam. Toxicol.20(3): 344-352	1978
Pimephales promelas	Fathead Minnow	Fish	LC50	MOR	MORT	3	F	M		A		14900	14.9	0.7	35	FW	LAB	11227	Walbridge, C.T., J.T. Fiandt, G.L. Phipps, and G.W. Holcombe	Acute Toxicity of Ten Chlorinated Aliphatic Hydrocarbons to the Fathead Minnow (Pimephales promelas)	Arch. Environ. Contam. Toxicol.12(6): 661-666	1983
Pimephales promelas	Fathead Minnow	Fish	LC50	MOR	MORT	2	F	M		A		15900	15.9	0.72	36	FW	LAB	11227	Walbridge, C.T., J.T. Fiandt, G.L. Phipps, and G.W. Holcombe	Acute Toxicity of Ten Chlorinated Aliphatic Hydrocarbons to the Fathead Minnow (Pimephales promelas)	Arch. Environ. Contam. Toxicol.12(6): 661-666	1983
Daphnia magna	Water Flea	Crustaceans	LC50	MOR	MORT	2	S	M		A		18000	18	0.74	37	FW	LAB	15981	Richter, J.E., S.F. Peterson, and C.F. Kleiner	Acute and Chronic Toxicity of some Chlorinated Benzenes, Chlorinated Ethanes, and Tetrachloroethylene to <i>Daphnia magna</i>	Arch. Environ. Contam. Toxicol.12(6): 679-684	1983
Daphnia magna	Water Flea	Crustaceans	LC50	MOR	MORT	2	S	U	INC	F		18000	18	0.76	38	FW	LAB	5184	LeBlanc, G.A.	Acute Toxicity of Priority Pollutants to Water Flea ( <i>Daphnia magna</i> )	Bull. Environ. Contam. Toxicol.24(5): 684-691	1980
Pimephales promelas	Fathead Minnow	Fish	LC50	MOR	MORT	4	F	M		A		18400	18.4	0.78	39	FW	LAB	973	Alexander, H.C., W.M. McCarty, and E.A. Bartlett	Toxicity of Perchloroethylene, Trichloroethylene, 1,1,1-Trichloroethane, and Methylene Chloride to Fathead Minnows	Bull. Environ. Contam. Toxicol.20(3): 344-352	1978
Pimephales promelas	Fathead Minnow	Fish	LC50	MOR	MORT	3	F	M		A		18900	18.9	0.8	40	FW	LAB	973	Alexander, H.C., W.M. McCarty, and E.A. Bartlett	Toxicity of Perchloroethylene, Trichloroethylene, 1,1,1-Trichloroethane, and Methylene Chloride to Fathead Minnows	Bull. Environ. Contam. Toxicol.20(3): 344-352	1978
Pimephales promelas	Fathead Minnow	Fish	LC50	MOR	MORT	2	F	M		A		19600	19.6	0.82	41	FW	LAB	973	Alexander, H.C., W.M. McCarty, and E.A. Bartlett	Toxicity of Perchloroethylene, Trichloroethylene, 1,1,1-Trichloroethane, and Methylene Chloride to Fathead Minnows	Bull. Environ. Contam. Toxicol.20(3): 344-352	1978
Pimephales promelas	Fathead Minnow	Fish	LC50	MOR	MORT	4	F	M		A		20300	20.3	0.84	42	FW	LAB	12447	Geiger, D.L., C.E. Northcott, D.J. Call, and L.T. Brooke	Acute Toxicities of Organic Chemicals to Fathead Minnows (Pimephales promelas), Vol. II	Center for Lake Superior Environmental Studies, University of Wisconsin, Superior, WI: 326 p.	1985
Pimephales promelas	Fathead Minnow	Fish	LC50	MOR	MORT	4	S	U		F		21400	21.4	0.86	43	FW	LAB	973	Alexander, H.C., W.M. McCarty, and E.A. Bartlett	Toxicity of Perchloroethylene, Trichloroethylene, 1,1,1-Trichloroethane, and Methylene Chloride to Fathead Minnows	Bull. Environ. Contam. Toxicol.20(3): 344-352	1978
Pimephales promelas	Fathead Minnow	Fish	LC50	MOR	MORT	4	F	NR	INC	F		23800	23.8	0.88	44	FW	LAB	14128	Broderius, S., and M. Kahl	Acute Toxicity of Organic Chemical Mixtures to the Fathead Minnow	Aquat. Toxicol.6: 302-322	1985

