

Voluntary Remediation Program  
Semiannual Progress Report  
Former Olympic Manufacturing/  
Diversey Site  
HSI Site No. 10435

---

Prepared for  
The Hillshire Brands Company  
Rathon Corp.  
December 2013



990 Hammond Drive, Suite 400  
Atlanta, Georgia 30328

Voluntary Remediation Program  
Semiannual Progress Report  
Former Olympic Manufacturing/Diversey Site

3051 Olympic Industrial Drive  
Smyrna, Cobb County, Georgia 30080  
HSI Site No. 10435

---

Prepared for  
The Hillshire Brands Company  
Rathon Corp.  
December 2013



990 Hammond Drive, Suite 400  
Atlanta, Georgia 30328

# Table of Contents

List of Figures .....	v
List of Tables .....	v
Technical Certification .....	vi
1. Introduction.....	1-1
1.1 Background .....	1-1
1.2 Report Organization .....	1-1
2. Work Performed This Period .....	2-1
2.1 Meeting with the EPD and Subsequent Follow-up.....	2-1
2.1.1 Revised Groundwater Monitoring Protocol.....	2-1
2.1.2 Installation of New Delineation Monitoring Well to the East.....	2-1
2.1.3 EPD Comments on Proposed Risk Reduction Standards.....	2-1
2.1.4 Environmental Covenants .....	2-2
2.1.5 EPD Comments on Site Groundwater Modeling .....	2-2
2.1.6 Impact on Neighboring Olympic Associates Property .....	2-2
2.2 Semiannual Sampling.....	2-2
2.2.1 Well Gauging .....	2-3
2.2.2 Sample Collection .....	2-3
2.2.3 Sample Analysis.....	2-4
2.2.4 Data Validation.....	2-4
3. Results.....	3-1
3.1 Groundwater Elevation Data .....	3-1
3.2 Groundwater Chemical Concentration Data .....	3-1
3.2.1 Organic Compounds .....	3-1
3.2.2 Chloroform.....	3-2
3.2.3 Manganese.....	3-2
3.2.4 Geochemical Parameters.....	3-3
3.2.5 Quality Assurance/Quality Control Samples .....	3-3
3.3 Efforts to Install a Monitoring Well to Delineate to the East .....	3-3
4. Status and Future Work .....	4-1
4.1 Delineation Status .....	4-1
4.1.1 On-site Horizontal Delineation .....	4-1
4.1.2 Off-site Horizontal Delineation .....	4-1
4.1.3 Vertical Delineation.....	4-1
4.2 Status Relative to Cleanup Levels .....	4-2
4.3 Planned Near-Term Actions.....	4-2
4.4 Schedule.....	4-3
5. Engineer's Services this Period .....	5-1

6. References ..... 6-1

7. Limitations..... 7-1

Appendix A: Notes Regarding September 19, 2013 Meeting with EPD .....A

Appendix B: Groundwater Sampling Field Data Sheets (*on CD Rom*) ..... B

Appendix C: Current and Historical Purging Data (*on CD Rom*) ..... C

Appendix D: Laboratory Reports and Data Validation Forms (*on CD Rom*) ..... D

Appendix E: Laboratory Stipulation Letter .....E

## List of Figures

---

- Figure 2-1. Site Plan
- Figure 2-2. Potential New Delineation Well Locations
- Figure 3-1. Well Location and Top of Casing Elevation Map
- Figure 3-2. Shallow Aquifer Potentiometric Map, October 29, 2013
- Figure 3-3. Bedrock Aquifer Potentiometric Map, October 29, 2013
- Figure 3-4. Groundwater Detections in the Shallow Aquifer, October 29, 2013
- Figure 3-5. Groundwater Detections in the Bedrock Aquifer, October 29, 2013
- Figure 3-6. Groundwater Detections in CCWS Wells, October 2013
- Figure 3-7. Groundwater Detections above the Cleanup Level – Shallow Aquifer, October 2013
- Figure 3-8. Groundwater Detections above the Cleanup Level – Bedrock Aquifer, October 2013
- Figure 3-9. Groundwater Detections above the Cleanup Level – CCWS Wells, October 2013
- Figure 3-10. View of S&S Realty LP Site, Facing Southwest
- Figure 3-11. View of Proposed New Well Location (marked with white pad), from South Atlanta Road
- Figure 4-1. Location of Proposed Monitoring Well MW-21

## List of Tables

---

- Table 2-1. Semiannual Groundwater Sampling Protocol, October 2013
- Table 3-1a. Historical Water Level Data
- Table 3-1b. Historical Groundwater Elevation Data
- Table 3-2. Analytical Detections for October 2013 Groundwater Samples
- Table 3-3. Historical Groundwater Sampling Detections for 1998 - 2013
- Table 3-4. Recent Groundwater Geochemical Results
- Table 5-1. Brown and Caldwell Billing and Services June 21, 2013 to December 12, 2013

# Technical Certification

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

Patricia C. Reifenger  
Patricia C. Reifenger, P.E.

December 26, 2013  
(date)

Georgia Registration Number: 20676

Seal:



## Section 1

# Introduction

This Semiannual Progress Report for the Former Olympic Manufacturing/Diversey site (Site) was prepared by Brown and Caldwell (BC) on behalf of The Hillshire Brands Company (Hillshire, formerly Sara Lee Corporation) and Rathon Corp. (Rathon) for submittal to the Land Protection Branch of the Georgia Environmental Protection Division (EPD). The Site is enrolled in EPD's Voluntary Remediation Program (VRP) and is listed on EPD's Hazardous Site Inventory as site no. 10435. This report describes work performed related to the Site between June and December 2013.

## 1.1 Background

The Site was accepted into the VRP on May 17, 2010. The Site history, description, regulatory history, and previous environmental work are described in detail in the Compliance Status Report (CSR) and subsequent addenda submitted in compliance with requirements of the former Hazardous Site Response Act Program (now part of EPD's Response and Remediation Program). Since 2007, Hillshire and Rathon have submitted semiannual reports documenting the work performed during the reporting period and the results of investigative work, remedial measures, and semiannual sampling. Semiannual progress reports will continue to be submitted under the VRP.

## 1.2 Report Organization

This progress report presents the work conducted from June to December 2013, and as such provides the results of the semiannual groundwater sampling performed in October 2013, conclusions from a productive meeting with EPD and subsequent follow-up, and efforts to obtain a permit to install a new monitoring well in a Cobb County road easement.

The report is organized into six sections. The present section references the project background and provides an outline of the report. The work performed during this period is described in Section 2.0. Section 3.0 presents the results of the work conducted this period. The current compliance status of the Site and work planned for the near future is presented in Section 4.0. Engineers' services this period are summarized in Section 5.0. References used in preparing this report are provided in Section 6.0, and limitations associated with the use of the report are noted in Section 7.0.

## Section 2

# Work Performed This Period

Work at the Site since the last submittal to the EPD, which was the June 2013 Semiannual Progress Report, has consisted of:

- Meeting with EPD on September 19, 2013 and subsequent follow-up
- Groundwater sampling in October 2013
- Efforts to obtain a permit to install a new monitoring well in a Cobb County road easement

These activities are discussed in the following sections.

## 2.1 Meeting with the EPD and Subsequent Follow-up

A meeting was held on September 19, 2013 with EPD, Hillshire (via telephone), Rathon, Harvey Sheldon, and BC to confirm EPD concurrence with Hillshire and Rathon's approach to close the Site, status of compliance with delineation and cleanup levels, and planned future work. EPD's notes from this meeting and subsequent related email correspondence between BC and EPD are provided in Appendix A. Specific topics discussed are noted below.

### 2.1.1 Revised Groundwater Monitoring Protocol

In the September 2013 meeting Hillshire and Rathon proposed discontinuing monitoring in certain wells. In an October 8, 2013 email, BC proposed discontinuing sampling in the 12 wells in which no groundwater concentrations have exceeded either a detection level or a cleanup level in the last two events (MW-1R, MW-3R, MW-5, MW-7R, MW-10, MW-13aR, MW-13b, MW-14, MW-14b, MW-17, MW-18, MW-19). EPD approved this change in an email dated October 16, 2013, and reiterated the approval in their November 25, 2013 letter. In the October 18, 2013 email and November 25, 2013 letter, EPD confirmed that future resampling of these wells to certify them to RRSs will not be necessary.

### 2.1.2 Installation of New Delineation Monitoring Well to the East

In the September 19, 2013 meeting the EPD also requested installation of a new well east of the Site to further delineate groundwater impact to the east. Alternative locations discussed in the meeting and in subsequent communications included sampling existing monitoring wells OW-77a or OW-77b that were installed as part of the Cobb County wastewater tunnel project, or installing a new well on the S&S Realty property, between the S&S property line and South Atlanta Road, or on Elizabeth Lane across South Atlanta Road from the S&S property (Figure 2-1). Sampling OW-77a or OW-77b was eliminated from consideration as EPD indicated that the OW-77 wells would be too far to the east to adequately define the width of the plume. BC then conducted desktop research and a field reconnaissance of alternative well locations to evaluate their suitability as a location for the well to delineate the eastern boundary of the groundwater VOC plume. The results of these efforts are described in Section 3.3 of this report.

### 2.1.3 EPD Comments on Proposed Risk Reduction Standards

In the December 2010 progress report for this Site, Hillshire and Rathon requested EPD approval of the cleanup and delineation levels presented in Table 2-3 of that report. Subsequent email communication with the EPD indicated that these levels could be considered final, and those levels have been used to assess compliance since that time.

In their November 25, 2013 letter, however, EPD confirmed this approval subject to seven exceptions. The changes to the groundwater standards have been incorporated into this report.

#### **2.1.4 Environmental Covenants**

Hillshire, Rathon, and the EPD also discussed finalizing the draft environmental covenant (EC) so that Hillshire and Rathon could proceed with negotiating ECs with neighboring property owners. As requested in the meeting on September 19, 2013, Mr. Sheldon provided the EPD with a copy of the red-line draft EC that BC submitted to EPD in December 2011. The EPD offered to provide a copy of a sample EC that has already been approved for use on another HSI site; Hillshire/Rathon has not yet received this and will follow-up with the EPD accordingly.

#### **2.1.5 EPD Comments on Site Groundwater Modeling**

EPD review of the groundwater modeling conducted for the Site, which was presented in the *Groundwater Modeling Technical Memorandum* (Appendix F of the June 2013 semiannual report), was not complete at the time of the September meeting, and thus was not discussed in the meeting.

EPD provided comments on the modeling in their November 25, 2013 letter. As work to address the EPD's comments is still ongoing, Hillshire and Rathon will respond to EPD's comments on the model under separate cover.

#### **2.1.6 Impact on Neighboring Olympic Associates Property**

In the September meeting and November letter, the EPD stated that they believe that the subject Site is the likely source of impact in the wells on the Olympic Associates (OA) property located south of the Site (Figure 2-1). Since the impact in monitoring wells MW-9a and MW-9b was identified, Hillshire and Rathon have consistently observed that the OA property is upgradient of the Former Olympic Manufacturing Site and thus concluded that the impact on that property did not originate on the subject Site. In the September meeting EPD suggested that as OA has not responded to multiple requests by Hillshire and Rathon to allow sampling on their property, an alternative to using additional investigative work to differentiate impact on the two properties would be for Hillshire and Rathon to bring the OA property into the Former Olympic Manufacturing VRP Site as a qualifying property.

In the recent meeting, EPD also indicated that their conclusion that the subject Site is the likely source of impact on the OA property is at least partially based on the premise that monitoring well MW-6 is screened in bedrock, and in that case, water levels in MW-6 should be compared to those in monitoring well MW-9b (rather than monitoring well MW-9a). Comparing water levels in MW-6 to those in MW-9b would indicate several events where water levels in monitoring well MW-6 were higher than in monitoring well MW-9b.

Following the meeting, Hillshire and Rathon reviewed the boring log for monitoring well MW-6 again and we note that this well is screened across the overburden/bedrock interface. Thus, monitoring well MW-6 reflects water levels in the shallow aquifer and is correctly compared to water levels in shallow monitoring well MW-9a. Other than three events when a water line break was known to have occurred along Olympic Industrial Court, water levels in MW-9a have always been higher than those in MW-6, which would preclude groundwater flow from the subject Site to the OA property.

## **2.2 Semiannual Sampling**

The semiannual groundwater monitoring was conducted October 28 to October 30, 2013 as described below. Figure 2-2 provides a site plan for reference.

### 2.2.1 Well Gauging

The depth to groundwater in all 40 monitoring, delineation, and injection wells at and near the Site was measured to determine the potentiometric surface. The measurements were taken on October 29, 2013, using a 100-foot Heron Dipper-T water level meter, prior to any purging or other monitoring activities and the measured depths to water were recorded. The down-hole portion of the water level meter was decontaminated with Liquinox and rinsed with distilled water between wells.

### 2.2.2 Sample Collection

Groundwater samples were collected from 10 monitoring wells according to the protocol shown in Table 2-1, which reflects the updated monitoring protocol approved by the EPD on October 16, 2013. The wells sampled included both on-site (MW-2, MW-4a, MW-4b, MW-6, MW-8, and MW-11) and off-site wells (MW-12, MW-20, OW-72, and OW-74A). As in many prior sampling events, monitoring wells MW-15 and MW-16 were dry.

The monitoring wells to be sampled were purged prior to sample collection using the procedures specified in the letters from the EPD dated April 17, 2007 and October 16, 2007 and sampled in accordance with USEPA procedures (USEPA March 2013). The wells were purged and sampled using low flow/low stress and low flow/low volume (micro-purging) techniques to minimize entrainment of solid particles. A decontaminated low-flow pump (SS-Geosub 12-Volt DC Stainless Steel low-flow sampling pump made by Geotech Environmental Equipment, Inc.), and/or a bladder pump (Sample Pro Portable Pump made by QED Environmental Systems) were used to purge and sample all wells. Both pumps used are low flow, stainless steel, 2-inch submersible pumps. The pump was placed midway in the screened interval during purging and sampling, and new polyethylene tubing was used at each well. The groundwater samples were collected using polyethylene tubing as approved by the EPD in their October 23, 2008 letter. Detailed information regarding the type of equipment and technique used to purge and sample each well is provided on the Groundwater Sampling Field Data Sheets that are provided in Appendix B.

In keeping with Hillshire's and Rathon's agreement with the EPD reached during a meeting on August 16, 2007, the wells were purged prior to sampling until the turbidity was less than 10 NTU, or as close to that as could be achieved within a reasonable time. If the turbidity remained above 10 NTU, purging was considered complete after three to five well volumes had been removed. The pH, temperature, specific conductivity, oxidation-reduction ("redox") potential, dissolved oxygen, and turbidity of all samples were measured in each well approximately every 5 minutes while purging, and the results were recorded on the data sheets in Appendix B. This timing allowed an adequate volume of water to be purged between measurements to assess field parameter trends. Water level measurements were also recorded approximately every 5 minutes to ensure minimal drawdown. An effort was made to ensure that the rate of groundwater withdrawal did not exceed the rate of recharge in the wells. Wells that went dry during purging due to low initial water levels were allowed to recharge prior to sample collection. Current and historical purging data are summarized in Appendix C. The groundwater samples were collected directly from the pump discharge into laboratory-prepared sample bottles, sealed, placed on ice, and delivered to a certified laboratory for analysis.

Quality assurance/quality control (QA/QC) samples were also collected as follows:

- One equipment blank for each full day of sampling (three total)
- One trip blank for each day samples were submitted to the laboratory (two samples)
- One duplicate sample (from monitoring well MW-8).

### 2.2.3 Sample Analysis

The samples were hand delivered to Analytical Environmental Services, Inc. laboratory in Atlanta, Georgia for analysis. Copies of the completed chain-of-custody forms are included in Appendix D with the laboratory reports. A letter stipulating that this laboratory is approved per the Georgia Rules for Commercial Environmental Laboratories is provided in Appendix E.

The samples were analyzed for the parameters shown in Table 2-1 as outlined below:

- Volatile organic compounds (VOCs, using USEPA Method 8260B) – All monitoring well, equipment blank, duplicate, and trip blank samples
- Geochemical parameters (total organic carbon, nitrate, sulfate, ferrous iron, and methane using methods shown on the laboratory reports) – MW-4a, MW-8, MW-12 and MW-6
- Total Manganese (USEPA Method 6010C) – MW-8 (a monitoring well in the vicinity of the previous ISCO injections).

### 2.2.4 Data Validation

Data validation was performed on the analytical results to verify that the data generated by the laboratory are of acceptable quality to allow appropriate decisions to be made. Data validation included a quality control review of the field and laboratory-generated data following USEPA guidelines (USEPA 2008) in order to answer questions such as:

- Were field procedures, including sample collection, handling and storage properly followed?
- Do the reported data include all requested analytical results for all samples collected?
- Were the correct analytical methods used and reported?
- Are there any anomalous results?
- Were results for QA/QC samples acceptable?

Validation included a review of field notes, sample holding times, blank contamination, spike recoveries, and duplicate precision. Following this review, data was qualified appropriately in the tables if problems were found. Copies of the data validation forms are included in Appendix D with each laboratory report.

## Section 3

# Results

This section presents and discusses the results of the work completed in the second half of 2013 described in Section 2. Semiannual groundwater sampling yielded groundwater level measurements, field water quality data, and laboratory chemical concentration data that are discussed below, along with efforts to locate and permit a final delineation well east of the Site.

### 3.1 Groundwater Elevation Data

The measured depths to water and the surveyed elevations of the monitoring wells were used to calculate the groundwater elevations. Current and historical groundwater level and elevation data are presented in Tables 3-1a and Table 3-1b, respectively. Ground surface and top of casing elevations are shown on Figure 3-1. Potentiometric maps of the shallow and bedrock aquifer groundwater surface as measured in October 2013 are presented on Figures 3-2 and 3-3, respectively.

Groundwater elevations in the wells screened in the shallow aquifer in October 2013 were generally higher than levels measured in April 2013 (Table 3-1). Lower water levels are typically observed at this Site in the fall, particularly in the shallow wells; however, due to the increased precipitation during the summer months of 2013, higher water levels were observed in this event. The water levels in October were an average of 2.0 feet higher than in the April 2013 event, and an average of 5.7 feet higher than in the October 2012 event. The trend was less distinct in the upper bedrock wells, with water levels being an average of 1.2 feet higher in October than in than in April 2013.

Consistent with past events, the October 2013 water level data indicate that the overall potentiometric surface in the shallow and upper bedrock aquifers generally slopes from southwest to northeast (Figures 3-2 and 3-3). As in previous events, the off-site wells to the southwest, MW-9a and MW-9b, are still upgradient of the subject Site.

### 3.2 Groundwater Chemical Concentration Data

The analytical results for the groundwater samples collected in October 2013 are summarized in Table 3-2. Current and historical concentrations are presented in Table 3-3, and Table 3-4 presents recent geochemical data. The tables include the date the sample was collected, the reported concentration, the method detection limit where a specific constituent was not detected, and applicable delineation and cleanup standards. Figures 3-4 through 3-6 show all the recent detections graphically, and Figures 3-7 through 3-9 show only the detections that exceed the VRP cleanup level. The results of the analyses are discussed below. The field data collected during the groundwater sampling is provided in Appendices B and C. Copies of the analytical reports are provided in Appendix D. The laboratory stipulation letter is provided in Appendix E.

#### 3.2.1 Organic Compounds

Observations regarding the organic compounds detected in October 2013 are noted below.