Species Scientific Name	Species Common Name	Species Group	Endpoint	Effect	Effect Measurement	Exposure Duration (Days)	Exposure Type	Chemical Analysis	Trend	Conc 1 Type (ug/L)	Conc 1 Op (ug/L)	Conc 1 (mg/L)	%	Order	Media Type	Test Location	Reference Number	Author	Title	Source	Publication Year	
Gammarus minus	Scud	Crustaceans	LC50	MOR	MORT	4	S	U	INC	F		28600	28.6	0.9	45	FW	LAB	14563	Horne, J.D., M.A. Swirsky, T.A. Hollister, B.R. Oblad, and J.H. Kennedy	5Aquatic Toxicity Studies of Five Priority Pollutants	Rep.No.4398, Final Report, EPA Contract No.68-01-6201, NUS Corp., Houston, TX: 196 p.	1983
Tanytarsus dissimilis	Midge	Insects Spiders	LC50	MOR	MORT	2	S	M		A		30800	30.8	0.92	46	FW	LAB	10579	Call, D.J., L.T. Brooke, N. Ahmad, and J.E. Richter	Toxicity and Metabolism Studies with EPA (Environmental Protection Agency) Priority Pollutants and Related Chemicals in Freshwater Organisms	EPA 600/3-83-095, U.S.EPA, Duluth, MN: 120 p.	1983
Physa heterostropha	Pond Snail, Pneumonate Snail	Molluscs	LC50	MOR	MORT	4	S	U	INC	F		93400	93.4	0.94	47	FW	LAB	14563	Horne, J.D., M.A. Swirsky, T.A. Hollister, B.R. Oblad, and J.H. Kennedy	5Aquatic Toxicity Studies of Five Priority Pollutants	Rep.No.4398, Final Report, EPA Contract No.68-01-6201, NUS Corp., Houston, TX: 196 p.	1983
Pseudokirchneriella subcapitata	Green Algae	Algae, Moss, Fungi	EC50	POP	CHLA	2	S	U	NR	F	>	500000	500	0.96	48	FW	LAB	9607	U.S.Environmental Protection Agency	In-Depth Studies on Health and Environmental Impacts of Selected Water Pollutants	U.S.EPA Contract No.68-01-4646, Duluth, MN: 9 p.	1978
Pseudokirchneriella subcapitata	Green Algae	Algae, Moss, Fungi	EC50	BCM	CHLA	4	S	U	NR	F	>	500000	500	0.98	49	FW	LAB	9607	U.S.Environmental Protection Agency	In-Depth Studies on Health and Environmental Impacts of Selected Water Pollutants	U.S.EPA Contract No.68-01-4646, Duluth, MN: 9 p.	1978
Pseudokirchneriella subcapitata	Green Algae	Algae, Moss, Fungi	EC50	POP	ABND	4	S	U	NR	F	>	500000	500	1	50	FW	LAB	9607	U.S.Environmental Protection Agency	In-Depth Studies on Health and Environmental Impacts of Selected Water Pollutants	U.S.EPA Contract No.68-01-4646, Duluth, MN: 9 p.	1978

## **Appendix E**

### **Calculation of Risk-Based Vapor Intrusion Criteria**

Table E1 - Summary of Groundwater Screening Criteria for Class C or Class D Carcinogens  
 Carolina Commercial Heat Treat  
 Conyers, Georgia

**OSWER VAPOR INTRUSION ASSESSMENT**  
 Vapor Intrusion Screening Level (VISL) Calculator Version 3.0, November 2012 RSLs

Parameter	Symbol	Value	Instructions
Exposure Scenario	Scenario	Commercial	Select residential or commercial scenario from pull down list
Target Risk for Carcinogens	TCR	1.00E-04	Enter target risk for carcinogens
Target Hazard Quotient for Non-Carcinogens	THQ	1	Enter target hazard quotient for non-carcinogens
Average Groundwater Temperature (°C)	Tgw	25	Enter average of the stabilized groundwater temperature to correct Henry's Law Constant for groundwater target concentrations