- Concentrations at the Site are generally similar to those in previous monitoring events with a few exceptions noted in this section.
- In the groundwater in the north parking lot:

- Total VOC concentrations of parameters exceeding their respective detection limits in the sample from well MW-4a were similar to those in IW-4 from April 2013 (8,110 microgram per liter [ $\mu\text{g/L}$ ] and 7,995  $\mu\text{g/L}$ , respectively). IW-4 was sampled in April 2013 as a surrogate for well MW-4a as MW-4a was dry in that event.
- Total VOC concentrations of parameters exceeding their respective detection limits in the October 2013 sample from monitoring well MW-8 (2,509  $\mu\text{g/L}$ ) were significantly lower than in April 2013 (13,311  $\mu\text{g/L}$ ), largely due to a large decline in the cis-1,2-dichloroethene (cis-1,2-DCE) concentration.
- The relative concentrations of specific compounds (tetrachloroethene [PCE], trichloroethene [TCE], cis-1,2-DCE, and vinyl chloride [VC]) in the north parking lot area are similar to the previous event.
- Downgradient of the north parking lot in monitoring MW-12, isopropylbenzene exceeded the delineation level, and VC exceeded the delineation and cleanup levels; however, the concentrations measured were slightly lower than in previous events, and similar to those in April 2013. The concentration of cis-1,2-DCE decreased from 110  $\mu\text{g/L}$  to 49  $\mu\text{g/L}$  between April and October 2013.
- Further downgradient in the sample from monitoring well OW-72, concentrations of three VOCs exceeded a cleanup level. All VOCs are in compliance with the cleanup levels further downgradient in OW-74A, however. Concentrations in both wells were higher than in the previous event, possibly due to residual VOC mass in the vadose zone desorbing into the groundwater as water levels rose, but were within the range of past fluctuations.
- No VOCs were detected in the sample from the new, most downgradient well, MW-20.

Elsewhere on the Former Olympic Manufacturing property, two wells are not in compliance with the VRP delineation or cleanup levels. Specific observations are noted below:

- Concentrations in the sample from monitoring well MW-2 meet the cleanup levels but slightly exceed the delineation levels (8.6  $\mu\text{g/L}$  vs. 7  $\mu\text{g/L}$  for 1,1-dichloroethene, and 13  $\mu\text{g/L}$  vs. 5  $\mu\text{g/L}$  for TCE). VOC concentrations in this well have fluctuated around the delineation levels in past monitoring events.
- In the sample from monitoring well MW-11, PCE and TCE slightly exceeded the VRP delineation levels (5.7  $\mu\text{g/L}$  and 10  $\mu\text{g/L}$  vs. 5.0  $\mu\text{g/L}$  for both constituents), and PCE slightly exceeded the cleanup level (5.7  $\mu\text{g/L}$  vs. 5.0  $\mu\text{g/L}$ ). Additionally, chemicals detected at MW-11 may be associated with rail activities rather than on-site activities as MW-11 is located along the former rail line. All other VOCs detected were below the VRP delineation and cleanup levels.
- No chemicals were measured above a VRP delineation or cleanup level in samples from monitoring wells MW-4b (the deepest well) or MW-6 (near the southern property boundary).

As shown on Figures 3-7 through 3-9, groundwater concentrations meet the VRP cleanup levels in all wells except those along the eastern side of the Site (MW-4a, MW-8, MW-12, and OW-72), and MW-11 along the southeastern side of the Site.

### 3.2.2 Chloroform

Chloroform was not detected in any monitoring wells at the Site in this event.

### 3.2.3 Manganese

The manganese concentration in the sample from monitoring well MW-8 remained elevated in this event (11,100  $\mu\text{g/L}$ ) as a result of the previous potassium permanganate injection for groundwater VOC remediation. As manganese is not a Site constituent of concern (COC) and is not regulated under HSRA, remediation of this constituent is not planned.

### 3.2.4 Geochemical Parameters

Recent and historical geochemical data are shown in Table 3-4. Notable observations are discussed below:

- Methane was highest in the sample from MW-12 (0.17 milligram per liter [mg/L]), and lower in the samples from MW-4a, MW-6, and MW-8 (0.077 mg/L, 0.130 mg/L, and 0.021 mg/L, respectively). Methane is produced under strongly anaerobic (reducing) conditions, the same conditions that allow the reductive dechlorination to occur. The presence of methane may indicate anaerobic conditions in these wells that would facilitate attenuation of the chlorinated VOCs.
- Nitrate was not detected in the samples from wells MW-4a, MW-6, MW-8, or MW-12, which likely indicates that nitrate is being consumed by microorganisms responsible for anaerobic degradation processes. The presence of these microorganisms could facilitate degradation of the Site COCs.
- Sulfate levels were higher in the samples from MW-4a (110 mg/L) and MW-8 (65 mg/L), and lower in the samples from MW-6 and MW-12 (2.7 mg/L and 10 mg/L, respectively). This appears to indicate that sulfate reducing conditions are more prominent in MW-6 and MW-12.
- Ferrous iron ( $\text{Fe}^{2+}$ ) was detected in samples from MW-6 and MW-12 at a concentration of 1.06 mg/L and 26.4 mg/L, respectively. Ferrous iron was not detected in samples from MW-4a and MW-8, which indicates that conditions in the sump area are still somewhat oxidizing, likely as a result of the previous ISCO work.
- Oxidation-reduction potentials (ORP) in samples from MW-4a, MW-6, and MW-12 were -129.9, -0.36, and -137.6 millivolts (mv), respectively. These values indicate relatively reducing conditions, which are conducive to reductive dechlorination of chlorinated VOCs. The ORP in MW-8 was positive (45.0 mv).

### 3.2.5 Quality Assurance/Quality Control Samples

No chemicals were detected in any of the two trip blanks or four equipment blanks.

The analytical results for the two duplicate samples were similar to those from the original samples. Thus, the QA/QC samples did not indicate impact to the Site results from field or laboratory methods.

## 3.3 Efforts to Install a Monitoring Well to Delineate to the East

As noted above, BC conducted desktop research and a field reconnaissance of alternative well locations to evaluate their suitability as a location for a well to delineate the eastern boundary of the groundwater VOC plume. Alternative locations reviewed were 1) on the S&S Realty property, 2) between the S&S property line and South Atlanta Road, or 3) on Elizabeth Lane across South Atlanta Road from the S&S property.

As shown on Figure 3-10, access to the northern end of the S&S property is limited by the presence of a residence and the southern portion of the property slopes downward and is currently in the process of being actively cleared. Thus, this property is not a feasible location for the new well. Property in the Cobb County Department of Transportation (CCDOT) right of way in front of the S&S property (Figure 3-11) would be accessible to a drill rig, however, and thus this location was selected for the new well (to be designated MW-21). The potential location on Elizabeth Lane was not considered further.

An application for a utility permit was filed with the CCDOT on November 11, 2013. Utility permit no. 1113-1287 was issued by the CCDOT for the well, and the necessary bond, insurance certificate, and certification were recently obtained. It is expected that the permit will be finalized in January 2014.

## Section 4

# Status and Future Work

Hillshire and Rathon are on track to meet the milestones required by the EPD in their May 17, 2010 letter approving the application to the VRP for the Former Olympic Manufacturing Site. Specifically:

- Horizontal groundwater delineation on-site and off-site
- Vertical groundwater delineation
- Remediation, where necessary.

As noted in Section 2, EPD recently confirmed previous email approval of the cleanup and delineation levels presented in Table 2-3 of the December 2010 progress report for this Site, subject to seven exceptions. These changes to the groundwater standards have been incorporated into this report and are used to assess compliance.

The current status of the Site relative to VRP delineation and cleanup criteria, near-term steps toward meeting project goals, and the project schedule are discussed below.

### 4.1 Delineation Status

Delineation of COCs in soil has already been achieved and discussed in previous reports. COC delineation in groundwater is discussed below.

#### 4.1.1 On-site Horizontal Delineation

On-site horizontal groundwater delineation has already been completed.

#### 4.1.2 Off-site Horizontal Delineation

As noted in the June 2013 report, Hillshire and Rathon had believed that as no VOCs were detected in the most downgradient well (MW-20), groundwater delineation was complete. In our September 19, 2013 meeting, however, EPD requested an additional delineation well to the east in order to better define the width of the plume. As noted in Section 2, alternative locations for this well have been evaluated and a utility permit to install the well in the CCDOT right of way is expected in early January 2014.

The concentrations of Site COCs in the monitoring well on-site at the southern end of the Former Olympic Manufacturing property (MW-6) meet the delineation standards and the off-site wells to the southwest (MW-9a and MW-9b) are located hydrogeologically upgradient of the Site. Thus, no additional delineation to the south is warranted. Hillshire and Rathon have taken EPD's suggestions on the OA property issues under advisement, with further communication anticipated in early 2014.

#### 4.1.3 Vertical Delineation

Vertical delineation has been completed. No VOCs were detected in the groundwater sample from the deepest well at the Site (monitoring well MW-4b).

## 4.2 Status Relative to Cleanup Levels

Soil at the Site is in compliance with the soil cleanup levels. As indicated in EPD's November 25, 2013 letter, sampling was recently conducted by the new owner of the property, Airgas Refrigerants, Inc. (Airgas) in the area where PCE concentrations had previously exceeded the risk reduction standards (RRSs). The sample results indicated a PCE concentration below the RRSs. Thus, no additional soil sampling or remediation is planned.

The status of the Site groundwater relative to the proposed VRP cleanup levels is presented in Table 3-2, where the orange cells indicate concentrations above the VRP cleanup levels. Figures 3-7 through 3-9 illustrate where the VOC cleanup levels are met (everywhere except where noted). The status is summarized below.

**To the Northeast.** Concentrations in the wells in and downgradient of the former source area (wells MW-4a, MW-8, MW-12, and OW-72) currently exceed the VRP cleanup levels for one to five chemicals. Further downgradient in monitoring wells OW-74A and MW-20, all COCs are in compliance with the cleanup levels.

Where concentrations in monitoring wells do not meet the numeric groundwater cleanup levels, groundwater modeling and institutional controls will be used to demonstrate compliance with the VRP cleanup requirements. As noted above, Hillshire and Rathon will address EPD's November 25, 2013 comments on the numerical groundwater model developed for the Site separately; however, our review indicates that the comments are unlikely to change the conclusion from the modeling that the downgradient plume concentrations will remain stable or contract both in mass and extent and will not reach the point of exposure (POE).

Environmental covenants negating future water well installation or withdrawal will also be used to prevent exposure to Site contaminants in areas where the cleanup levels are exceeded. Based on current groundwater concentrations, an environmental covenant may be required on the following properties (identified on Figure 4-1):

- The subject property currently owned by Airgas
- The adjoining property to the east and northeast owned by Wesley Properties (Wesley)
- The parcels owned by Cobb County along South Atlanta Road and Elizabeth Lane.

Hillshire and Rathon notified Wesley in December 2011 that the proposed remedial strategy for the Site involved obtaining an environmental covenant from them that would enroll their property in the VRP as a "Qualifying Property" under the Site's application and permanently restrict and prohibit the drilling of a water well on their property. No response to this letter has been received from Wesley.

**To the East.** Concentrations in the wells along the east side of the Site are either below or just above the VRP cleanup levels. Concentrations in well MW-2 are below the VRP cleanup criteria, and the concentration of PCE in well MW-11 in this event only slightly exceeded the cleanup level (5.7 µg/L compared to 5.0 µg/L) and was below the level in the last six events. Thus, no remediation is warranted in these areas.

**To the South, West, and North.** Concentrations in well MW-6 at the south end of the property were below the cleanup levels in this event, and concentrations in wells along the west and north sides of the Site were shown to be below the VRP cleanup criteria in previous sampling events. Thus, no remediation is necessary in these areas.

## 4.3 Planned Near-Term Actions

Tasks to comply with the VRP delineation and cleanup requirements are outlined above, and specific actions to meet these objectives are summarized below:

- Obtain a copy of a sample EC that has been modified for an HSI site, and use it to finalize the environmental covenants for submittal to the off-site property owners identified in Section 4.2.
- Submit the ECs to each property owner and follow-up as needed to have the ECs successfully executed.
- Obtain utility permit from CCDOT, and install the new monitoring well between South Atlanta Road and the S&S LP property to demonstrate delineation to the east.
- Respond to EPD's comments on the groundwater modeling Technical Memorandum presented in EPD's November 25, 2013 letter.
- Consider alternatives and further consult and report to EPD respecting course of action on OA property issues.

## 4.4 Schedule

A milestone schedule to complete this project is presented below. This schedule is based on the expectation that compliance with the VRP cleanup levels can be demonstrated with the modeling and institutional controls described herein. In addition to the activities outlined below, semiannual progress reports will also be submitted by June 30 and December 31 of each year until submittal of the final Compliance Status Report.

In the December 2011 semiannual report, Hillshire and Rathon requested that the VRP schedule milestones be adjusted to be consistent with the schedule for submittal of the semiannual progress reports approved in EPD's September 3, 2010 letter. The schedule below reflects this adjustment.

<b>Estimated Schedule</b>	
<b>Action</b>	<b>Expected Date</b>
On-site Horizontal Delineation	Completed
Vertical Delineation	Completed
Submittal of Remediation Plan and Cost Estimate	Completed
Install Monitoring Well to the East	January 2014
Respond to EPD Comments on Groundwater Modeling	January 2014
Pursue Environmental Covenants with Airgas, Wesley, and Cobb County	Early 2014
Finalize Environmental Covenants	Mid-2014
Semiannual Sampling	April, October 2014
Submittal of Final Compliance Status Report	May 2015

## Section 5

# Engineer's Services this Period

This section presents a summary of the Engineer's (BC's) work on this project since the last submittal to the EPD. Table 5-1 summarizes the hours charged and the services BC provided between June 22 and December 12, 2013.

## Section 6

# References

U.S. Environmental Protection Agency (USEPA), Science and Ecosystem Support Division (SESD); Athens, Georgia.  
*Groundwater Sampling Operating Procedure*. March 6, 2013.

USEPA, 2008. *National Functional Guidelines for Superfund Organic Methods Data Review*. USEPA Contract Laboratory Program. Office of Superfund Remediation and Technology Innovation (OSRTI). USEPA-540-R-08-01.

## Section 7

# Limitations

This document was prepared solely for The Hillshire Brands Company and Rathon Corp. in accordance with professional standards at the time the services were performed and in accordance with the contract between Sara Lee Corporation and BC dated April 26, 2002 and subsequent amendments. This document is governed by the specific scope of work authorized by Hillshire and Rathon; it is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. Except for data and engineering prepared by BC, we have relied on information provided by Hillshire, Rathon, and other sources and, unless otherwise expressly indicated, have made no independent confirmation of the validity, completeness, or accuracy of such information.

FILE PATH: R:\Projects\Sara\_Lee\Mapdocs\Fig\_3\_tax\_Plat.mxd



**LEGEND**

- ⊕ Existing Monitoring Wells
- ⊕ Potential Locations for MW-21

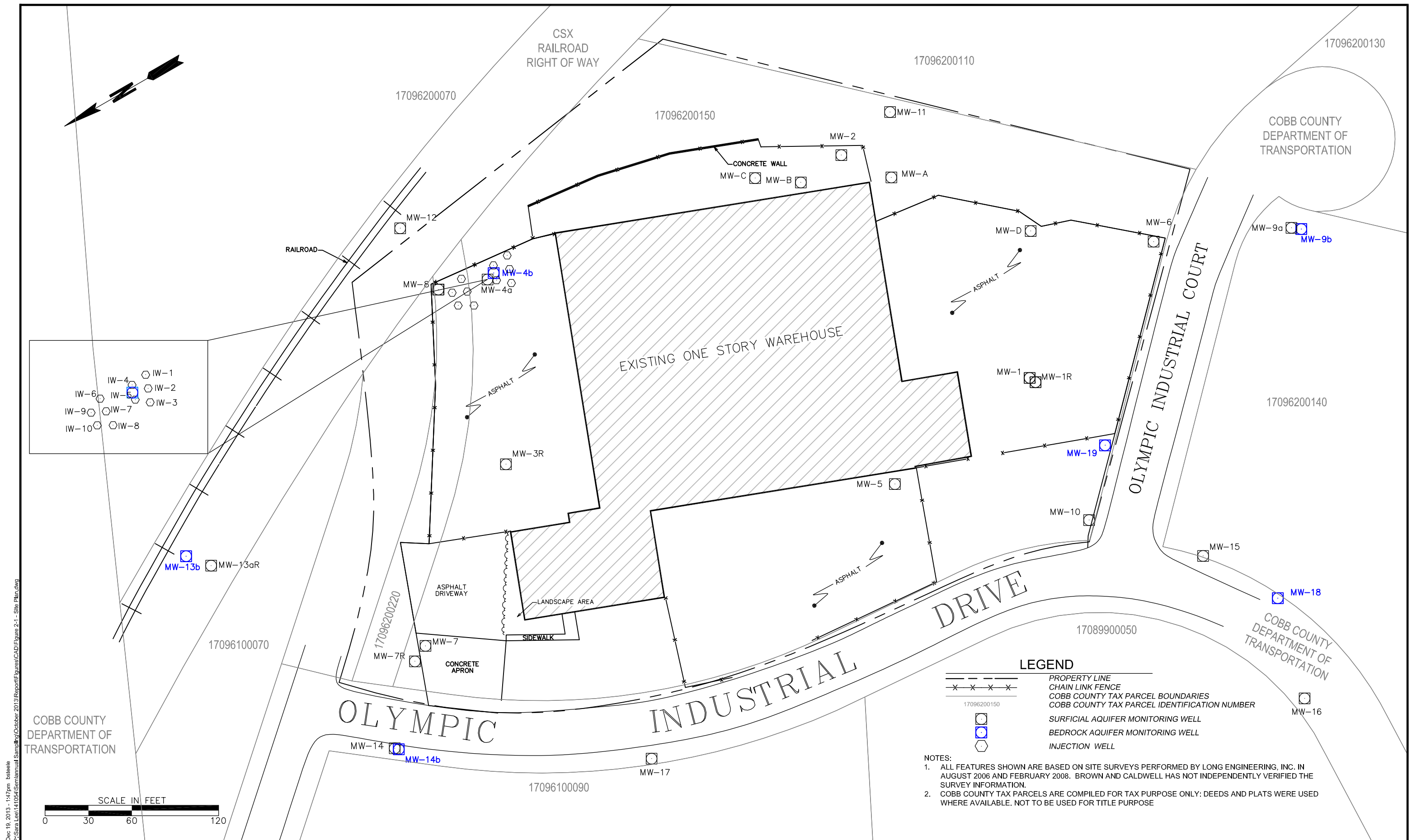
17096200150    Number provided is the Cobb County Tax Parcel Identification Number (PIN)

Former Olympic Manufacturing Site  
3051 Olympic Industrial Drive  
Smyrna, Georgia