CAS	Chemical Name	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Soil Source?	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Groundwater Source?	Target Indoor Air Conc. @ TCR = 1E-04 or THQ = 1	Toxicity Basis	Target Sub-Slab and Exterior Soil Gas Conc. @ TCR = 1E-04 or THQ = 1	Target Ground Water Conc. @ TCR = 1E-04 or THQ = 1	Is Target Ground Water Conc. < MCL?	Pure Phase Vapor Conc. @ 25°C	Groundwater Vapor Conc.	Temperature for Groundwater Vapor Conc.	Lower Explosive Limit**	LEL Source	Inhalation Unit Risk	IUR Source*	Reference Concentration	RFC Source*	Mutagenic Indicator	Target Indoor Air Conc. for Non-Carcinogens @ TCR = 1E-04	Target Indoor Air Conc. for Non-Carcinogens @ THQ = 1			
x 67-66-3	Chloroform	Yes	Yes	5.3E+01	C	5.3E+02	3.6E+02	No (80)	1.27E+09	1.19E+09	25			IUR	RFC	i	Cia,c	Cia,nc	(ug/m³) <sup>-1</sup>	(mg/m³)	(ug/m³)	(ug/m³)	
x 75-35-4	Dichloroethylene, 1,1-	Yes	Yes	8.8E+02	NC	8.8E+03	8.2E+02	No (7)	3.31E+09	2.58E+09	25	6.5	N	2.30E-05	I	9.80E-02	A	5.3E+01	4.3E+02	2.00E-01	I	8.8E+02	

Notes:

(1) <b>Inhalation Pathway Exposure Parameters (RME):</b>	Units	Residential	Commercial	Selected (based on scenario in cell E7)	
Exposure Scenario		Symbol	Symbol	Symbol	
Averaging time for carcinogens	(yrs)	ATc_R	70	ATc_C	70
Averaging time for non-carcinogens	(yrs)	ATnc_R	30	ATnc_C	25
Exposure duration	(yrs)	ED_R	30	ED_C	25
Exposure frequency	(days/yr)	EF_R	350	EF_C	250
Exposure time	(hr/day)	ET_R	24	ET_C	8
(2) <b>Generic Attenuation Factors:</b>		Residential	Commercial	Selected (based on scenario in cell E7)	
Source Medium of Vapors		Symbol	Symbol	Symbol	
Groundwater	(-)	AFgw_R	0.001	AFgw_C	0.001
Sub-Slab and Exterior Soil Gas	(-)	AFss_R	0.1	AFss_C	0.1
(3) <b>Formulas</b>					
Cia,target = MIN( Cia,c; Cia,nc)					
Cia,c (ug/m³) = TCR x ATc x (365 days/yr) x (24 hrs/day) / (ED x EF x ET x IUR)					
Cia,nc (ug/m³) = THQ x ATnc x (365 days/yr) x (24 hrs/day) x RFC x (1000 ug/mg) / (ED x EF x ET)					
(4) <b>Special Case Chemicals</b>		Residential	Commercial	Selected (based on scenario in cell E7)	
Trichloroethylene		Symbol	Symbol	Symbol	
	mIURTCE_R	1.00E-06	mIURTCE_C	0.00E+00	
	IURTCE_R	3.10E-06	IURTCE_C	4.10E-06	

Mutagenic Chemicals      The exposure durations and age-dependent adjustment factors for mutagenic-mode-of-action are listed in the table below:

Age Cohort	Exposure Duration (years)	Age-dependent adjustment factor
Note: This section applies to trichloroethylene and other mutagenic chemicals, but not to vinyl chloride.		
0 - 2 years	2	10
2 - 6 years	4	3
6 - 16 years	10	3
16 - 30 years	14	1

**Mutagenic-mode-of-action (MMOA) adjustment factor**      25      This factor is used in the equations for mutagenic chemicals.

Vinyl Chloride

See the Navigation Guide equation for Cia,c for vinyl chloride.