SAVED DATE:	12/23/2013
SCALE:	AS SHOWN
DRAWN BY:	BAS
CHECKED BY:	PCR
PROJECT #:	141054

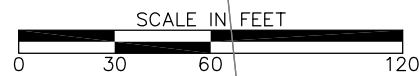
**Brown AND Caldwell**

Figure 2-1  
Potential New Delineation Well Locations

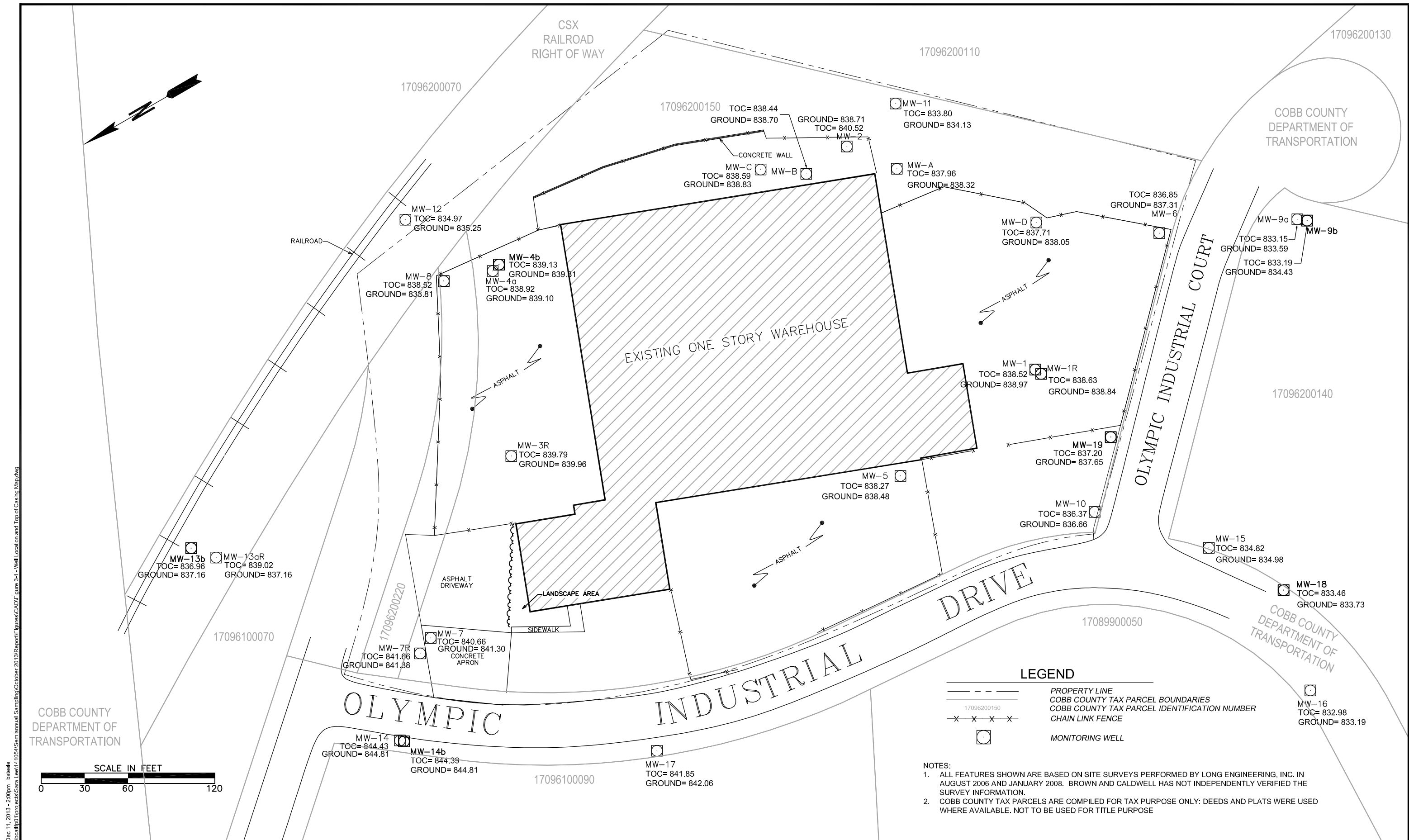


Dec 19, 2013 - 1:47pm bteiele  
 P:\Sara Lee\11054\Seminar\Summary\October 2013\Report\Figures\CAD\Figure 2-1 - Site Plan.dwg

COBB COUNTY  
DEPARTMENT OF  
TRANSPORTATION



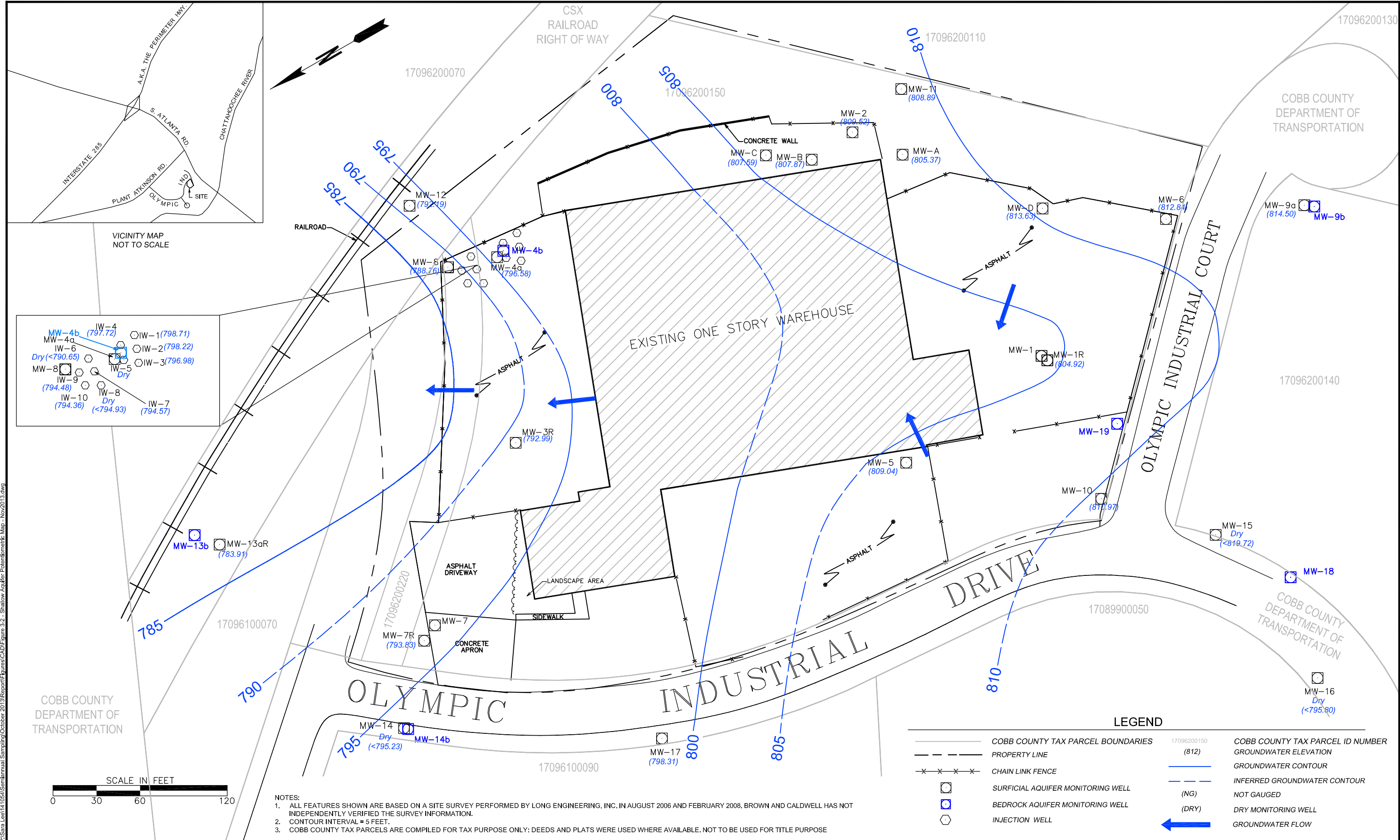
**FIGURE 2-2**  
 Site Plan  
 Former Olympic Manufacturing Site, Smyrna, Georgia



Dec 11, 2013 - 2:00pm - btelele  
 U:\cal\10\projects\Sara Lee\14\054\Semianual Sampling\October 2013\Report\Figures\CAD\Figure 3-1 - Well Location and Top of Casing Map.dwg



**FIGURE 3-1**  
 Well Location and Top of Casing Elevation Map  
 Former Olympic Manufacturing Site, Smyrna, Georgia



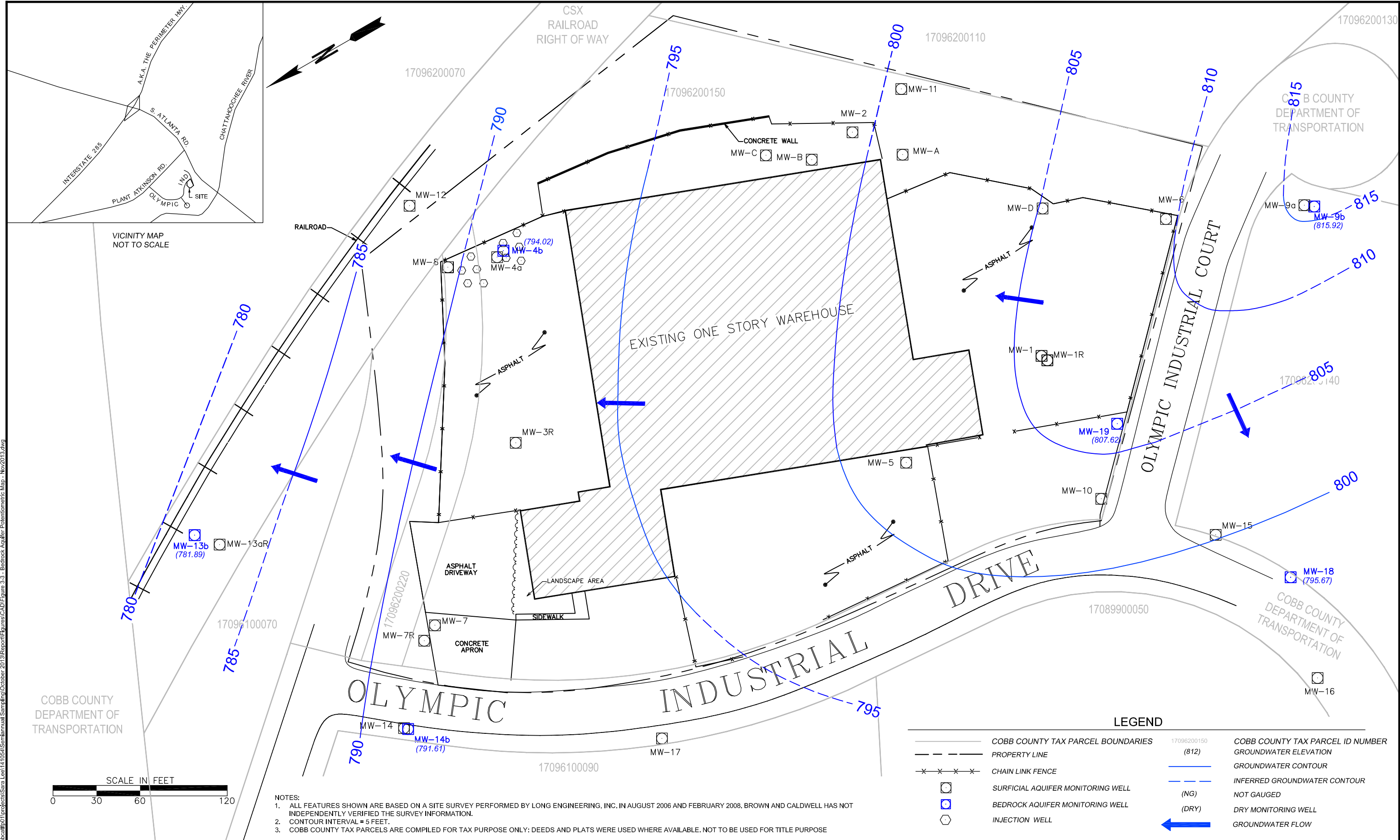
NOTES:  
 1. ALL FEATURES SHOWN ARE BASED ON A SITE SURVEY PERFORMED BY LONG ENGINEERING, INC. IN AUGUST 2006 AND FEBRUARY 2008. BROWN AND CALDWELL HAS NOT INDEPENDENTLY VERIFIED THE SURVEY INFORMATION.  
 2. CONTOUR INTERVAL = 5 FEET.  
 3. COBB COUNTY TAX PARCELS ARE COMPILED FOR TAX PURPOSE ONLY; DEEDS AND PLATS WERE USED WHERE AVAILABLE. NOT TO BE USED FOR TITLE PURPOSE

LEGEND	
	COBB COUNTY TAX PARCEL BOUNDARIES
	PROPERTY LINE
	CHAIN LINK FENCE
	SURFICIAL AQUIFER MONITORING WELL
	BEDROCK AQUIFER MONITORING WELL
	INJECTION WELL
	COBB COUNTY TAX PARCEL ID NUMBER
	GROUNDWATER ELEVATION
	GROUNDWATER CONTOUR
	INFERRED GROUNDWATER CONTOUR
	NOT GAUGED
	DRY MONITORING WELL
	GROUNDWATER FLOW

**FIGURE 3-2**  
 Shallow Aquifer Potentiometric Map  
 October 29, 2013  
 Former Olympic Manufacturing Site, Smyrna, Georgia



Dec 23, 2013 - 9:48am - bwisele  
 P:\Sara Lee\141054\Seminar\Sampling\October 2013\Report\Figures\CAD\Fig 3-2 - Shallow Aquifer Potentiometric Map - Nov2013.dwg



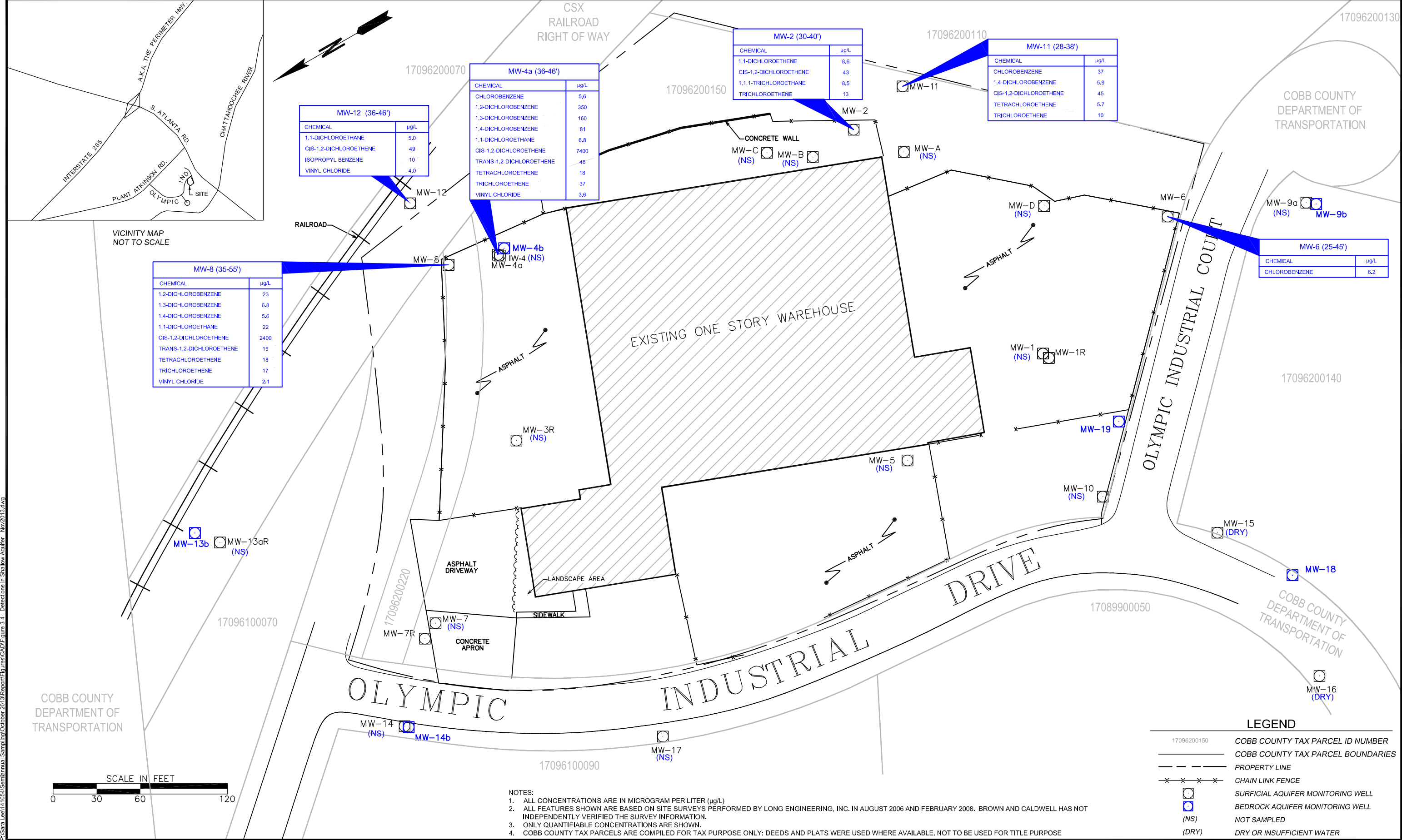
NOTES:  
 1. ALL FEATURES SHOWN ARE BASED ON A SITE SURVEY PERFORMED BY LONG ENGINEERING, INC. IN AUGUST 2006 AND FEBRUARY 2008. BROWN AND CALDWELL HAS NOT INDEPENDENTLY VERIFIED THE SURVEY INFORMATION.  
 2. CONTOUR INTERVAL = 5 FEET.  
 3. COBB COUNTY TAX PARCELS ARE COMPILED FOR TAX PURPOSE ONLY; DEEDS AND PLATS WERE USED WHERE AVAILABLE. NOT TO BE USED FOR TITLE PURPOSE

LEGEND	
	COBB COUNTY TAX PARCEL BOUNDARIES
	PROPERTY LINE
	CHAIN LINK FENCE
	SURFICIAL AQUIFER MONITORING WELL
	BEDROCK AQUIFER MONITORING WELL
	INJECTION WELL
	GROUNDWATER ELEVATION (812)
	GROUNDWATER CONTOUR
	INFERRED GROUNDWATER CONTOUR (NG)
	NOT GAUGED (DRY)
	DRY MONITORING WELL
	GROUNDWATER FLOW

**FIGURE 3-3**  
 Bedrock Aquifer Potentiometric Map  
 October 29, 2013  
 Former Olympic Manufacturing Site, Smyrna, Georgia



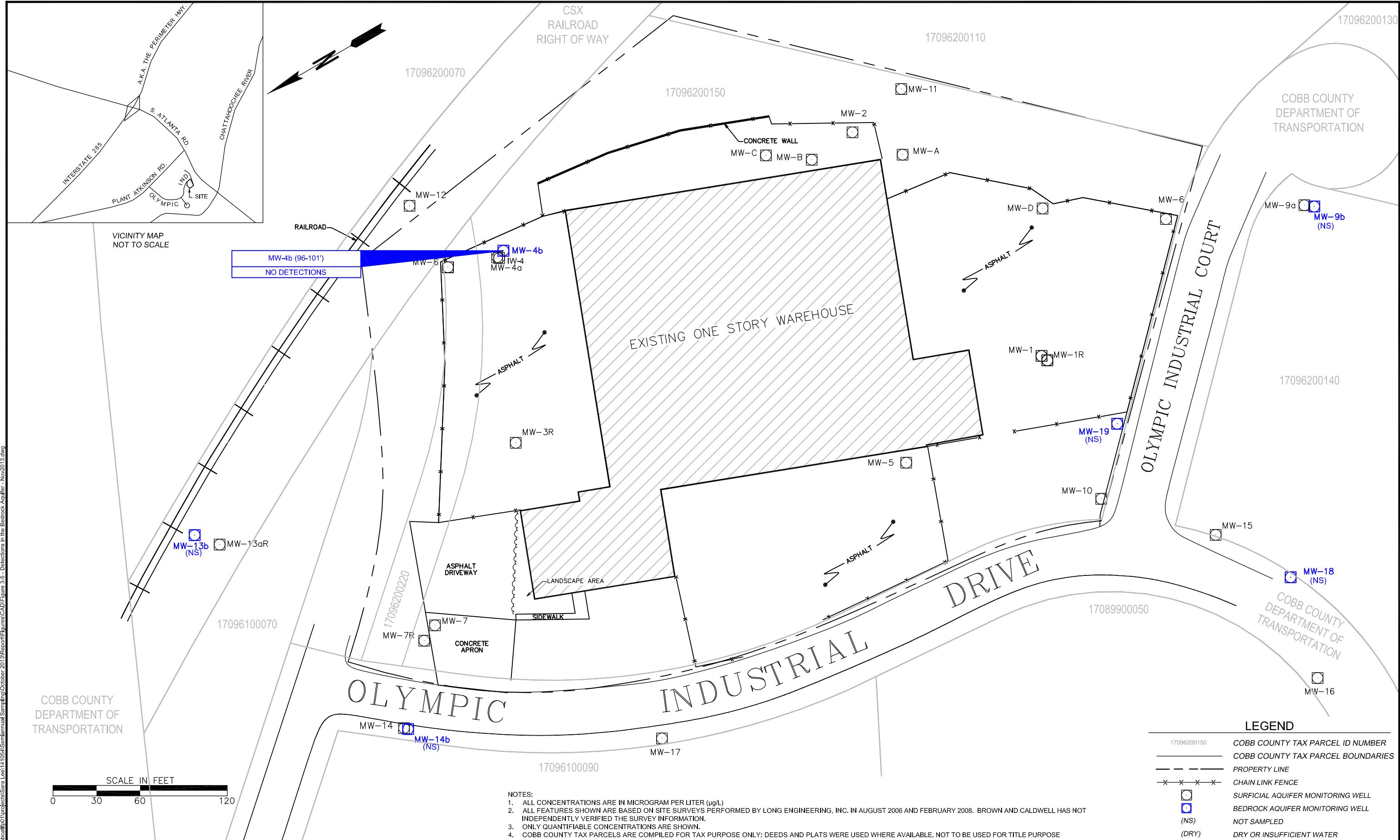
Dec 11, 2013 - 1:34pm baw/csl  
 I:\cadd\projects\Sara Lee\14.054\Semianual Sampling\October 2013\Report\Figures\CAD\Figure 3-3 - Bedrock Aquifer Potentiometric Map - Nov2013.dwg



Dec 12, 2013 - 11:17am bwisele  
 P:\Sara Lee\141054\Semianual Sampling\October 2013\Report\Figures\CAD\Figure 3-4 - Detections in Shallow Aquifer - Nov 2013.dwg



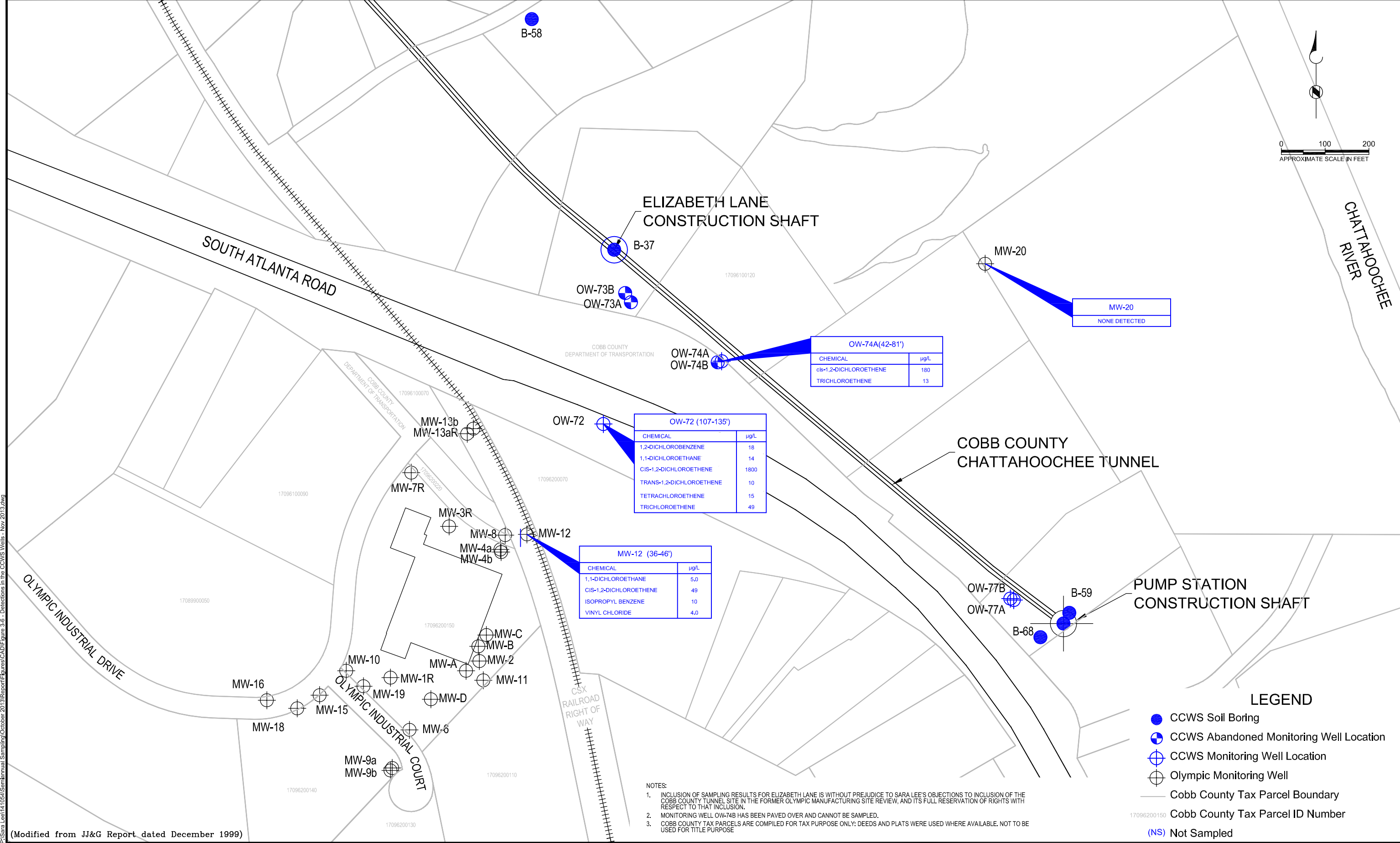
**FIGURE 3-4**  
*Groundwater Detections in the Shallow Aquifer*  
 October 2013  
 Former Olympic Manufacturing Site, Smyrna, Georgia



Dec 11, 2013 - 2:47pm bawale  
 I:\a\10\Projects\Sara Lee\14.05a\Semianual Sampling\October 2013\Report\Figures\CAD\Figure 3-5 - Detections in the Bedrock Aquifer - Nov2013.dwg



**FIGURE 3-5**  
 Groundwater Detections in the Bedrock Aquifer  
 October 2013  
 Former Olympic Manufacturing Site, Smyrna, Georgia

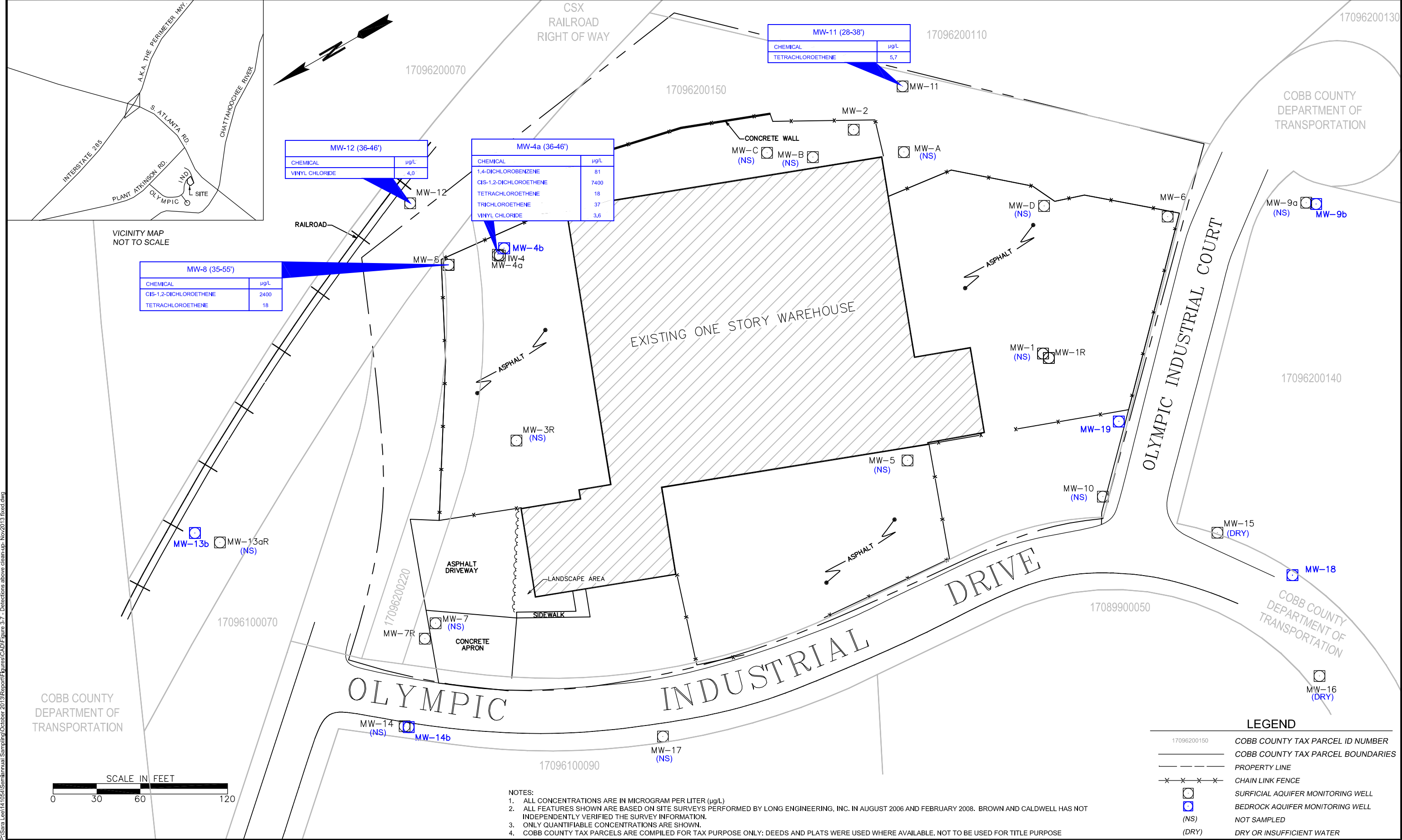


Dec 12, 2013 - 11:24am bwisele  
 P:\Sara Lee\14.054\Semianual Sampling\October 2013\Report\Figures\CAD\Figure 3-6 - Detections in the CCWS Wells - Nov 2013.dwg

(Modified from JJ&G Report dated December 1999)

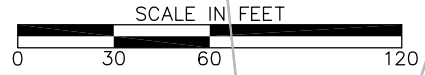


**FIGURE 3-6**  
*Groundwater Detections in CCWS Wells,*  
*October 2013*  
*Former Olympic Manufacturing Site, Smyrna, Georgia*



Dec 19, 2013 - 1:46pm - bawale  
 P:\Sara Lee\141054\Site\Annual Sampling\October 2013\Report\Figures\CAD\Figure 3-7 - Detections above clean-up- Nov 2013 fixed.dwg

COBB COUNTY  
DEPARTMENT OF  
TRANSPORTATION

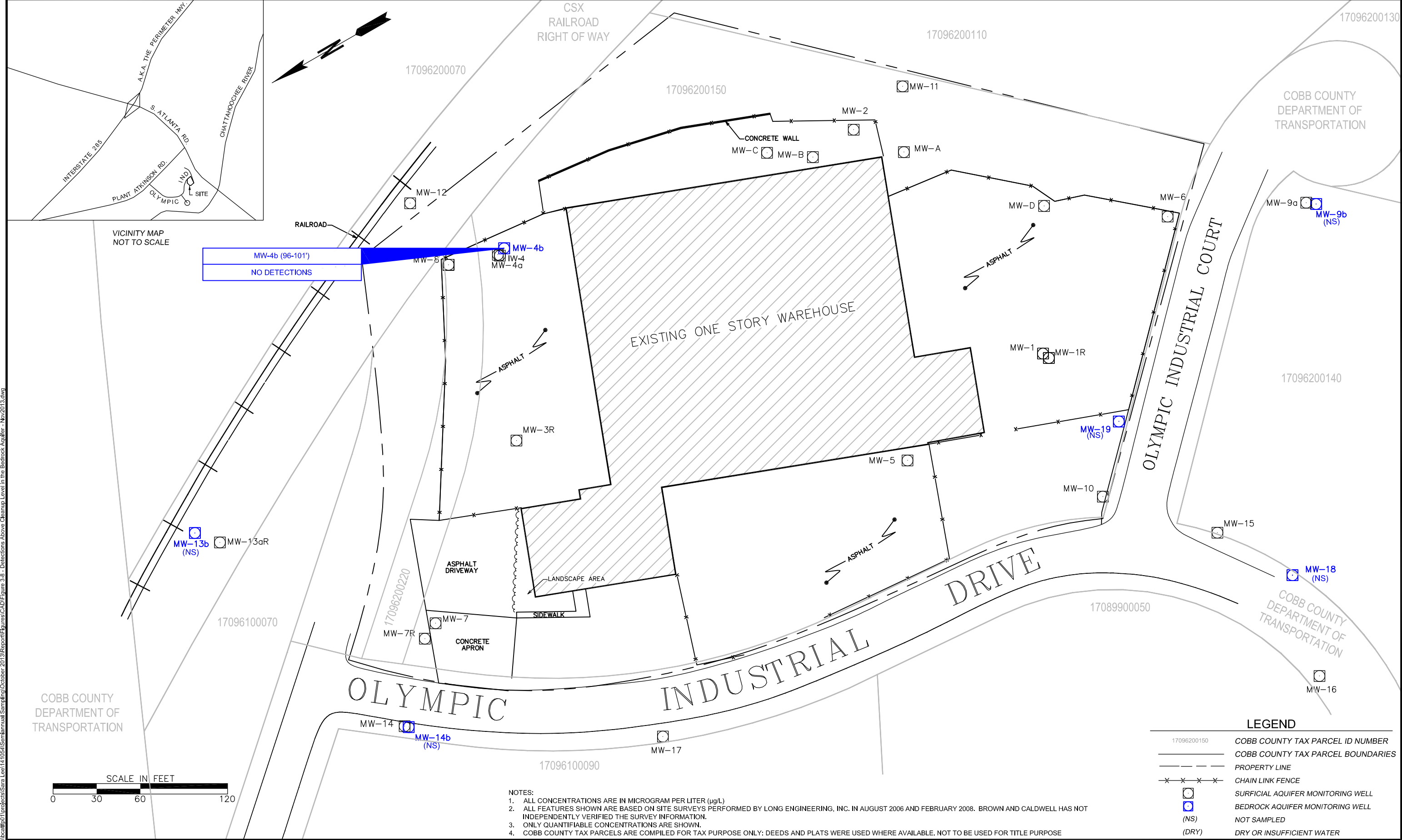


- NOTES:**
1. ALL CONCENTRATIONS ARE IN MICROGRAM PER LITER (µg/L)
  2. ALL FEATURES SHOWN ARE BASED ON SITE SURVEYS PERFORMED BY LONG ENGINEERING, INC. IN AUGUST 2006 AND FEBRUARY 2008. BROWN AND CALDWELL HAS NOT INDEPENDENTLY VERIFIED THE SURVEY INFORMATION.
  3. ONLY QUANTIFIABLE CONCENTRATIONS ARE SHOWN.
  4. COBB COUNTY TAX PARCELS ARE COMPILED FOR TAX PURPOSE ONLY; DEEDS AND PLATS WERE USED WHERE AVAILABLE. NOT TO BE USED FOR TITLE PURPOSE

- LEGEND**
- 17096200150 COBB COUNTY TAX PARCEL ID NUMBER
  - COBB COUNTY TAX PARCEL BOUNDARIES
  - PROPERTY LINE
  - CHAIN LINK FENCE
  - SURFICIAL AQUIFER MONITORING WELL
  - BEDROCK AQUIFER MONITORING WELL
  - (NS) NOT SAMPLED
  - (DRY) DRY OR INSUFFICIENT WATER

**FIGURE 3-7**  
 Groundwater Detections Above the Cleanup Level  
 Shallow Aquifer, October 2013  
 Former Olympic Manufacturing Site, Smyrna, Georgia

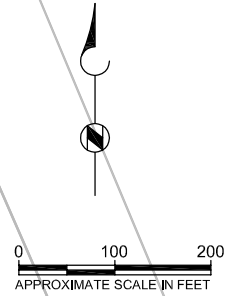
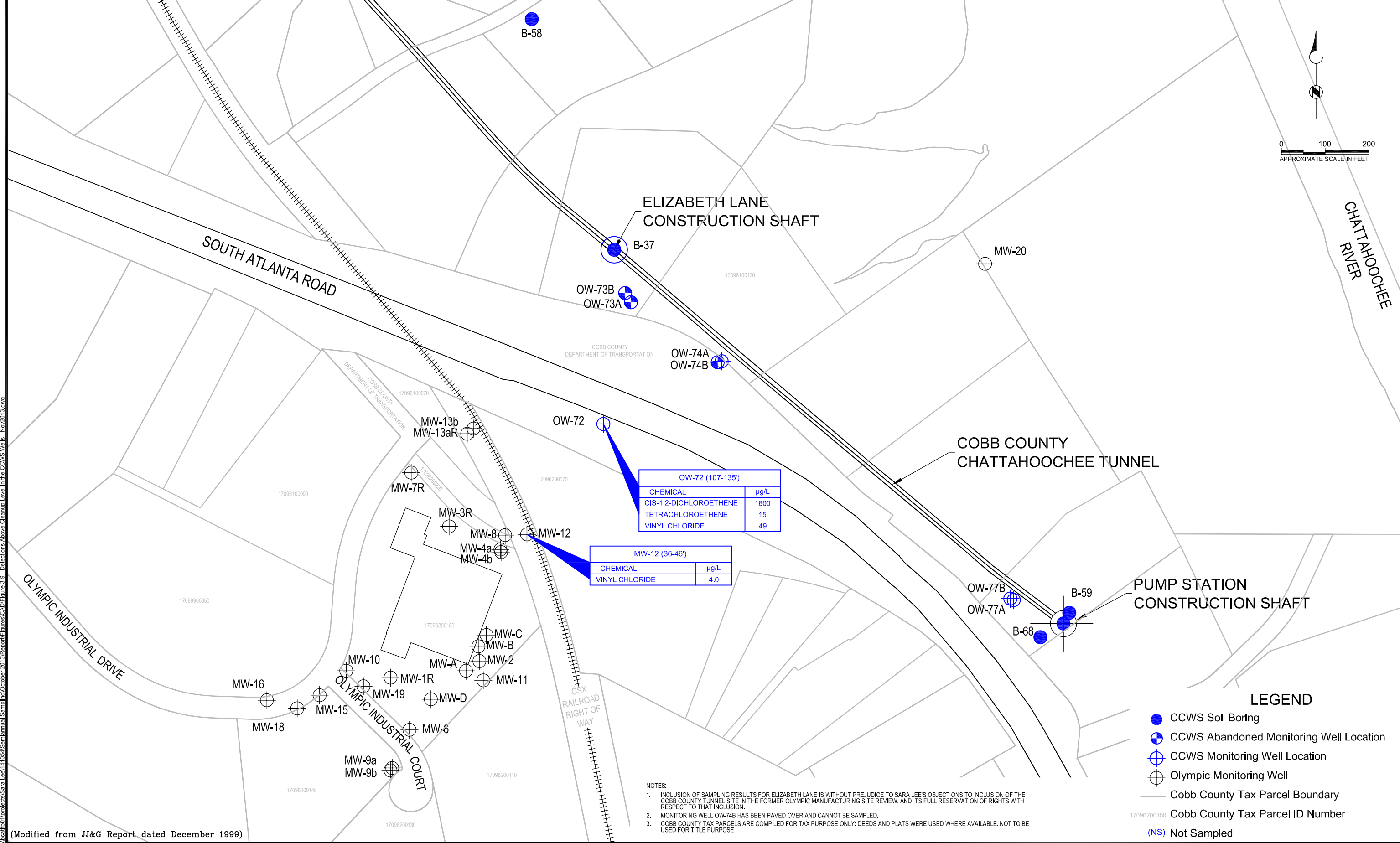




Dec 11, 2013 - 2:49pm bawale  
\\bawale\projects\Sara Lee\14054\Semianual Sampling\October 2013\Report\Figures\CAD\Figure 3-8 - Detections Above Cleanup Level in the Bedrock Aquifer - Nov2013.dwg



**FIGURE 3-8**  
Groundwater Detections Above the Cleanup Level  
Bedrock Aquifer, October 2013  
Former Olympic Manufacturing Site, Smyrna, Georgia



**LEGEND**

- CCWS Soil Boring
- ⊕ CCWS Abandoned Monitoring Well Location
- ⊕ CCWS Monitoring Well Location
- ⊕ Olympic Monitoring Well
- Cobb County Tax Parcel Boundary
- 17096200150 Cobb County Tax Parcel ID Number
- (NS) Not Sampled

- NOTES:**
- INCLUSION OF SAMPLING RESULTS FOR ELIZABETH LANE IS WITHOUT PREJUDICE TO SARA LEE'S OBJECTIONS TO INCLUSION OF THE COBB COUNTY TUNNEL SITE IN THE FORMER OLYMPIC MANUFACTURING SITE REVIEW, AND ITS FULL RESERVATION OF RIGHTS WITH RESPECT TO THAT INCLUSION.
  - MONITORING WELL OW-74B HAS BEEN PAVED OVER AND CANNOT BE SAMPLED.
  - COBB COUNTY TAX PARCELS ARE COMPILED FOR TAX PURPOSE ONLY; DEEDS AND PLATS WERE USED WHERE AVAILABLE. NOT TO BE USED FOR TITLE PURPOSE.