**Notation:**

NVT = Not sufficiently volatile and/or toxic to pose inhalation risk in selected exposure scenario for the indicated medium

C = Carcinogenic

NC = Non-carcinogenic

I = IRIS: EPA Integrated Risk Information System (IRIS). Available online at: <http://www.epa.gov/iris/subst/index.html>

P = PPRTV: EPA Provisional Peer Reviewed Toxicity Values (PPRTVs). Available online at: <http://hprrtv.ornl.gov/prrtv.shtml>

A = Agency for Toxic Substances and Disease Registry (ATSDR) Minimum Risk Levels (MRLs). Available online at: <http://www.atsdr.cdc.gov/mrls/index.html>

CA = California Environmental Protection Agency/Office of Environmental Health Hazard Assessment assessments. Available online at: <http://www.oehha.ca.gov/risk/ChemicalDB/index.asp>

H = HEAST: EPA Superfund Health Effects Assessment Summary Tables (HEAST) database. Available online at: <http://epa-heast.ornl.gov/heast.shtml>

S = See RSL User Guide, Section 5

X = PPRTV Appendix

E = The Engineering ToolBox. Available online at [http://www.engineeringtoolbox.com/explosive-concentration-limits-d\\_423.html](http://www.engineeringtoolbox.com/explosive-concentration-limits-d_423.html)

N = Centers for Disease Control and Prevention (CDC) National Institute for Occupational Safety and Health (NIOSH). Pocket Guide to Chemical Hazards. Available online at: <http://www.cdc.gov/niosh/npg/default.html>    <http://www.cdc.gov/niosh/npg/default.html>

M = Chemical-specific MSDS

Mut = Chemical acts according to the mutagenic-mode-of-action, special exposure parameters apply (see footnote (4) above).

VC = Special exposure equation for vinyl chloride applies (see Navigation Guide for equation).

TCE = Special mutagenic and non-mutagenic IURs for trichloroethylene apply (see footnote (4) above).

Yellow highlighting indicates site-specific parameters that may be edited by the user.

Blue highlighting indicates exposure factors that are based on Risk Assessment Guidance for Superfund (RAGS) or EPA vapor intrusion guidance, which generally should not be changed.

\*\*Lower explosive limit is the minimum concentration of the compound in air (% by volume) that is needed for the gas to ignite and explode.

Table E2 - Summary of Groundwater Screening Criteria for Class A or Class B Carcinogens  
 Carolina Commercial Heat Treat  
 Conyers, Georgia

**OSWER VAPOR INTRUSION ASSESSMENT**  
 Vapor Intrusion Screening Level (VISL) Calculator Version 3.0, November 2012 RSLs

Parameter	Symbol	Value	Instructions
Exposure Scenario	Scenario	Commercial	Select residential or commercial scenario from pull down list
Target Risk for Carcinogens	TCR	1.00E-05	Enter target risk for carcinogens
Target Hazard Quotient for Non-Carcinogens	THQ	1	Enter target hazard quotient for non-carcinogens
Average Groundwater Temperature (°C)	Tgw	25	Enter average of the stabilized groundwater temperature to correct Henry's Law Constant for groundwater target concentrations

CAS	Chemical Name	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Soil Source?		Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Groundwater Source?		Target Indoor Air Conc. @ TCR = 1E-05 or THQ = 1	Toxicity Basis	Target Sub-Slab and Exterior Soil Gas Conc. @ TCR = 1E-05 or THQ = 1	Target Ground Water Conc. @ TCR = 1E-05 or THQ = 1	Is Target Ground Water Conc. < MCL?	Pure Phase Vapor Conc. @ 25°C	Groundwater Vapor Conc.	Temperature for Groundwater Vapor Conc.	Lower Explosive Limit**	LEL Source	Inhalation Unit Risk	IUR Source*	Reference Concentration	RFC Source*	Mutagenic Indicator	Target Indoor Air Conc. for Non-Carcinogens @ TCR = 10E-06	Target Indoor Air Conc. for Non-Carcinogens @ THQ = 1
		Cvp > Cia,c,target?	Chc > Cia,c,target?	MIN(Cia,c;Cia,nc)	Csq																	
		Yes/No	Yes/No	(ug/m³)	C/NC	(ug/m³)	(ug/L)	(MCL ug/L)	(ug/m³)	(ug/m³)	C	(% by vol)										
X 74-87-3	Chloromethane	Yes	Yes	3.9E+02	NC	3.9E+03	1.1E+03	--	1.17E+10	1.92E+09	25	8.1	N									
X 127-18-4	Tetrachloroethylene	Yes	Yes	1.8E+02	NC	1.8E+03	2.4E+02	No (5)	1.65E+08	1.49E+08	25											
X 79-01-6	Trichloroethylene	Yes	Yes	8.8E+00	NC	8.8E+01	2.2E+01	No (5)	4.88E+08	5.15E+08	25	8	N									
X 75-01-4	Vinyl Chloride	Yes	Yes	2.8E+01	C	2.8E+02	2.5E+01	No (2)	1.00E+10	1.00E+10	25	3.6	N									