Dec 11, 2013 - 6:57pm bawele  
 \\caldwell\projects\Sara Lee\14054\Semianual Sampling\October 2013\Report\Figures\CAD\Figure 3-9 - Detections Above Cleanup Level in the CCWS Wells - Nov2013.dwg

(Modified from JJ&G Report dated December 1999)



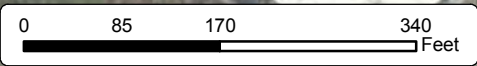
**FIGURE 3-9**  
*Groundwater Detections above the Cleanup Level*  
*CCWS Wells, October 2013*  
*Former Olympic Manufacturing Site, Smyrna, Georgia*



Figure 3-10. View of S&S Realty LP Site, Facing Southwest



Figure 3-11. View of Proposed New Well Location (marked with white pad), from South Atlanta Road



Former Olympic Manufacturing Site  
 3051 Olympic Industrial Drive  
 Smyrna, Georgia

**Brown AND Caldwell**

SAVED DATE:	12/23/2013
SCALE:	AS SHOWN
DRAWN BY:	RPJ
CHECKED BY:	TR
PROJECT #:	141054

**Figure 4-1**  
 Location of Proposed Monitoring Well MW-21

Smyrna, Georgia

**Table 2-1. Semiannual Groundwater Sampling Protocol, October 2013  
Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well <sup>a</sup>	Sampled?	Analytes	Notes
MW-1R		----	Water level only
MW-2	✓	VOCs	
MW-3R		----	Water level only
MW-4a	✓	VOCs, geochemical parameters <sup>b</sup>	
MW-4b	✓	VOCs	
MW-5		----	Water level only
MW-6	✓	VOCs, geochemical parameters	
MW-7R		----	Water level only
MW-8	✓	VOCs, Mn, geochemical parameters	
MW-9a		----	Water level only
MW-9b		----	Water level only
MW-10		----	Water level only
MW-11	✓	VOCs	
MW-12	✓	VOCs, geochemical parameters	
MW-13aR		----	Water level only
MW-13b		----	Water level only
MW-14		----	Water level only
MW-14b		----	Water level only
MW-15		----	Not sampled as well was dry
MW-16		----	Not sampled as well was dry
MW-17		----	Water level only
MW-18		----	Water level only
MW-19		----	Water level only
MW-20	✓	VOCs	
MW-A		----	Water level only
MW-B		----	Water level only
MW-C		----	Water level only
MW-D		----	Water level only
OW-72	✓	VOCs	
OW-74A	✓	VOCs	
IW-1 to IW-3		----	Water level only
IW-4		----	Water level only
IW-5 to IW-10		----	Water level only

<sup>a</sup> MW-1, MW-3, MW-4, MW-7, and MW-13a damaged by others; thus wells MW-1R, MW-3R, MW-4a, MW-4b, MW-7R, MW-13aR were installed. CCWS monitoring well OW-74B was paved over after December 2004.

<sup>b</sup> Geochemical parameters are total organic carbon (TOC), nitrate, sulfate, ferrous iron, and methane.

Table 3-1a. Historical Water Level Data  
Former Olympic Manufacturing Site, Smyrna, Georgia

Well	Top of Casing Elev., ft	Depth to Water from Top of Casing, feet																													
		Dec-98	Sep-99	Feb-00	Apr-01	Dec-01	May-02	Sep-03	Dec-03	Feb-04	Jun-04	May-05	Jul-06	Apr-07	May-07	Oct-07	Jan-08	Apr-08	Oct-08	Apr-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11	Nov-11	Apr-12	Oct-12	Apr-13	Oct-13	
MW-1	838.52	31.74	31.14	31.63	30.6	33.89	33.69	32.76 <sup>d</sup>	33.92	ng <sup>b</sup>	35.35	ng	34.85	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng		
MW-1R	838.63	ni <sup>c</sup>	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	34.62	34.46	ng	36.74	36.17	34.61	37.12	35.19	34.02	32.83	34.37	33.78	35.86	ng	35.44	36.70	34.04	33.71	
MW-2	840.52	32.18	30.18	31.75	26.31	37.48	36.81	29.02 <sup>d</sup>	31.99	ng	33.98	ng	33.00	34.15	ng	38.42	39.26	33.53	38.81	36.14	33.39	27.83	34.81	32.49	38.35	ng	37.37	42.07	35.23	31.00	
MW-3	839.98	37.20	38.00	39.60	37.62	41.86	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng		
MW-3R	839.79	ni	ni	ni	ni	ni	ni	ni	ni	ni	45.85	ng	44.84	47.10	ng	49.46	51.02	50.75	51.55	52.19	49.61	42.12	44.05	47.57	49.31	ng	51.65	53.67	52.90	46.80	
MW-4	841.45	37.05	37.15	38.36	35.58	Dry	Dry	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng		
MW-4a	838.92	ni	ni	ni	ni	ni	ni	ni	ni	ni	43.86	40.27	42.15	43.13	44.45	Dry	Dry	45.88	Dry	44.59	39.40	42.60	43.63	Dry	ng	Dry	Dry	42.34			
MW-4b	839.13	ni	ni	ni	ni	ni	ni	ni	ni	ni	46.51	ng	44.60	46.27	ng	49.08	50.37	49.78	50.72	51.22	50.98	42.14	43.66	46.71	48.59	ng	50.53	52.56	51.00	45.11	
MW-5	838.27	28.2	27.8	27.95	27.78	27.31	26.89	29.13	ng	ng	30.56	ng	29.82	30.11	ng	32.02	32.11	30.22	32.32	29.89	28.82	27.87	29.48	28.21	30.04	ng	29.13	30.95	28.38	29.23	
MW-6 <sup>d</sup>	836.85	26.59	24.38	24.29	21.24	28.12	26.62	16.45 <sup>d</sup>	21.67	23.75	25.99	ng	25.33	26.69	ng	18.36 <sup>d</sup>	19.7 <sup>d</sup>	23.42	26.82	24.96	23.61	23.38	27.55	24.79	28.58	ng	27.81	30.20	23.42	24.01	
MW-7	840.66	39.06	39.06	41.01	39.15	42.37	43.35	42.54	ng	ng	46.21	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng		
MW-7R	841.66	ni	ni	ni	ni	ni	ni	ni	ni	ni	44.95	ng	45.65	47.07	ng	48.44	49.38	49.26	49.49	49.19	47.36	43.92	44.42	46.30	48.00	ng	49.50	50.62	49.72	47.83	
MW-8	838.52	35.68	36.04	37.71	35.08	45.94	47.79	40.90	ng	ng	45.25	41.38	43.27	44.90	45.76	48.56	48.79	47.81	48.39	49.35	46.59	40.33	43.67	45.58	48.32	48.93	49.55	52.38	49.21	49.76	
MW-9a <sup>d</sup>	833.15	ni	ni	ni	ni	21.34	19.41	18.18 <sup>d</sup>	17.25	18.17	20.31	ng	19.77	20.29	ng	17.14 <sup>d</sup>	17.15 <sup>d</sup>	18.46	21.12	18.36	18.46	19.29	21.55	19.32	23.48	ng	21.34	23.90	18.70	18.65	
MW-9b <sup>e</sup>	833.19	ni	ni	ni	ni	22.55	20.38	20.69 <sup>d</sup>	31.01	31.81	34.94	ng	34.26	25.84	ng	22.05 <sup>d</sup>	24.88 <sup>d</sup>	23.35	23.21	19.08	18.80	19.53	22.19	19.92	23.80	ng	22.20	24.49	19.10	17.27	
MW-10	836.37	ni	ni	ni	ni	24.27	24.14	24.37	24.51	ng	23.69	ng	25.10	24.39	ng	25.22	24.60	24.92	26.58	24.92	25.53	24.93	24.68	24.30	24.77	ng	23.82	26.22	24.66	25.40	
MW-11	833.80	ni	ni	ni	ni	29.8	27.74	20.07 <sup>d</sup>	23.37	ng	26.15	ng	26.10	26.32	ng	32.15 <sup>d</sup>	31.30 <sup>d</sup>	24.15	33.28	25.46	26.65	19.63	29.65	24.19	33.67	ng	30.58	37.52	25.50	24.91	
MW-12	834.97	ni	ni	ni	ni	43.87	45.46	37.31	ng	ng	41.48	ng	39.45	41.44	43.53	44.53	44.53	42.91	45.92	43.92	41.38	36.07	40.27	41.07	44.81	ng	45.36	Dry	43.58	42.78	
MW-13a	837.44	ni	ni	ni	ni	42.87	44.67	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	
MW-13aR	839.02	ni	ni	ni	ni	ni	ni	ni	ni	ni	46.88	ng	45.56	47.95	ng	51.52	52.18	51.55	52.50	53.12	50.48	43.58	45.19	48.58	50.51	ng	52.72	54.88	54.05	55.11	
MW-13b <sup>e</sup>	836.96	ni	ni	ni	ni	48.21	48.89	43.79	ng	48.04	48.72	ng	47.42	49.04	ng	51.80	52.85	51.81	53.29	52.79	50.62	44.85	46.97	49.17	51.47	ng	52.85	55.17	53.31	55.07	
MW-14	844.43	ni	ni	ni	ni	ni	43.21	45.17	ng	ng	47.6	ng	48.36	49.72	ng	Dry	Dry	Dry	Dry	Dry	Dry	46.70	47.13	48.96	50.03	ng	Dry	Dry	Dry	Dry	
MW-14b	844.39	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	54.45	53.21	53.10	52.72	50.72	47.41	47.73	49.48	51.18	ng	55.09	56.69	56.17	52.78
MW-15	834.82	ni	ni	ni	ni	ni	Dry	Dry	ng	ng	Dry	ng	Dry	15.02	ng	Dry	Dry	Dry	Dry	Dry	Dry	15.04	15.03	15.04	15.05	ng	Dry	Dry	Dry	Dry	
MW-16	832.98	ni	ni	ni	ni	ni	29.42	Dry	ng	ng	Dry	ng	Dry	Dry	ng	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ng	Dry	Dry	Dry	Dry	
MW-17	841.85	ni	ni	ni	ni	ni	ni	38.06	ng	ng	40.51	ng	42.25	43.89	ng	45.62	46.76	44.49	46.81	41.73	37.94	38.14	40.78	39.93	44.43	ng	44.92	46.87	43.16	43.54	
MW-18	833.46	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	51.21	34.83	ng	34.53	33.98	33.30	33.40	48.30	29.01	29.22	31.75	33.73	31.14	ng	32.10	35.78	37.60	37.79	
MW-19	837.20	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	29.68	29.25	31.11	29.45	29.24	28.92	29.49	29.06	30.09	ng	29.53	30.26	29.20	29.58
MW-20	800.83	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	33.06	33.11
MW-A	837.96	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	29.3 <sup>f</sup>	ng	ng	ng	35.52	28.98	35.28	31.60	30.51	23.85	31.10	28.78	34.74	ng	33.75	38.01	31.60	32.59	
MW-B	838.44	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	36.57	ng	ng	ng	38.62	32.87	38.15	36.56	33.38	27.41	33.60	32.72	37.39	ng	37.12	41.02	35.60	30.57	
MW-C	838.59	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	32.50	ng	ng	ng	38.88	33.2	38.35	36.91	33.62	28.04	34.00	33.12	37.64	ng	37.43	41.24	35.88	31.00	
MW-D	837.71	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	27.44	27.42	31.34	30.62	28.65	25.18	29.09	28.51	31.29	ng	31.21	33.88	29.12	24.08	
OW-72	861.00	ng	ng	ng	ng	ng	ng	ng	ng	ng	77.04	ng	78.60	76.65	ng	79.48	80.10	78.58	80.79	76.73	77.53	73.10	75.30	76.29	79.19	ng	79.79	82.56	79.73	75.58	
OW-74A	800.00	ng	ng	ng	ng	ng	ng	ng	ng	ng	18.39	ng	17.42	17.99	ng	20.39	20.42	19.15	21.65	19.50	18.38	15.33	17.53	17.74	20.82	ng	20.61	23.70	20.12	17.66	
OW-74B	799.00	ng	ng	ng	ng	ng	ng	ng	ng	ng	20.55	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	
IW-1	839.26	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	40.65	41.56	ng	41.56	43.80	42.14	45.50	42.61	41.10	37.99	41.62	41.24	44.93	ng	44.27	47.36	41.97	40.55	
IW-2	839.52	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	41.45	42.31	ng	42.31	45.00	43.35	46.67	42.56	ng	42.24	42.11	46.48	ng	46.46	46.72	43.56	41.30		
IW-3	839.36	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	42.53	43.89	ng	43.89	47.00	46.12	47.25	47.31	44.27	39.85	42.73	42.85	46.10	ng	47.33	46.93	46.47	42.38	
IW-4	838.80	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	41.17	42.19	ng	42.19	44.17	43.18	46.40	43.90	41.92	38.24	42.05	41.80	45.80	46.25	45.36	47.23	43.03	41.08	
IW-5	839.17	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	42.50	43.58	ng	43.58	48.20	47.12	48.12	48.12	ng	39.82	43.06	44.26	47.70	ng	47.98	48.10	48.15	Dry	
IW-6	838.36	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	43.00	43.61	ng	43.61	48.00	46.88	Dry	Dry	ng	39.74	43.31	45.00	47.49	ng	Dry	Dry	Dry	Dry	
IW-7	838.40	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	43.12	44.52	ng	44.52	48.50	47.31	47.31	48.13	ng	40.14	43.46	47.37	47.64	ng	48.25	48.21	48.29	43.83	
IW-8	838.49	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	43.03	43.39	ng	43.39	42.70	Dry	37.50	42.70	ng	40.25	43.48	Dry	Dry	ng	Dry	Dry	Dry	Dry	
IW-9	838.51	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	43.28	44.91	ng	44.91	48.50	47.65	48.55	48.50	ng	40.24	43.66	45.61	48.15	ng	48.48	48.43	48.61	44.03	
IW-10	838.46	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	43.28	44.69	ng	44.69	48.50	47.68	48.49	44.74	ng	40.39	43.72	45.54	47.85	ng	Dry	Dry	48.18	44.10	

<sup>a</sup> Well casing elevations based upon August 2, 2006 survey by Long Engineering, Inc. for all monitoring wells, except OW-72A, OW-74A, and OW-74B (obtained from Jordon, Jones, and Goulding, June 2004), and MW-14b, MW-

Table 3-1b. Historical Groundwater Elevation Data  
Former Olympic Manufacturing Site, Smyrna, Georgia

Well	Top of Casing Elev., ft	Groundwater Elevation, feet																														
		Dec-98	Sep-99	Feb-00	Apr-01	Dec-01	May-02	Sep-03	Dec-03	Feb-04	Jun-04	Dec-04	May-05	Jul-06	Apr-07	May-07	Oct-07	Jan-08	Apr-08	Oct-08	Apr-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11	Apr-12	Oct-12	Apr-13	Oct-13		
MW-1	838.52	807.34	807.94	807.45	808.48	805.19	805.39	806.32 <sup>d</sup>	805.16	ng	803.17	ng	ng	803.67	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng			
MW-1R	838.63	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	804.01	804.17	ng	801.89	802.46	804.02	801.51	803.44	804.61	805.80	804.26	804.85	802.77	803.19	801.93	804.59	804.92		
MW-2	840.52	809.09	811.09	809.52	814.96	803.79	804.46	812.25 <sup>d</sup>	809.28	ng	806.54	ng	ng	807.52	806.37	ng	802.10	801.26	806.99	801.71	804.38	807.13	812.69	805.71	808.03	802.17	803.15	798.45	805.29	809.52		
MW-3	839.98	802.78	801.98	800.38	802.36	798.12	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng			
MW-3R	839.79	ni	ni	ni	ni	ni	ni	ni	ni	ni	793.94	ng	ng	794.95	792.69	ng	790.33	788.77	789.04	788.24	787.60	790.18	797.67	795.74	792.22	790.48	788.14	786.12	786.89	792.99		
MW-4	841.45	804.40	804.30	803.09	805.87	Dry	Dry	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng			
MW-4a	838.92	ni	ni	ni	ni	ni	ni	ni	ni	ni	795.06	ng	798.65	796.77	795.79	794.47	Dry	Dry	793.04	787.91	794.33	799.52	796.32	795.29	Dry	Dry	Dry	Dry	796.58			
MW-4b	839.13	ni	ni	ni	ni	ni	ni	ni	ni	ni	792.62	ng	ng	794.53	792.86	ng	790.05	788.76	789.35	788.41	787.91	788.15	796.99	795.47	792.42	790.54	788.60	786.57	788.13	794.02		
MW-5	838.27	811.01	811.41	811.26	811.43	811.9	812.32	810.08	ng	ng	807.71	ng	ng	808.45	808.16	ng	806.25	806.16	808.05	805.95	808.38	809.45	810.40	808.79	810.06	808.23	809.14	807.32	809.89	809.04		
MW-6 <sup>d</sup>	836.85	810.68	812.89	812.98	816.03	809.15	810.65	820.82 <sup>d</sup>	815.60	813.52	810.86	ng	ng	811.52	810.16	ng	818.49 <sup>d</sup>	817.15 <sup>d</sup>	813.43	810.03	811.89	813.24	813.47	809.30	812.06	808.27	809.04	806.65	813.43	812.84		
MW-7	840.66	802.02	802.02	800.07	801.93	798.71	797.73	798.54	ng	ng	794.45	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng			
MW-7R	841.66	ni	ni	ni	ni	ni	ni	ni	ni	ni	796.71	ng	ng	796.01	794.59	ng	793.22	792.28	792.40	792.17	792.47	794.30	797.74	797.24	795.36	793.66	792.16	791.04	791.94	793.83		
MW-8	838.52	803.28	802.92	801.25	803.88	793.02	791.17	798.06	ng	ng	793.27	ng	797.14	795.25	793.62	792.76	789.96	789.73	790.71	790.13	789.17	791.93	798.19	792.94	792.94	790.20	788.97	786.14	789.31	788.76		
MW-9a <sup>d</sup>	833.15	ni	ni	ni	ni	812.39	814.32	815.55 <sup>d</sup>	816.48	815.56	812.84	ng	ng	813.38	812.86	ng	816.01 <sup>d</sup>	816.00 <sup>d</sup>	814.69	812.03	814.79	814.69	813.86	811.60	813.83	809.67	811.81	809.25	814.45	814.50		
MW-9b <sup>d,e</sup>	833.19	ni	ni	ni	ni	810.97	813.14	812.83 <sup>d</sup>	802.51	801.38	798.25	ng	ng	798.93	807.35	ng	811.14 <sup>d</sup>	808.31 <sup>d</sup>	809.84	809.98	814.11	814.39	813.66	811.00	813.27	809.39	810.99	808.70	814.09	815.92		
MW-10	836.37	ni	ni	ni	ni	812.74	812.87	812.64	812.5	ng	812.68	ng	ng	811.27	811.98	ng	811.15	811.77	811.45	809.79	811.45	810.84	811.44	811.69	812.07	811.60	812.55	810.15	811.71	810.97		
MW-11	833.80	ni	ni	ni	ni	804.61	806.67	814.34 <sup>d</sup>	811.04	ng	807.65	ng	ng	807.70	807.48	ng	801.65 <sup>d</sup>	802.50 <sup>d</sup>	809.65	800.52	808.34	807.15	814.17	804.15	809.61	800.13	803.22	796.28	808.30	808.89		
MW-12	834.97	ni	ni	ni	ni	791.77	790.18	798.33	ng	ng	793.49	ng	ng	795.52	793.53	791.44	790.44	790.44	792.06	789.05	791.05	793.59	798.90	794.70	793.90	790.16	789.61	Dry	791.39	792.19		
MW-13a	837.44	ni	ni	ni	ni	794.57	792.77	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng		
MW-13aR	839.02	ni	ni	ni	ni	ni	ni	ni	ni	ni	792.14	ng	ng	793.46	791.07	ng	787.50	786.84	787.47	786.52	785.90	788.54	795.44	793.83	790.44	788.51	786.30	784.14	784.97	783.91		
MW-13b <sup>f</sup>	836.96	ni	ni	ni	ni	788.93	788.25	793.35	ng	788.92	788.24	ng	ng	789.54	787.92	ng	785.16	784.11	785.15	783.67	784.17	786.34	792.11	789.99	787.79	785.49	784.11	781.79	783.65	781.89		
MW-14	844.43	ni	ni	ni	ni	ni	801.87	799.91	ng	ng	796.83	ng	ng	796.07	794.71	ng	Dry	Dry	Dry	Dry	Dry	Dry	797.73	797.30	795.47	794.40	Dry	Dry	Dry	Dry		
MW-14b	844.39	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	789.94	791.18	791.29	791.67	793.67	796.98	796.66	794.91	793.21	789.30	787.70	788.22	791.61
MW-15	834.82	ni	ni	ni	ni	ni	Dry	Dry	ng	ng	Dry	ng	ng	Dry	819.80	ng	Dry	Dry	Dry	Dry	Dry	Dry	819.78	819.79	819.78	819.77	Dry	Dry	Dry	Dry		
MW-16	832.98	ni	ni	ni	ni	ni	804.12	Dry	ng	ng	Dry	ng	ng	Dry	Dry	ng	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry		
MW-17	841.85	ni	ni	ni	ni	ni	804.44	ng	ng	ng	801.34	ng	ng	799.60	797.96	ng	796.23	795.09	797.36	795.04	800.12	803.91	803.71	801.07	801.92	797.42	796.93	794.98	798.69	798.31		
MW-18	833.46	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	782.25	798.63	ng	798.93	799.48	800.16	800.06	785.16	804.45	804.24	801.71	799.73	802.32	801.36	797.68	795.86	795.67		
MW-19	837.20	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	807.52	807.95	806.09	807.75	807.96	808.28	807.71	808.14	807.11	807.67	806.94	808.00	807.62
MW-20		ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	767.77	767.72
MW-A	837.96	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	808.66	ng	ng	ng	ng	802.44	808.98	802.68	806.36	807.45	814.11	806.86	809.18	803.22	804.21	799.95	806.36	805.37	
MW-B	838.44	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	801.87	ng	ng	ng	799.82	805.57	800.29	801.88	805.06	811.03	804.84	805.72	801.05	801.32	797.42	802.84	807.87		
MW-C	838.59	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	806.09	ng	ng	ng	799.71	805.39	800.24	801.68	804.97	810.55	804.59	805.47	800.95	801.16	797.35	802.71	807.59		
MW-D	837.71	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	810.27	810.29	806.37	807.09	809.06	812.53	808.62	809.20	806.42	806.50	803.83	808.59	813.63	
OW-72	861.00	ng	ng	ng	ng	ng	ng	ng	ng	ng	783.96	784.14	787.18	782.40	784.35	ng	781.52	780.90	782.42	780.21	784.27	783.47	787.90	785.70	784.71	781.81	781.21	778.44	781.27	785.42		
OW-74A	800.00	ng	ng	ng	ng	ng	ng	ng	ng	ng	781.61	782.41	784.82	782.58	782.01	ng	779.61	779.58	780.85	778.35	780.50	781.62	784.67	782.47	782.26	779.18	779.39	776.30	779.88	782.34		
OW-74B	799.00	ng	ng	ng	ng	ng	ng	ng	ng	ng	778.45	779.49	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	ng	
IW-1	839.26	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	798.61	797.70	ng	797.70	795.46	797.12	793.76	796.65	798.16	801.27	797.64	798.02	794.33	794.99	791.90	797.29	798.71		
IW-2	839.52	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	798.07	797.21	ng	797.21	794.52	796.17	792.85	796.96	ng	ng	797.28	797.41	793.04	793.06	792.80	795.96	798.22		
IW-3	839.36	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	796.83	795.47	ng	795.47	792.36	793.24	792.11	792.05	795.09	799.51	796.63	796.51	793.26	792.03	792.43	792.89	796.98		
IW-4	838.80	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	797.63	796.61	ng	796.61	794.63	795.62	792.40	794.90	796.88	800.56	796.75	797.00	793.00	793.44	791.57	795.77	797.72		
IW-5	839.17	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	796.67	795.59	ng	795.59	790.97	792.05	791.05	791.05	ng	799.35	796.11	794.91	791.47	791.19	791.07	791.02	Dry		
IW-6	838.36	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	795.36	794.75	ng	794.75	790.36	791.48	Dry	Dry	ng	798.62	795.05	793.36	790.87	Dry	Dry	Dry	Dry		
IW-7	838.40	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	795.28	793.88	ng	793.88	789.90	791.09	791.09	790.27	ng	798.26	794.94	791.03	790.76	790.15	790.19	790.11	794.57		
IW-8	838.49	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	ni	795.46	795.10	ng	795.10	795.79	Dry	800.99	795.79	ng	798.24									

Table 3-2. Analytical Detections for October 2013 Groundwater Samples  
Former Olympic Manufacturing Site, Smyrna, Georgia

Constituent	Concentration (micrograms per liter)																VRP Delineation Level	VRP Cleanup Level
	MW-2	MW-4a	MW-4b	MW-6	MW-8	MW-11	MW-12	MW-15	MW-16	MW-20	OW-72	OW-74A	13301-EB	13302-EB	13303-EB	13303- DUP-1 (MW-8)		
Screened Interval, bgs	30 to 40	36 to 46	96 to 101	25 to 45	35 to 55	28 to 38	36 to 46	5 to 15	27 to 37	33 to 43	107 to 135	42 to 81	13301-EB	13302-EB	13303-EB	13303- DUP-1 (MW-8)		
Sampling Date	10/28/13	10/30/13	10/29/13	10/29/13	10/30/13	10/28/13	10/29/13	ns <sup>a</sup>	ns	10/28/13	10/29/13	10/29/13	10/28/13	10/29/13	10/30/13	10/30/13		
Volatile Organics, Method 8260B																		
Chlorobenzene	<5.0	<b>5.6</b>	<5.0	<b>6.2</b>	<5.0	<b>37</b>	<5.0	ns	ns	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	100	136
1,2-Dichlorobenzene	<5.0	<b>350</b>	<5.0	<5.0	<b>23</b>	<5.0	<5.0			<5.0	<b>18</b>	<5.0	<5.0	<5.0	<5.0	<b>23</b>	600	600
1,3-Dichlorobenzene	<5.0	<b>160</b>	<5.0	<5.0	<b>6.8</b>	<5.0	<5.0			<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<b>6.9</b>	600	600
1,4-Dichlorobenzene	<5.0	<b>81</b>	<5.0	<5.0	<b>5.6</b>	<b>5.9</b>	<5.0			<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<b>5.3</b>	75	75
1,1-Dichloroethane	<5.0	<b>6.8</b>	<5.0	<5.0	<b>22</b>	<5.0	<b>5.0</b>			<5.0	<b>14</b>	<5.0	<5.0	<5.0	<5.0	<b>23</b>	4,000	4,000
1,1-Dichloroethene	<b>8.6</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0			<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7.0	524
<i>cis</i> -1,2-Dichloroethene	<b>43</b>	<b>7,400</b>	<5.0	<5.0	<b>2,400</b>	<b>45</b>	<b>49</b>			<5.0	<b>1,800</b>	<b>180</b>	<5.0	<5.0	<5.0	<b>2,600</b>	70	1,020
<i>trans</i> -1,2-Dichloroethene	<5.0	<b>48</b>	<5.0	<5.0	<b>15</b>	<5.0	<5.0			<5.0	<b>10</b>	<5.0	<5.0	<5.0	<5.0	<b>15</b>	100	161
Isopropyl benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<b>10</b>			<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	207
Tetrachloroethene	<5.0	<b>18</b>	<5.0	<5.0	<b>18</b>	<b>5.7</b>	<5.0			<5.0	<b>15</b>	<5.0	<5.0	<5.0	<5.0	<b>17</b>	5.0	5.0
1,1,1-Trichloroethane	<b>8.5</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0			<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	200	200
Trichloroethene	<b>13</b>	<b>37</b>	<5.0	<5.0	<b>17</b>	<b>10</b>	<5.0			<5.0	<b>49</b>	<b>13</b>	<5.0	<5.0	<5.0	<b>16</b>	5.0	35
Vinyl Chloride	<2.0	<b>3.6</b>	<2.0	<2.0	<b>2.1</b>	<2.0	<b>4.0</b>			<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<b>2.0</b>	2.0	3.3
Total VOCs Detected	73.1	8,110.0	< 5.0	6.2	2,509.5	103.6	68.0	ns	ns	< 5.0	1,906.0	193.0	< 5.0	< 5.0	< 5.0	2,708.2		
Metals, Method 6010B																		
Manganese	na <sup>b</sup>	na	na	na	11,100	na	na	ns	ns	na	na	na	na	na	na	<b>11,200</b>	ne <sup>c</sup>	ne

<sup>a</sup> "ns" indicates sample not collected as well was dry (MW-15, MW-16).

<sup>b</sup> "na" indicates sample not analyzed for that parameter.

<sup>c</sup> "ne" indicates no standard established as parameter is not regulated under HSRA.

**BOLD** = Analytical Detection above Reporting Limit

  = Exceeds VRP Delineation and Cleanup Levels for Groundwater (ug/L).

  = Exceeds VRP Delineation Level for Groundwater (ug/L).









Table 3-3. Historical Groundwater Sampling Detections for 1998-2013  
Former Olympic Manufacturing Site, Smyrna, GA

Parameter	Concentration, ug/L																																																		
	Type 1, Type 3 RRS	Type 2 RRS	Type 4 RRS	MW-6 25 to 45 ft bg					MW-7 35 to 55 ft bg								MW-7R 45 to 55 ft bg								MW-8 35 to 55 ft bg																										
				Oct-11	Apr-12	Oct-12	Apr-13	Oct-13	Oct-88	Jun-95	Mar-96	Nov-97	Dec-98	Sep-99	Feb-00	Apr-01	May-02	Sep-03	May-04	May-04	Jul-06	Apr-07	Oct-07	Apr-08	Oct-08	Apr-08	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11	Apr-12	Oct-12	Apr-13	Oct-88	Jun-95	Mar-96	Nov-97	Dec-98	Sep-99	Feb-00	Apr-01	May-02	Sep-03	May-04	May-05	Jul-06	Apr-07	May-07		
<b>Volatile Organics, Method 8260</b>																																																			
Acetone	4,000	nc <sup>f</sup>	nc	<5.0	<5.0	<5.0	<5.0	<5.0	na	<2.6	<100	<10	na	<100	<100	<5	<100	na	<20	<20	<20	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	250	93							
Benzene	5	4.4	8.7	7.6	9.2	7.5	<5.0	<5.0	<5	<0.3	<2	0.27	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5				
Bromodichloromethane	100	nc	nc	<5.0	<5.0	<5.0	<5.0	<5.0	nr	nr	<10	<0.19	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5			
2-Butanone	2,000	nc	nc	<5.0	<5.0	<5.0	<5.0	<5.0	na	<12.0	<100	<10	na	<100	<100	<5	<100	na	<10	<10	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	
n-Butylbenzene	5	626	4,088	na	na	na	na	na	na	na	<10	na	<5	<5	<5	na	<5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
sec-Butylbenzene	5	626	4,088	na	na	na	na	na	na	na	<10	na	<5	<5	<5	na	<5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
Carbon disulfide	4,000	nc	nc	<5.0	<5.0	<5.0	<5.0	<5.0	na	na	<10	<5	na	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Carbon Tetrachloride	5	4.9	10	<5.0	<5.0	<5.0	<5.0	<5.0																																											
Chlorobenzene	100	27	136	67	75.0	84.0	20	6	<5	<0.60	<10	<0.25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Chloroethane	10	nc	nc	<10	<10	<10	<10	<10	<10	<1.3	<5	<0.37	<10	<10	<10	<5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Chloroform	100	nc	nc	<5.0	<5.0	<5.0	<5.0	<5.0	1.3 J	<0.7	<2	0.60	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	100	nc	nc	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<0.6	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
1,2-Dichlorobenzene	600	nc	nc	<5.0	<5.0	<5.0	<5.0	<5.0	<5	na	<10	NAV	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
1,3-Dichlorobenzene	600	nc	nc	6.4	8.6	9.6	<5.0	<5.0	<5	na	<10	NAV	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
1,4-Dichlorobenzene	75	35	73	10	11	13	<5.0	<5.0	<5	na	<10	NAV	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
1,1-Dichloroethane	4,000	nc	nc	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<0.8	<2	<0.15	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
1,2-Dichloroethane	5	1.6	2.9	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<0.5	<2	<0.12	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		
1,1-Dichloroethene	7	103	524	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<0.9	<2	<0.48	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		
cis-1,2-Dichloroethene	70	156	1,020	<5.0	<5.0	<5.0	<5.0	<5.0	na	na	5	na	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		
trans-1,2-Dichloroethene	100	32	161	<5.0	<5.0	<5.0	<5.0	<5.0	<5	na	<2	<0.23	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		
Total 1,2-Dichloroethene	105 <sup>a</sup>	192 <sup>b</sup>	1,160 <sup>b</sup>	<10	<10	<10	<10	<10	<5	4.5 E	7	<0.23	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10		
Ethylbenzene	700	nc	nc	46	59	57	5.2	<5.0	<5	<1.0	<2	<0.34	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		
p-Isopropylbenzene	5	207	nc	<5.0	<5.0	5.8	<5.0	<5.0	na	na	<10	na	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		
β-Isopropyl toluene	5	200	1,010	na	na	na	na	na	na	na	<10	na	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Methylene chloride	5	nc	nc	<5.0	<5.0	<5.0	<5.0	<5.0	<7.1	6.9 E	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5			
Naphthalene	20	nc	nc	na	na	na	na	na	na	na	<10</																																								

Table 3-3. Historical Groundwater Sampling Detections for 1998-2013  
Former Olympic Manufacturing Site, Smyrna, GA

Table with columns for Parameter, Type 1/2/3 RRS, MW-8 (35 to 55 ft bg), MW-9a (17 to 27 ft bg), MW-9b (53.5 to 58.5 ft bg), and MW-10 (24 to 34 ft bg). Rows include Volatile Organics (e.g., Acetone, Benzene, Chlorobenzene), Semi-Volatile Organics (e.g., 1,2-Dichlorobenzene, Toluene), and Metals (e.g., Barium, Cadmium, Chromium, Copper, Lead, Manganese, Nickel, Zinc).

"nr" = Analytical reports not available to determine detection limits.  
"na" = Not analyzed for this parameter or by this method.  
"J" indicates reported between MDL and PQL. Estimated below detection limit. (Information based on current method of reporting. Original laboratory not available to confirm.)  
"NAV" = Not analyzed as a volatile. See semi-volatile result.  
"ns" indicates the well was not sampled during the event as it was not yet installed, or because there was insufficient water or well damage.  
NASV = Not reported as a semi-volatile. See volatile result.  
"nc" = Not calculated because Type 1 and 3 are already met, or because the RRS is based on the sum and not the individual isomers.  
Computed as Sum. RRS for cis- and trans- isomers still must be met.  
"E" indicates the concentration is estimated.  
"ne" = Standard not established as parameter not regulated under HSRA.











**Table 3-4. Recent Groundwater Geochemical Results  
Former Olympic Manufacturing Site; Smyrna, Georgia**

Parameter	Concentration, mg/L																												
	MW-4a <sup>a</sup>					IW-4 <sup>a</sup>								MW-6	MW-8														
	Apr-07	Apr-10	Oct-10	Apr-11	Oct-13	Apr-08	Oct-08	Apr-09	Oct-09	Oct-11	Apr-12	Oct-12	Apr-13	Oct-13	Apr-07	Oct-07	Apr-08	Oct-08	Apr-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11	Apr-12	Oct-12	Apr-13	Oct-13	
Methane	0.400	0.055	0.170	0.036	0.077	0.048	0.210	0.069	0.013	0.130	0.290	ns	0.190	0.130	0.160	na	0.063	0.062	0.110	0.032	0.033	0.047	0.130	0.690	0.094	na	0.082	0.021	
Nitrate	0.54	< 2.5	< 0.25	< 0.25	< 1.2	< 2.5	na	< 2.5	< 0.25	< 0.25	< 1.2	ns	< 2.5	< 0.25	< 5.0	na	< 2.5	< 0.25	< 0.25	< 0.25	< 0.25 <sup>UJ</sup>	< 2.5	< 0.25	< 1.2	< 0.5	na	< 1.2	< 0.25	
Sulfate	58	280	67	97	110	280	na	190	210	45	26	ns	230 <sup>J</sup>	2.7	150	na	150	130	120	97	51 <sup>J</sup>	99	110	110	120	na	120	65	
Total Organic Carbon	37.2	52.4	31.0	33.1	32.5	57.6	na	42.0	37.5	21.0	27.9	ns	34.6	3.21	< 100	na	54.7	36.9	48.5	26.9	19.6	24.0	27.0	31.1	43.3	na	60.2	15.6	
Manganese	4.09	58.7	23.8	21.4	na	50.3	na	na	1.62 <sup>J</sup>	11.9	95.7	ns	26.1	na	185	14.8	11.1	25.1	na	12.1 <sup>J</sup>	6.92	12.60	16.9	15.6	16.8	na	15.7	11.1	
pH (S.U.)	7.18 <sup>e</sup>	6.88	6.63	6.63	6.48	6.76	7.41	6.92	6.48	6.68	6.90	ns	6.41	6.31	6.89 <sup>e</sup>	6.4	6.47	6.30	6.49	6.42	6.49	6.64	6.73	6.54	6.50	6.71	6.27	6.51	
Dissolved Oxygen	8.41 <sup>e</sup>	2.69	0.17	4.45	0.32	0.33	7.03	0.47	0.65	14.79	3.52	ns	0.14	0.28	8.4 <sup>e</sup>	0.65	0.40	1.08	0.54	0.56	0.31	0.30	3.91	4.86	0.19	0.15	0.24	0.31	
Potassium Permanganate	< 0.89	na	na	na	na	270	12	< 0.89	< 0.89	na	na	ns	na	na	800	1.8	< 0.89	1	< 0.89	< 0.89	na	na	na	na	na	na	na	na	
Ferrous Iron	< 0.1	< 0.100	< 1.0 <sup>UJ</sup>	< 0.100	< 0.1 <sup>UJ</sup>	< 10	na	< 0.100	< 0.100	< 0.100	< 0.100	ns	0.609 <sup>J</sup>	1.06	< 100	na	< 0.1	< 1.00	< 0.100 <sup>UJ</sup>	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	na	< 0.100	< 0.100	
Oxidation-Reduction Potential (millivolts)	369.2			35.2	-129.9	687.6						ns	-82.6	-0.36	696	270.1										117.6	na	-52.0	45.0

Parameter	Concentration, mg/L																								
	MW-12 <sup>b</sup>													MW-19											
	Apr-07	May-07	Oct-07	Apr-08	Oct-08	Apr-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11	Apr-12	Oct-12	Apr-13	Oct-13	Apr-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11	Apr-12	Oct-12	Apr-13	
Methane	0.74	0.74	na	0.13	ns <sup>d</sup>	0.130	0.054	0.310	1.100	0.210	ns	na	ns	0.027	0.170	< 0.004	0.021	< 0.004	0.015	< 0.004	0.140	0.033	0.140	0.023	
Nitrate	< 0.25	< 0.25	na	< 0.25	ns	< 0.25 <sup>UJ</sup>	< 0.25	< 0.25	< 0.25	< 0.25	ns	na	ns	< 0.25	< 0.25	< 0.25 <sup>UR</sup>	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	
Sulfate	< 1.0	< 1.0	na	1.3	ns	6.9	11	32	< 1.0	< 10.0	ns	na	ns	19	10	65	51	37	31	24	25	23	29	21	
Total Organic Carbon	6.07	6.07	na	6.49	ns	8.90	12.6	7.98	2.90	4.11	ns	na	ns	8.92	5.17	5.32	5.66	6.21	2.10	2.26	5.38	3.1	5.81	3.93	
Manganese	7.63	7.63	8.45	7.02	ns	na	7.83	8.97	7.17	8.11	ns	na	ns	10.0	na	na	na	na	na	na	na	na	na	na	
pH (S.U.)	6.33 <sup>e</sup>	6.33 <sup>e</sup>	6.16	6.30	ns	6.39	6.51	6.38	6.49	6.61	ns	6.38	ns	6.37	6.66	4.72	5.58	5.71	6.18	5.82	6.36	5.87	6.1	5.98	
Dissolved Oxygen	8.05 <sup>e</sup>	8.05 <sup>e</sup>	0.96	0.44	ns	2.45	1.32	0.38	0.35	3.91	ns	1.02	ns	0.31	0.28	1.40	0.69	0.37	0.42	1.40	2.26	0.20	0.2	4.01	
Potassium Permanganate	12	12	14	< 0.89	ns	2.2 <sup>J</sup>	< 0.89	na	na	na	ns	na	ns	na	na	na	na	na	na	na	na	na	na	na	
Ferrous Iron	46.3	46.3	na	52.4	ns	49.3 <sup>J</sup>	51.3	0.464	30.5	30.8	ns	na	ns	38.4	26.4	2.25 <sup>J</sup>	8.51	< 10.0	9.60	7.55	2.80	8.66 <sup>J</sup>	3.75	3.41	
Oxidation-Reduction Potential (millivolts)	-133.2		-85.1									ns	-97.5	-137.6	238.7	-22.3								-127.1	54.4

<sup>a</sup> MW-4a had been dry or had inadequate sample volume from May 2007 to Oct 2009, in Oct 2011, and in April 2013 due to regional drought. Thus, IW-4 was sampled as a surrogate for MW-4a during that period. In October 2008, the limited sample volume available in IW-4 prevented analysis for TOC, nitrate, sulfate, manganese, and ferrous iron. In October 2012, IW-4 and MW-4a were not sampled due to insufficient water.