Notes:

(1) Inhalation Pathway Exposure Parameters (RME):		Units	Residential	Commercial	Selected (based on scenario in cell E7)
Exposure Scenario		Symbol	Value	Symbol	Value
Averaging time for carcinogens	(yrs)	ATc_R	70	ATc_C	70
Averaging time for non-carcinogens	(yrs)	ATnc_R	30	ATnc_C	25
Exposure duration	(yrs)	ED_R	30	ED_C	25
Exposure frequency	(days/yr)	EF_R	350	EF_C	250
Exposure time	(hr/day)	ET_R	24	ET_C	8
(2) Generic Attenuation Factors:		Residential	Commercial	Selected (based on scenario in cell E7)	
Source Medium of Vapors		Symbol	Value	Symbol	Value
Groundwater	(-)	AFgw_R	0.001	AFgw_C	0.001
Sub-Slab and Exterior Soil Gas	(-)	AFss_R	0.1	AFss_C	0.1
(3) Formulas		Residential	Commercial	Selected (based on scenario in cell E7)	
Cia, target = MIN( Cia,c; Cia,nc )		Symbol	Value	Symbol	Value
Cia,c (ug/m³) = TCR x ATc x (365 days/yr) x (24 hrs/day) / (ED x EF x ET x IUR)					
Cia,nc (ug/m³) = THQ x ATnc x (365 days/yr) x (24 hrs/day) x RfC x (1000 ug/mg) / (ED x EF x ET)					
(4) Special Case Chemicals		Residential	Commercial	Selected (based on scenario in cell E7)	
Trichloroethylene		Symbol	Value	Symbol	Value
mIURTCE_R	1.00E-06	mIURTCE_C	0.00E+00	mIURTCE	0.00E+00
IURTCE_R	3.10E-06	IURTCE_C	4.10E-06	IURTCE	4.10E-06

Mutagenic Chemicals

The exposure durations and age-dependent adjustment factors for mutagenic-mode-of-action are listed in the table below:

Note: This section applies to trichloroethylene and other mutagenic chemicals, but not to vinyl chloride.	Age Cohort	Exposure Duration (years)	Age-dependent adjustment factor	
			Symbol	Value
	0 - 2 years	2		10
	2 - 6 years	4		3
	6 - 16 years	10		3
	16 - 30 years	14		1

Mutagenic-mode-of-action (MMOA) adjustment factor

25

This factor is used in the equations for mutagenic chemicals.

Vinyl Chloride

See the Navigation Guide equation for Cia,c for vinyl chloride.

Notation:

NVT = Not sufficiently volatile and/or toxic to pose inhalation risk in selected exposure scenario for the indicated medium

C = Carcinogenic

NC = Non-carcinogenic

I = IRIS: EPA Integrated Risk Information System (IRIS). Available online at: <http://www.epa.gov/iris/subst/index.html>

P = PPRTV: EPA Provisional Peer Reviewed Toxicity Values (PPRTVs). Available online at: <http://hprrtv.nlm.nih.gov/pptv.shtml>

A = Agency for Toxic Substances and Disease Registry (ATSDR) Minimum Risk Levels (MRLs). Available online at: <http://atsdr.cdc.gov/mrls/index.html>

CA = California Environmental Protection Agency/Office of Environmental Health Hazard Assessment assessments. Available online at: <http://oehha.ca.gov/risk/ChemicalDB/index.asp>

H = HEAST: EPA Superfund Health Effects Assessment Summary Tables (HEAST) database. Available online at: <http://epa-heast.nlm.nih.gov/heast.shtml>

S = See RSL User Guide, Section 5

X = PPRTV Appendix

E = The Engineering ToolBox. Available online at [http://www.engineeringtoolbox.com/explosive-concentration-limits-d\\_423.html](http://www.engineeringtoolbox.com/explosive-concentration-limits-d_423.html)

N = Centers for Disease Control and Prevention (CDC) National Institute for Occupational Safety and Health (NIOSH). Pocket Guide to Chemical Hazards. Available online at: <http://www.cdc.gov/niosh/npg/default.html> <http://www.cdc.gov/niosh/npg/default.html>

M = Chemical-specific MSDS

Mut = Chemical acts according to the mutagenic-mode-of-action, special exposure parameters apply (see footnote (4) above).

VC = Special exposure equation for vinyl chloride applies (see Navigation Guide for equation).

TCE = Special mutagenic and non-mutagenic IURs for trichloroethylene apply (see footnote (4) above).

Yellow highlighting indicates site-specific parameters that may be edited by the user.

Blue highlighting indicates exposure factors that are based on Risk Assessment Guidance for Superfund (RAGS) or EPA vapor intrusion guidance, which generally should not be changed.

\*Lower explosive limit is the minimum concentration of the compound in air (% by volume) that is needed for the gas to ignite and explode.

## **Appendix F**

### **Surface Water Risk-Based Criteria**

**Table F1a**  
**Summary of the Exposure Factors and Intake Calculations for the Trespasser (Swimming)**  
**Carolina Commercial Heat Treat**  
**Conyers, Georgia**

<b>SURFACE WATER</b>	
<b>Incidental Ingestion:</b>	<b>Dermal Contact:</b>
Intake = $\frac{C_w \times IR_w \times ET \times EF \times ED}{BW \times AT}$	Intake = $\frac{C_w \times DA_{event\ sw} \times EV \times EF \times ED \times SA}{BW \times AT}$
DA <sub>event sw</sub> = see Table E2 and Table E3	

<b>Exposure Assumptions:</b>		<b>Trespasser (Swimming)</b>			
		<b>Youth (6-16)</b>		<b>Adult</b>	
EF	Exposure frequency (days/yr)	=	26 (a)	26 (a)	
ED	Exposure duration (years)	=	10 (a)	30 (b)	
BW	Body weight (kg)	=	45 (a)	70 (a)	
AT <sub>nc</sub>	Averaging time - noncanc. (days)	=	3,650	10,950	
AT <sub>c</sub>	Averaging time - canc. (days)	=	25,550	25,550	
SA <sub>sw/sd</sub>	Surface area - surface water/sediment (cm <sup>2</sup> )	=	12,350 (b)	18,000 (b)	
C <sub>w</sub>	Concentration in water (mg/L)	=	chemical specific		
IR <sub>w</sub>	Ingestion rate for water (l/hour)	=	0.05 (c)	0.05 (c)	
EV	Event frequency (events/day)	=	1 (d)	1 (d)	
ET <sub>sw/sd</sub>	Exposure time (hours/event)	=	1 (d)	1 (d)	

<b>Trespasser</b>			
	<b>Youth (6-16)</b>		<b>Adult</b>
Incidental Ingestion of Surface Water Intake (noncanc.) =	C <sub>w</sub> x	7.91E-05	5.09E-05
Incidental Ingestion of Surface Water Intake (canc.) =	C <sub>w</sub> x	1.13E-05	2.18E-05
Dermal Contact with Surface Water Intake (noncanc.) =	C <sub>w</sub> x DA <sub>event\ sw</sub> x	1.95E+01	1.83E+01
Dermal Contact with Surface Water Intake (canc.) =	C <sub>w</sub> x DA <sub>event\ sw</sub> x	2.79E+00	7.85E+00

Sources:

- (a) Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (USEPA, 2002).
- (b) Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) (USEPA, 2004).
- (c) Region 4 Human Health Risk Assessment Bulletins - Supplement to RAGS (USEPA, 2000).
- (d) Professional judgment.

**Table F1b**  
**Summary of the Exposure Factors and Trespasser Intake Calculations (Wading)**  
**Carolina Commercial Heat Treat**  
**Conyers, Georgia**

<b>SURFACE WATER</b>		<b>Dermal Contact:</b>																																																														
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Intake = $\frac{C_w \times IR_w \times ET \times EF \times ED}{BW \times AT}$		Intake = $\frac{C_w \times DA_{event\ sw} \times EV \times EF \times ED \times SA}{BW \times AT}$																																																														
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- (b) Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) (USEPA, 2004).
- (c) Region 4 Human Health Risk Assessment Bulletins - Supplement to RAGS (USEPA, 2000).
- (d) Professional judgment.