<sup>b</sup> MW-12 not sampled in Oct 2011 because unable to obtain access to well from CSX Transportation, or in October 2012 due to insufficient water.

<sup>c</sup> "na" indicates parameter not analyzed for.

<sup>d</sup> "ns" indicates well not sampled in this event due to insufficient water.

<sup>e</sup> Water quality parameters measured at the lab in spring 2007. All other results measured using a field instrument.

<sup>UJ</sup> Value qualified as undetected with an estimated limit of detection.

<sup>UR</sup> Value qualified as unusable due to sample hold time exceedance.

<sup>J</sup> Value qualified as estimated.

**Table 5-1. Brown and Caldwell Billing and Services from June 22 to December 12, 2013  
Former Olympic Manufacturing Site, Smyrna, Georgia**

Month, Person	Role	Hours Billed	Services Provided
<b>2013</b>			
<b>June 22-30</b>			
Trish	Project Manager	24.50	Groundwater Modeling Review, Report Preparation
Greg, Jeff W.	Senior Hydrogeologists (2)	6.50	Groundwater Modeling
Brian	Project Geologist	0.50	Report Preparation
Elaine, Lavana	Admin Assistants (2)	7.00	Report Preparation
Rhona	Project Assistant	2.25	Data Analysis & Report Preparation
Carol	Regional Biller	0.75	Administrative
	<b>Labor Subtotal, Hours</b>	<b>41.50</b>	
	<b>Subs and Expenses</b>	<b>\$876.62</b>	
<b>July</b>			
Trish	Project Manager	2.50	Financial Assurance Renewal, Project Communications and Mgmt
Elaine	Admin Assistant	0.50	Administrative
Rhona	Project Assistant	0.25	Administrative
	<b>Labor Subtotal, Hours</b>	<b>3.25</b>	
	<b>Subs and Expenses</b>	<b>\$13.00</b>	
<b>August</b>			
Trish	Project Manager	2.75	Project Communications and Management
	<b>Labor Subtotal, Hours</b>	<b>2.75</b>	
	<b>Subs and Expenses</b>	<b>\$118.00</b>	
<b>September</b>			
Trish	Project Manager	25.50	Comm. & Coord w/EPD, Remedial Strategy Development, Asstce Rel to Property Sale, GW Sampling Preparation
Greg	Senior Hydrogeologist	1.50	Remedial Strategy Development
Steve	Managing Scientist	0.50	Remedial Strategy Development
Carol	Regional Biller	1.00	Administrative
Rhona	Project Assistant	1.75	Administrative
	<b>Labor Subtotal, Hours</b>	<b>30.25</b>	
	<b>Subs and Expenses</b>	<b>\$210.61</b>	
<b>October</b>			
Trish	Project Manager	33.50	Groundwater Sampling, Comm.& Coord w/EPD, New Well Siting, Utility Permit Application
Rachel	Engineer II	2.75	Utility Permit Application
Juan	Engineer II	37.50	Groundwater Sampling
Brian	Geologist II	4.50	Groundwater Sampling Support
Ryan	Scientist II	7.00	Groundwater Sampling
George	Geologist I	24.00	Groundwater Sampling
Rhona	Project Assistant	0.50	Administrative
	<b>Labor Subtotal, Hours</b>	<b>109.75</b>	
	<b>Subs and Expenses</b>	<b>\$1,208.71</b>	

**Table 5-1. Brown and Caldwell Billing and Services from June 22 to December 12, 2013  
Former Olympic Manufacturing Site, Smyrna, Georgia**

<b>Month, Person</b>	<b>Role</b>	<b>Hours Billed</b>	<b>Services Provided</b>
<b>November</b>			
Trish	Project Manager	18.50	Groundwater Sampling, Report Prep, Utility Permit Application
Sarah	Scientist III	0.75	Data Validation
Ryan, Eileen	Scientist II (2)	2.75	Data Management
Juan	Engineer II	6.50	Data Management, Table and Figure Preparation
George	Geologist I	9.50	Table and Figure Preparation
Carol	Regional Biller	1.00	Administrative
Elaine	Admin Assistant	0.25	Administrative
Rhona	Project Assistant	0.25	Administrative
	<b>Labor Subtotal, Hours</b>	<b>39.50</b>	
	<b>Subs and Expenses</b>	<b>\$6,073.99</b>	
<b>December 1 - 12</b>			
Trish	Project Manager	18.75	Report Preparation, Utility Permit Coordination
Brian	Geologist II	9.75	Report Preparation
Eileen	Scientist II	2.50	Table and Figure Preparation
Juan	Engineer II	1.50	Table and Figure Preparation
Rachel	Engineer II	2.00	Table and Figure Preparation
Rhona	Project Assistant	0.25	Administrative
	<b>Labor Subtotal, Hours</b>	<b>34.75</b>	
	<b>Subs and Expenses</b>	<b>\$2,828.37</b>	

## **Appendix A: Notes Regarding September 19, 2013 Meeting with EPD**

---

# Georgia Department of Natural Resources

## Environmental Protection Division


2 Martin Luther King, Jr. Dr., S.E., Suite 1054 East, Atlanta, Georgia 30334

Judson H. Turner, Director

Land Protection Branch

Phone: 404/657-8600 FAX: 404/657-0807

### MEMORANDUM

TO: David Brownlee, Unit Coordinator   
Response and Remediation Program

FROM: Allan Nix, Geologist *acn*  
Response and Remediation Program

DATE: September 25, 2013

RE: EPD Meeting and Teleconference with Diversey Representatives  
Diversey Olympic Manufacturing (Former)  
VRP Site Number 1267564281, HSI Site Number 10435

**COPY**

---

The above-referenced meeting took place in Conference Room B in Suite 1054 on the 10<sup>th</sup> floor of the East Tower on September 19, 2013, at 2pm. The attendees were as follows:

- Benjamin Moline, Water Resources and Real Estate Manager for Molson Coors Brewing Company (parent company of Rathon, an RP)
- Harvey Sheldon (via telephone), attorney, outside counsel for the The Hillshire Group (an RP)
- Patricia Reifenberger, of Brown & Caldwell, consultant for both RPs
- Kent Magill (via telephone), attorney, internal counsel for the The Hillshire Group

The RPs wanted this meeting with EPD to get feedback on work already performed and to chart a path to delisting.

The RPs asked for EPD's feedback on the draft environmental covenant, from which some of EPD's original boilerplate language was deleted. The draft covenant includes water-well restrictions and also brings the targeted property into the VRP as an additional qualifying property. Wesley Properties, which adjoins the site on the east, has been non-responsive to the RPs' request to sign a covenant. The EPD replied as follows:

1. EPD wants a "redline" version of the draft covenant which shows those parts of the EPD model covenant that were deleted.
2. An environmental covenant is not necessary to bring a property into the VRP as a qualifying property. The qualifying property owner need only agree to allow the RPs and EPD access to the property to complete assessment and remediation activities. Upon approval of a final CSR, the seeking of covenants from nearby property owners constitutes the RPs' final task prior to removal of a site from the HSI.

Given EPD's reply that obtaining covenants is commonly the last step in the delisting process, the RPs stated that they may pursue preparation of a CSR prior to obtaining covenants from property owners.

The RPs contended that they are not responsible for groundwater contamination on the adjoining warehouse property at 5210 Olympic Industrial Court. Wells MW-9a and MW-9b, which are both on the warehouse property, have not been sampled recently. EPD responded that Diversey is the likely source of contaminants in the warehouse groundwater, given that an alternative source for those contaminants has not been identified, and that all contaminants in the warehouse groundwater have previously been detected in Diversey groundwater. EPD acknowledged that the mechanism by which groundwater contaminants migrated to the warehouse property from Diversey is unclear.

The RPs stated that the owner of the aforementioned warehouse property has been unwilling to grant access for additional well installations, or for other investigative subsurface activities. EPD suggested that the adjoining warehouse property could be brought into the VRP as a qualifying property, and that additional well installations and soil borings may not be necessary. An existing well west of the warehouse could possibly be used for groundwater delineation.

The RPs requested permission to discontinue sampling of several wells that have historically been below applicable RRSs. EPD said that sampling of historically non-detect wells could possibly be discontinued. EPD recommended that those wells requested to be dropped from the monitoring program be specified in an email submittal.

EPD reiterated its position, stated in an earlier meeting, that MW-4b could be used for vertical delineation of contaminants in groundwater, on the condition that a spike in concentrations does not occur in that well.

EPD wanted one additional well installed for horizontal delineation of groundwater, in the area of the S&S Realty property. A well on Elizabeth Lane, between the OW-74 and OW-77 well clusters, would suffice.

The RPs stated that they have discontinued groundwater monitoring for manganese, but EPD replied that monitoring of at least one well with high manganese concentrations should be continued.

#### **Action Items from Meeting**

1. RPs will email to EPD a redline version of the draft covenant for review.
2. RPs will email to EPD a request to drop some wells from the monitoring program, and will specify those wells to be dropped and why.
3. RPs will install an additional delineation well at a location on Elizabeth Lane between the OW-74 and OW-77 well clusters.
4. RPs will resume monitoring of manganese in groundwater.
5. EPD will provide Harvey Sheldon with a sample environmental covenant that has already been approved for use on another HSI site.
6. EPD will make a statement in its upcoming Diversey VRP comment letter that soil delineation on site is complete.

7. EPD will make a statement in its upcoming Diversey VRP comment letter approving the removal of certain wells from the monitoring program, pursuant to the email referenced in Action Item 2 above.

Attachments: Meeting Sign-In Sheet

# MEETING SIGN-IN SHEET

September 19, 2013

NAME (Please print)

REPRESENTING

Ben Moline

Rathan - Smyrna site

Tosh Reiterberg

Brown and Caldwell/RPs

David Brownlee

GA EPD

Allan Nix

↓

Harvey Sheldon (Telephone)

Hinshaw & Culbertson / Hillshire Brands

Kent Magill ↓

The Hillshire Brands Company

**Reifenberger, Trish**

---

**From:** Reifenberger, Trish  
**Sent:** Tuesday, October 08, 2013 5:11 PM  
**To:** 'Allan Nix'  
**Cc:** David Brownlee (David.Brownlee@dnr.state.ga.us); 'Magill, Kent'; Moline, Benjamin; Harvey Sheldon  
**Subject:** RE: EPD Meeting Memo, PPCSR documents, Request to Discontinue Monitoring of Certain Wells  
**Attachments:** Wells to Discontinue Monitoring.xlsx

Allan,

Thank you for forwarding the notes from our meeting and the documents related to Airgas' PPCSR. We have a few minor additions to the meeting notes, and appreciate your standing by what was discussed in our meeting whether in the notes or not. Our request to discontinue monitoring in certain wells is also provided below.

**Meeting Notes**

We propose the following revisions to the notes:

**Corrections**

1. Page 2, Paragraph 6: We are still monitoring groundwater in the sump area for manganese, and thus we suggest the sentence be revised as follows: "The RPs inquired regarding the need for future work related to manganese. EPD replied that as manganese is not a regulated compound its presence will not keep the site from being delisted, however, monitoring of at least one well with high manganese concentrations should be continued." (new text in blue).
2. Page 2 Action Item no. 4: Revise the sentence as follows: "RPs will continue monitoring of manganese in groundwater in at least one well where concentrations are currently high".

**Additions**

1. In their upcoming comment letter EPD will provide confirmation of the delineation and clean-up standards previously proposed by the RPs. They will be the same as proposed by the RPs, with only a few minor changes.
2. Action Item: EPD will let RPs know if they need additional information on the groundwater model following their review of the June 2013 semiannual report.
3. Action Item: EPD will provide approval and/or comments on the groundwater model and the conclusions from the modeling in the upcoming comment letter.

**Wells to Discontinue Monitoring**

Hillshire Brands and Rathon propose to discontinue monitoring in wells in which no groundwater concentrations have exceeded either a detection or a cleanup level in the last 2 events. This would result in discontinuing monitoring of the 12 wells indicated on the attached table.

As we discussed, the next groundwater monitoring event is scheduled to occur this month. We have scheduled the event for late in the month to allow time for review our proposal. ***We would appreciate your getting back to us by Friday October 18<sup>th</sup> so that we can incorporate the changes in the fieldwork.***

Additionally, will you please confirm that since both delineation and cleanup have already been achieved in these wells, we can certify compliance in them now and no additional sampling will be required later to certify compliance?

If you have any questions on the above comments or other matters related to the site, please let me know. We appreciate your time in meeting with us, and in reviewing and responding to the above comments and requests. Thank you very much.

Trish

**Trish Reifenberger, P.E.**  
Project Manager

TReifenberger@brwncald.com  
T 770.673.3630 | F 770.396.9495



For secure transfer of large files please use my dropbox: <http://dropbox.yousendit.com/TrishReifenberger>

---

**From:** Nix, Allan x [<mailto:Allan.Nix@dnr.state.ga.us>]  
**Sent:** Thursday, September 26, 2013 11:29 AM  
**To:** Reifenberger, Trish  
**Cc:** Brownlee, David x  
**Subject:** EPD Meeting Memo, PPCSR documents

Trish—

As promised, I have attached a copy of the meeting memo, in PDF format. I do not think that I omitted anything important, but please let me know if you notice something. We will stand by our word, regardless.

Also attached, FYI, are the the Airgas LOL letter, the subsequent soil sampling report associated with the LOL, and our confirmation that the soil-remediation requirement in the LOL has been satisfied.

Thank you again for your diligence.

Allan C. Nix, P.G.  
Georgia EPD Response and Remediation Program  
404-657-8600  
[Allan.nix@gaepd.org](mailto:Allan.nix@gaepd.org)

No. of Events Below Cleanup and Detection Levels, as of April 2013 Semiannual Event  
Former Olympic Manufacturing Site, Smyrna, Georgia

Last Detected Above Detection Level		No. of Events below Threshold																							
		MW-1R	MW-2	MW-3R	MW-4a IW-4	MW-4b	MW-5	MW-6	MW-7R	MW-8	MW-10	MW-11	MW-12	MW-13aR	MW-13b	MW-14	MW-14b	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	OW-72	OW-74A
Events Below All Cleanup Levels																									
0	Apr-13																	Dry	Dry						
1	Oct-12																						b		
2	Apr-12																								
3	Oct-11																				NS <sup>a</sup>				
≥4	≤ Apr-11																								
Events Below All Delineation Levels																									
0	Apr-13																	Dry	Dry						
1	Oct-12																						b		
2	Apr-12																								
3	Oct-11																				NS				
≥4	≤ Apr-11																								
Discontinue Monitoring?		√		√		√		√		√			√	√	√	√				√	√	√			

<sup>a</sup> No results above delineation or cleanup levels in three events prior to when monitoring of MW-18 was discontinued in October 2009 (none since October 2007).

<sup>b</sup> No COCs detected in first sampling event (April 2013).

## **Appendix B: Groundwater Sampling Field Data Sheets** *(on CD Rom)*

---

WELL ID: MW-2

### 1. PROJECT INFORMATION

Project Number: 141054 Task Number: 060 Area of Concern: \_\_\_\_\_  
 Client: Hillshire Brands Personnel: Svan Nunez  
 Project Location: Smyrna GA Weather: Cloudy

### 2. WELL DATA

Date Measured: 10/28/13 Time: AM Temporary Well:  Yes  No

Casing Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Screen Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Total Depth of Well: 40 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Static Water: 31.00 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Product: \_\_\_\_\_ feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Length of Water Column: 9.00 feet Well Volume: 15 gal Screened Interval (from GS): \_\_\_\_\_  
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

### 3. PURGE DATA

Date Purged: 10/28/13 Time: 1200 Equipment Model(s) \_\_\_\_\_

Purge Method:  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Rope/Tubing  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Volume to Purge (minimum): 3 well volumes or 4.5 gallons  
 Was well purged dry?  Yes  No Pumping Rate: .05 gal/min Calibrated?  Yes  No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1220	0	5.52	17.73	0.138	281.2	2.23	354	31.97	
1225	0.25	5.60	17.77	0.133	272.2	1.27	180	33.12	
1230	0.50	5.60	17.76	0.133	272.4	1.27	116	33.39	
1235	0.75	5.63	17.75	0.134	268.7	1.19	79.1	33.81	
1240	1.0	5.65	17.76	0.138	261.5	1.10	64.4	34.09	

Purge data continued on next sheet?