**Table F2**  
**Dermal Absorbed Dose per Event Equations**  
**Carolina Commercial Heat Treat**  
**Conyers, Georgia**

<b>ORGANICS:</b>	$DA_{\text{event}} (\text{mg/cm}^2\text{-event}) = \begin{cases} \text{If } t_{\text{event}} \leq t^*, \text{ then: } DA_{\text{event}} = 2 FA \times K_p \times C_w \times \sqrt{\frac{6 T_{\text{event}} \times t_{\text{event}}}{\pi}} \\ \text{If } t_{\text{event}} > t^*, \text{ then: } DA_{\text{event}} = FA \times K_p \times C_w \times \left[ \frac{t_{\text{event}}}{1+B} + 2T_{\text{event}} \left( \frac{1+3B+3B^2}{(1+B)^2} \right) \right] \end{cases}$	
<b>INORGANICS:</b>	$DA_{\text{event}} (\text{mg/cm}^2\text{-event}) = K_p \times C_w \times t_{\text{event}}$	
<b>Where:</b>		
<b>Parameter</b>	<b>Definition (units)</b>	<b>Default Value</b>
$DA_{\text{event}}$	Absorbed dose per event ( $\text{mg/cm}^2\text{-event}$ )	—
$FA$	Fraction absorbed water (dimensionless)	Chemical Specific
$K_p$	Dermal permeability coefficient of compound in water ( $\text{cm/hr}$ )	Chemical Specific
$C_w$	Chemical concentration in water ( $\text{mg/cm}^3$ )	Site Specific, non-ionized fraction
$T_{\text{event}}$	Lag time per event (hr/event)	Chemical Specific
$t_{\text{event}}$	Event duration (hr/event)	See Table F1 ( $ET_{sw}$ )
$t^*$	Time to reach steady-state (hr) = $2.4 T_{\text{event}}$	Chemical Specific
$B$	Dimensionless ratio of the permeability coefficient of a compound through the stratum corneum relative to its permeability coefficient across the viable epidermis (ve) (dimensionless)	Chemical Specific

Source: USEPA, 2004. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment. EPA/540/R/99/005. July.

**Table F3a**  
**Dermal Absorbed Dose per Event**  
**Carolina Commercial Heat Treat**  
**Conyers, Georgia**

Constituent	MW	t <sub>event</sub>	t*	FA	K <sub>p</sub>	C <sub>w</sub>	lsc	Dsc/lsc	Dsc	t <sub>event</sub>	π	b	c	B	Organics DA <sub>event</sub>
Tetrachloroethene	165.83	1	0.648	1	0.010803	0.0057	0.001	0.000618	0.000000618	0.27	3.141593	0.336659	0.36991	0.053507	9.35E-05

Note:

Equations provided on Table F2

Source: USEPA, 2004. Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment). Final. EPA/540/R/99/005.

**Table F3b**  
**Dermal Absorbed Dose per Event**  
**Carolina Commercial Heat Treat**  
**Conyers, Georgia**

Constituent	MW	t <sub>event</sub>	t*	FA	K <sub>p</sub>	C <sub>w</sub>	lsc	Dsc/lsc	Dsc	t <sub>event</sub>	π	b	c	B	Organics DA <sub>event</sub>
Tetrachloroethene	165.83	1	0.648	1	0.010803	0.0057	0.001	0.000618	0.000000618	0.27	3.141593	0.336659	0.36991	0.053507	9.35E-05

Note:

Equations provided on Table F2

Source: USEPA, 2004. Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment). Final. EPA/540/R/99/005.

**Table F4**  
**Physical Chemical Parameters**  
**Carolina Commercial Heat Treat**  
**Conyers, Georgia**

Chemical	CASRN	MW (g/mole)			K <sub>oc</sub> (L/kg)			H (unitless)			D <sub>air</sub> (m <sup>2</sup> /d)			D <sub>water</sub> (m <sup>2</sup> /d)			K <sub>p</sub> (cm/hr)			ABS <sub>d</sub> (unitless)			FA (unitless)					
		Value	Ref	Notes	Value	Ref	Notes	Value	Ref	Notes	Value	Ref	Notes	Value	Ref	Notes	Value	Ref	Notes	Value	Ref	Notes	Value	Ref	Notes	Value	Ref	Notes
Tetrachloroethene	127-18-4	1.7E+02	50.1		1.6E+02	44	111	7.5E-01	44		6.2E-01	44		7.1E-05	44		1.1E-02	44	115	0.0E+00	62		1.0E+00	62				

**Table F5**  
**Toxicity Values**  
**Carolina Commercial Heat Treat**  
**Conyers, Georgia**

Constituent	Cancer Classification Group	Oral Reference Dose (mg/kg-day) (Ref)	Inhalation Reference Concentration (mg/m <sup>3</sup> ) (Ref)	Oral Cancer Slope Factor (mg/kg-day) <sup>-1</sup> (Ref)	Unit Risk Factor (m <sup>-3</sup> /mg) (Ref)
Tetrachloroethene	C-B2	1.0E-02 1	2.7E-01 1	5.4E-01 1	5.9E-03 1

**References:**

1 USEPA. 2012. Regional Screening Levels for Chemical Contaminants at Superfund Sites

**Table F6a**  
**Summary of Hazard and Risk - Trespasser (Swimming) Exposure to Surface Water**  
**Carolina Commercial Heat Treat**  
**Conyers, Georgia**

Constituent	Maximum Detected Concentration (mg/L)	Trespasser RBC - Noncarcinogenic		Trespasser RBC - Carcinogenic
		Youth RBC (mg/L)	Adult RBC (mg/L)	
Tetrachloroethene	0.0057	5.24E+00	5.67E+00	2.5E-03

$$\text{Noncarcinogenic RBC} = \frac{1}{(\text{Target Hazard Index} \times \text{RfD})/\text{Ingestion Intake} \text{ (Table F1a)}} + \frac{1}{(\text{Target Hazard Index} \times \text{RfD})/\text{Dermal Intake} \text{ (Table F1a)}}$$

$$\text{Carcinogenic RBC} = \frac{1}{\text{Target Cancer Risk}/(\text{CSF} \times \text{Ingestion Intake} \text{ [Table F1a]})} + \frac{1}{\text{Target Cancer Risk}/(\text{CSF} \times \text{Dermal Intake} \text{ [Table F1a]})}$$

Target Cancer Risk = 1.00E-06

Target Hazard Index = 1

RfD and CSF provided on Table F5

Note: The constituents detected in the surface water are not carcinogens with a mutagenic mode of action; therefore, the age-dependent adjustment factors were not applied to the calculations.

**Table F6b**  
**Summary of Hazard and Risk - Trespasser (Wading) Exposure to Surface Water**  
**Carolina Commercial Heat Treat**  
**Conyers, Georgia**

Constituent	Maximum Detected Concentration (mg/L)	Trespasser RBC - Noncarcinogenic		Trespasser RBC - Carcinogenic
		Youth RBC (mg/L)	Adult RBC (mg/L)	
Tetrachloroethene	0.0057	2.11E+01	1.81E+01	7.8E-03

$$\text{Noncarcinogenic RBC} = \frac{1}{\frac{1}{(\text{Target Hazard Index} \times \text{RfD})/\text{Ingestion Intake (Table F1b)}} + \frac{1}{(\text{Target Hazard Index} \times \text{RfD})/\text{Dermal Intake (Table F1b)}}}$$

$$\text{Carcinogenic RBC} = \frac{1}{\frac{1}{\text{Target Cancer Risk}/(\text{CSF} \times \text{Ingestion Intake [Table F1b]})} + \frac{1}{\text{Target Cancer Risk}/(\text{CSF} \times \text{Dermal Intake [Table F1b]})}}$$

Target Cancer Risk = 1.00E-06

Target Hazard Index = 1

RfD and CSF provided on Table F5

Note: The constituents detected in the surface water are not carcinogens with a mutagenic mode of action; therefore, the age-dependent adjustment factors were not applied to the calculations.

**Appendix G**  
**Projected Schedule and Milestones**

**Appendix G- Project Schedule**  
**CCHT Conyers, GA**

ID	Task Name	Duration	Start				2014				2015		
				Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3
1	Submit VRP Application	0 days	7/8/13		◆ 7/8								
2	Approval of VRP Application	0 days	8/26/13		◆ 8/26								
3	<b>Groundwater Monitoring</b>	<b>392 days</b>	<b>9/23/13</b>										
4	Groundwater sampling event	2 days	9/23/13										
5	Groundwater sampling event	2 days	3/24/14										
6	Groundwater sampling event	2 days	9/22/14										
7	Groundwater sampling event	2 days	3/23/15										
8	Annual Status Report	0 days	8/19/14				◆ 8/19						
9	Final CSR/Site Closure	0 days	6/29/15								◆ 6/29		