### 4. SAMPLING DATA

Method(s):  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Tubing/Rope  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Depth to Water at Time of Sampling: 35.62 Field Filtered?  Yes  No  
 Sample ID: 13301-MW-2 Sample Date: 10/28/13 Sample Time: 1425 # of Containers: 2  
 Duplicate Sample Collected?  Yes  No ID: \_\_\_\_\_ # of Containers: \_\_\_\_\_  
 Equipment Blank Collected?  Yes  No ID: 13301-EB # of Containers: 2

#### Geochemical Analyses

Ferrous Iron: \_\_\_\_\_ mg/L  
 DO: \_\_\_\_\_ mg/L  
 Nitrate: \_\_\_\_\_ mg/L  
 Sulfate: \_\_\_\_\_ mg/L  
 Alkalinity: \_\_\_\_\_ mg/L

### 5. COMMENTS

EB collected at TSC0

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

## GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-2

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1245	1.25	5.68	17.75	0.140	257.2	1.06	43.3	34.45	
<del>1250</del>	<del>1.50</del>	<del>5.69</del>	<del>17.78</del>	<del>0.142</del>	<del>253.6</del>	<del>1.02</del>	<del>30.5</del>	<del>34.56</del>	
1255	1.75	5.72	17.81	0.144	247.7	0.97	21.6	34.60	
<del>1300</del>	<del>2.00</del>	<del>5.73</del>	<del>17.81</del>	<del>0.145</del>	<del>245.3</del>	<del>0.94</del>	<del>15.6</del>	<del>34.72</del>	
1305	2.25	5.75	17.81	0.147	242.4	0.88	23.7	34.80	
<del>1310</del>	<del>2.50</del>	<del>5.77</del>	<del>17.80</del>	<del>0.148</del>	<del>241.6</del>	<del>0.87</del>	<del>22.1</del>	<del>34.91</del>	
1315	2.75	5.76	17.82	0.149	240.0	0.85	33.3	35.02	
<del>1320</del>	<del>3.00</del>	<del>5.78</del>	<del>17.84</del>	<del>0.151</del>	<del>237.7</del>	<del>0.85</del>	<del>31.7</del>	<del>35.13</del>	
1325	3.25	5.79	17.84	0.153	237.6	0.84	<del>22.1</del>	35.22	29.6 = Turb
<del>1330</del>	<del>3.50</del>	<del>5.81</del>	<del>17.83</del>	<del>0.154</del>	<del>236.0</del>	<del>0.80</del>	<del>28.7</del>	<del>35.25</del>	
1335	3.75	5.82	17.83	0.155	233.8	0.78	25.8	35.33	
<del>1340</del>	<del>4.00</del>	<del>5.83</del>	<del>17.81</del>	<del>0.156</del>	<del>232.5</del>	<del>0.75</del>	<del>23.1</del>	<del>35.36</del>	
1345	4.25	5.84	17.81	0.157	232.3	0.74	19.0	35.40	
<del>1350</del>	<del>4.50</del>	<del>5.85</del>	<del>17.80</del>	<del>0.158</del>	<del>231.5</del>	<del>0.75</del>	<del>22.1</del>	<del>35.54</del>	
1400	5.00	5.87	17.80	0.159	228.8	0.67	14.9	35.48	
1410	5.50	5.88	17.77	0.160	225.7	0.65	13.9	35.55	
1420	<del>5.75</del> <sup>6.0</sup>	5.89	17.79	0.161	229.7	0.61	9.48	35.61	

Purge data continued on next sheet?

212

Signature \_\_\_\_\_

## GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-4a

### 1. PROJECT INFORMATION

Project Number: 141054 Task Number: 060 Area of Concern: \_\_\_\_\_  
 Client: Hillshire Brands Personnel: JW  
 Project Location: Smyrna GA Weather: cloudy 60°

### 2. WELL DATA

Date Measured: 10/30/13 Time: AM Temporary Well:  Yes  No

Casing Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Screen Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Total Depth of Well: 46 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Static Water: 42.34 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Product: \_\_\_\_\_ feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Length of Water Column: 3.66 feet Well Volume: 0.61 gal Screened Interval (from GS): \_\_\_\_\_  
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

### 3. PURGE DATA

Date Purged: 10/30/13 Time: 0930 Equipment Model(s): \_\_\_\_\_

Purge Method:  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials:  Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials:  Rope/Tubing  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Volume to Purge (minimum): 3 well volumes or 1.8 gallons  
 Was well purged dry?  Yes  No Pumping Rate: \_\_\_\_\_ gal/min Calibrated?  Yes  No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<del>1010</del>	0	6.37	19.01	0.852	-62.8	0.84	41.5	42.44	
1015	0.1	6.42	19.10	0.849	-69.4	0.80	0.29	42.44	
<del>1022</del>	0.2	6.42	19.11	0.855	-78.8	0.76	0.58	42.44	
1025	0.3	6.42	18.99	0.859	-94.1	0.67	1.27	42.50	
<del>1028</del>	0.4	6.42	18.95	0.863	-101.2	0.72	0.87	42.55	

Purge data continued on next sheet?

### 4. SAMPLING DATA

Method(s):  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials:  Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials:  Tubing/Rope  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Depth to Water at Time of Sampling: 42.82 Field Filtered?  Yes  No  
 Sample ID: 13303-MW-4a Sample Date: 10/30/13 Sample Time: 1115 # of Containers: 7  
 Duplicate Sample Collected?  Yes  No ID: \_\_\_\_\_ # of Containers: \_\_\_\_\_  
 Equipment Blank Collected?  Yes  No ID: 13303-EB # of Containers: 2

#### Geochemical Analyses

Ferrous Iron: \_\_\_\_\_ mg/L  
 DO: \_\_\_\_\_ mg/L  
 Nitrate: \_\_\_\_\_ mg/L  
 Sulfate: \_\_\_\_\_ mg/L  
 Alkalinity: \_\_\_\_\_ mg/L

### 5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.



WELL ID: MW-4b

### 1. PROJECT INFORMATION

Project Number: 141054 Task Number: 060 Area of Concern: \_\_\_\_\_  
 Client: Hillshire Brands Personnel: Sean Nunez  
 Project Location: Smyrna GA Weather: 55°

### 2. WELL DATA

Date Measured: 10/29/13 Time: AM Temporary Well:  Yes  No

Casing Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Screen Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Total Depth of Well: 101 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Static Water: 45.11 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Product: — feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Length of Water Column: 55.89 feet Well Volume: 9633 gal Screened Interval (from GS): \_\_\_\_\_  
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

### 3. PURGE DATA

Date Purged: 10/29/13 Time: 0900 Equipment Model(s) \_\_\_\_\_

Purge Method:  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Tubing/Rope  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Volume to Purge (minimum): 3 well volumes or 28.0 gallons  
 Was well purged dry?  Yes  No Pumping Rate: \_\_\_\_\_ gal/min Calibrated?  Yes  No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>0945</u>	<u>0</u>	<u>7.51</u>	<u>18.61</u>	<u>0.322</u>	<u>-187.9</u>	<u>0.37</u>	<u>0.60</u>	<u>45.71</u>	
<u>0950</u>	<u>0.2</u>	<u>7.56</u>	<u>18.60</u>	<u>0.327</u>	<u>-211.1</u>	<u>0.33</u>	<u>0.42</u>	<u>47.15</u>	
<u>0955</u>	<u>0.4</u>	<u>7.56</u>	<u>18.68</u>	<u>0.328</u>	<u>-213.4</u>	<u>0.22</u>	<u>0.63</u>	<u>47.41</u>	
<u>1000</u>	<u>0.5</u>	<u>7.56</u>	<u>18.80</u>	<u>0.330</u>	<u>-219.4</u>	<u>0.19</u>	<u>0.37</u>	<u>47.81</u>	
<u>1005</u>	<u>0.6</u>	<u>7.58</u>	<u>18.89</u>	<u>0.337</u>	<u>-228.4</u>	<u>0.18</u>	<u>1.25</u>	<u>48.35</u>	<u>water has black particles</u>

Purge data continued on next sheet?

### 4. SAMPLING DATA

Method(s):  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Tubing/Rope  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Depth to Water at Time of Sampling: 49.02 Field Filtered?  Yes  No  
 Sample ID: 13307-MW-4B Sample Date: 10/29/13 Sample Time: 1020 # of Containers: 2  
 Duplicate Sample Collected?  Yes  No ID: — # of Containers: —  
 Equipment Blank Collected?  Yes  No ID: — # of Containers: —

#### Geochemical Analyses

Ferrous Iron: \_\_\_\_\_ mg/L  
 DO: \_\_\_\_\_ mg/L  
 Nitrate: \_\_\_\_\_ mg/L  
 Sulfate: \_\_\_\_\_ mg/L  
 Alkalinity: \_\_\_\_\_ mg/L

### 5. COMMENTS

Micro purge method,

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.



WELL ID: MW-6

### 1. PROJECT INFORMATION

Project Number: 141054 Task Number: 060 Area of Concern: \_\_\_\_\_  
 Client: Hillshire Brands Personnel: M  
 Project Location: Smyrna GA Weather: 60° sunny

### 2. WELL DATA

Date Measured: 10-28-13 Time: Am Temporary Well:  Yes  No

Casing Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Screen Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Total Depth of Well: 45 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Static Water: 24.01 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Product: \_\_\_\_\_ feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Length of Water Column: 20.99 feet Well Volume: 3.42 gal Screened Interval (from GS): \_\_\_\_\_  
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

### 3. PURGE DATA

Date Purged: 10-29-13 Time: 0805 Equipment Model(s): \_\_\_\_\_

Purge Method:  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Rope/Tubing  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Volume to Purge (minimum): 3 well volumes or 10.26 gallons  
 Was well purged dry?  Yes  No Pumping Rate: \_\_\_\_\_ gal/min Calibrated?  Yes  No

1. Bluebird In-Situ
2. DRY
3. GeoSub
4. \_\_\_\_\_

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>0805</u>	<u>2.0</u>	<u>6.20</u>	<u>21.03</u>	<u>135.7</u>	<u>31.7</u>	<u>.21</u>	<u>25</u>	<u>26.01</u>	
<u>0815</u>	<u>4.5</u>	<u>6.25</u>	<u>21.18</u>	<u>144</u>	<u>13.50</u>	<u>.41</u>	<u>2.66</u>	<u>26.01</u>	
<u>0820</u>	<u>6.0</u>	<u>6.32</u>	<u>21.53</u>	<u>158</u>	<u>0.00</u>	<u>.41</u>	<u>7.8</u>	<u>26.01</u>	
<u>0825</u>	<u>8.0</u>	<u>6.34</u>	<u>21.42</u>	<u>163</u>	<u>-2.00</u>	<u>.39</u>	<u>5.41</u>	<u>26.01</u>	
<u>0830</u>	<u>10.0</u>	<u>6.33</u>	<u>22.15</u>	<u>163</u>	<u>-3.90</u>	<u>.29</u>	<u>3.00</u>	<u>26.01</u>	
<u>0835</u>	<u>12.0</u>	<u>6.31</u>	<u>22.11</u>	<u>159</u>	<u>-.34</u>	<u>.28</u>	<u>3.89</u>		Purge data continued on next sheet? <input type="checkbox"/>

### 4. SAMPLING DATA

Method(s):  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Tubing/Rope  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Depth to Water at Time of Sampling: \_\_\_\_\_ Field Filtered?  Yes  No  
 Sample ID: 13302-MW6 Sample Date: 10-29-13 Sample Time: 0835 # of Containers: \_\_\_\_\_  
 Duplicate Sample Collected?  Yes  No ID: \_\_\_\_\_ # of Containers: \_\_\_\_\_  
 Equipment Blank Collected?  Yes  No ID: \_\_\_\_\_ # of Containers: \_\_\_\_\_

Geochemical Analyses  
 Ferrous Iron: \_\_\_\_\_ mg/L  
 DO: \_\_\_\_\_ mg/L  
 Nitrate: \_\_\_\_\_ mg/L  
 Sulfate: \_\_\_\_\_ mg/L  
 Alkalinity: \_\_\_\_\_ mg/L

### 5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.



WELL ID: MW-8

### 1. PROJECT INFORMATION

Project Number: 141054 Task Number: 060 Area of Concern: \_\_\_\_\_  
 Client: Hillshire Brands Personnel: JN  
 Project Location: Smyrna GA Weather: Sunny 65°

### 2. WELL DATA

Date Measured: 10/30/13 Time: AM Temporary Well:  Yes  No

Casing Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Screen Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Total Depth of Well: 55 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Static Water: 49.46 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Product: \_\_\_\_\_ feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Length of Water Column: 5.24 feet Well Volume: 0.87 gal Screened Interval (from GS): \_\_\_\_\_  
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

### 3. PURGE DATA

Date Purged: 10/30/13 Time: 1210 Equipment Model(s): \_\_\_\_\_

Purge Method:  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Rope/Tubing  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Volume to Purge (minimum): 3 well volumes or 2.6 gallons  
 Was well purged dry?  Yes  No Pumping Rate: \_\_\_\_\_ gal/min Calibrated?  Yes  No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<del>1220</del>	0	6.58	19.33	0.726	-70.4	5.58	48.7	44.10	water is black/grey color
<del>1230</del>	0.25	6.55	18.97	0.738	-66.2	0.84	29.9	44.19	
<del>1236</del>	0.50	6.52	18.81	0.729	-29.6	0.59	11.7	44.22	
<del>1240</del>	0.75	6.49	18.73	0.725	-13.2	0.58	6.10	44.22	
<del>1245</del>	1.00	6.50	18.71	0.718	-3.0	0.52	3.08	44.22	

Purge data continued on next sheet?

### 4. SAMPLING DATA

Method(s):  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Tubing/Rope  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Depth to Water at Time of Sampling: 44.22 Field Filtered?  Yes  No  
 Sample ID: 13303-MW-8 Sample Date: 10/30/13 Sample Time: 1320 # of Containers: 8  
 Duplicate Sample Collected?  Yes  No ID: 13303-MW-30 # of Containers: 3  
 Equipment Blank Collected?  Yes  No ID: \_\_\_\_\_ # of Containers: \_\_\_\_\_

#### Geochemical Analyses

Ferrous Iron: \_\_\_\_\_ mg/L  
 DO: \_\_\_\_\_ mg/L  
 Nitrate: \_\_\_\_\_ mg/L  
 Sulfate: \_\_\_\_\_ mg/L  
 Alkalinity: \_\_\_\_\_ mg/L

### 5. COMMENTS

FD collected at 1200

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.



# GROUNDWATER SAMPLING FIELD DATA SHEET

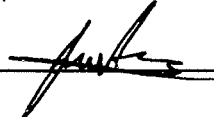
WELL ID: MW-8

### 3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1250	1.25	6.52	18.69	0.710	6.9	0.46	2.97	44.22	
<del>1255</del>	1.50	6.52	18.69	0.703	<del>4.4</del>	0.41	1.95	44.22	ORP = 13.8
1300	1.75	6.51	18.68	0.698	24.4	0.37	0.40	44.22	
<del>1305</del>	2.0	6.50	18.70	0.699	33.4	0.34	0.31	44.22	
1310	2.25	6.52	18.80	0.702	39.4	0.34	0.09	44.22	
<del>1315</del>	2.50	6.50	18.82	0.706	43.5	0.32	0.09	44.22	
<del>1320</del>	2.75	6.51	18.84	0.707	45.0	0.31	0.26	44.22	

Purge data continued on next sheet?

2/2

Signature 



# GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-11

**1. PROJECT INFORMATION**

Project Number: 141054 Task Number: 060 Area of Concern: \_\_\_\_\_  
 Client: Hillshire Brands Personnel: M  
 Project Location: Smyrna GA Weather: 70° overcast

**2. WELL DATA** Date Measured: 10-28-13 Time: Am Temporary Well:  Yes  No

Casing Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Screen Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Total Depth of Well: 38 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Static Water: 24.91 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Product: \_\_\_\_\_ feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Length of Water Column: 13.09 feet Well Volume: 2.13 gal Screened Interval (from GS): \_\_\_\_\_  
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

**3. PURGE DATA** Date Purged: 10-28-13 Time: 1335 Equipment Model(s): \_\_\_\_\_

Purge Method:  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_

Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable

Materials: Rope/Tubing  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable

Volume to Purge (minimum): 3 well volumes or 6.5 gallons

Was well purged dry?  Yes  No Pumping Rate: \_\_\_\_\_ gal/min Calibrated?  Yes  No

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1335	1.0	6.64	20.12	437	-97.11	.11	205	25.36	
1345	2.0	6.49	20.14	368	-60.0	.10	13.9	26.00	
1350	3.5	6.43	19.26	377	-60.8	.05	4.0	26.00	
1355	5.5	6.43	19.40	373	-60.8	.02	2.4	26.00	
1400	8.0	6.43	19.53	374	61.9	.01	0.0	26.00	

Purge data continued on next sheet?

**4. SAMPLING DATA**

Method(s):  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_

Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable

Materials: Tubing/Rope  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable

Depth to Water at Time of Sampling: \_\_\_\_\_ Field Filtered?  Yes  No

Sample ID: 13301-mw-11 Sample Date: 10-28-13 Sample Time: 1400 # of Containers: 2

Duplicate Sample Collected?  Yes  No ID: \_\_\_\_\_ # of Containers: 0

Equipment Blank Collected?  Yes  No ID: \_\_\_\_\_ # of Containers: 0

**Geochemical Analyses**

Ferrous Iron: \_\_\_\_\_ mg/L  
 DO: \_\_\_\_\_ mg/L  
 Nitrate: \_\_\_\_\_ mg/L  
 Sulfate: \_\_\_\_\_ mg/L  
 Alkalinity: \_\_\_\_\_ mg/L

**5. COMMENTS**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature MTE



WELL ID: MW-12

### 1. PROJECT INFORMATION

Project Number: 141054 Task Number: 060 Area of Concern: \_\_\_\_\_  
 Client: Hillshire Brands Personnel: Juan Munoz  
 Project Location: Smyrna GA Weather: Sunny 70°

### 2. WELL DATA

Date Measured: 10/29/13 Time: PM Temporary Well:  Yes  No

Casing Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Screen Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Total Depth of Well: 46 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Static Water: 42.78 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Product: — feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Length of Water Column: 3.22 feet Well Volume: 0.5 gal Screened Interval (from GS): \_\_\_\_\_  
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

### 3. PURGE DATA

Date Purged: 10/29/13 Time: 1315 Equipment Model(s) \_\_\_\_\_

Purge Method:  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Tubing  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Volume to Purge (minimum): 3 well volumes or 1.6 gallons  
 Was well purged dry?  Yes  No Pumping Rate: \_\_\_\_\_ gal/min Calibrated?  Yes  No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1315</u>	<u>0</u>	<u>6.58</u>	<u>19.48</u>	<u>0.328</u>	<u>-125.5</u>	<u>1.71</u>	<u>—</u>	<u>39.95</u>	<u>Water is dark grey</u>
<u>1320</u>	<u>0.25</u>	<u>6.63</u>	<u>18.64</u>	<u>0.323</u>	<u>-133.1</u>	<u>0.54</u>	<u>—</u>	<u>40.01</u>	<u>forbore died, switched with GS.</u>
<u>1325</u>	<u>0.40</u>	<u>6.64</u>	<u>18.72</u>	<u>0.323</u>	<u>-132.9</u>	<u>0.56</u>	<u>35.2</u>	<u>40.01</u>	
<u>1330</u>	<u>0.50</u>	<u>6.64</u>	<u>18.65</u>	<u>0.323</u>	<u>-132.0</u>	<u>0.52</u>	<u>18.9</u>	<u>40.01</u>	
<u>1335</u>	<u>0.70</u>	<u>6.65</u>	<u>18.57</u>	<u>0.322</u>	<u>-134.2</u>	<u>0.47</u>	<u>9.71</u>	<u>40.03</u>	

Purge data continued on next sheet?

### 4. SAMPLING DATA

Method(s):  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Tubing / Rope  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Depth to Water at Time of Sampling: 40.07 Field Filtered?  Yes  No  
 Sample ID: 13302-MW-12 Sample Date: 10/29/13 Sample Time: 1410 # of Containers: 2  
 Duplicate Sample Collected?  Yes  No ID: \_\_\_\_\_ # of Containers: \_\_\_\_\_  
 Equipment Blank Collected?  Yes  No ID: \_\_\_\_\_ # of Containers: \_\_\_\_\_

#### Geochemical Analyses

Ferrous Iron: \_\_\_\_\_ mg/L  
 DO: \_\_\_\_\_ mg/L  
 Nitrate: \_\_\_\_\_ mg/L  
 Sulfate: \_\_\_\_\_ mg/L  
 Alkalinity: \_\_\_\_\_ mg/L

### 5. COMMENTS

not

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.



# GROUNDWATER SAMPLING FIELD DATA SHEET

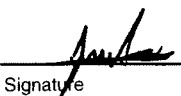
WELL ID:     MW-12    

## 3. PURGE DATA (continued from page 1 )

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1340	0.90	6.65	18.54	0.322	-135.0	0.42	5.81	40.05	
1345	1.00	6.66	18.69	0.322	-135.5	0.41	5.48	40.07	
1350	<del>1.15</del>	6.66	18.73	0.323	-135.9	0.36	3.21	40.07	
1355	1.30	6.66	18.54	0.323	-136.7	0.33	6.12	40.07	
1400	1.45	6.66	18.63	0.323	-136.7	0.31	3.55	40.07	
1405	1.60	6.66	18.56	0.323	-137.6	0.28	3.01	40.07	
<del>1410</del>	<del>1.50</del>								
<del>1415</del>	<del>1.60</del>								

Purge data continued on next sheet?

2/2

  
Signature \_\_\_\_\_

WELL ID: MW-20

### 1. PROJECT INFORMATION

Project Number: 141054 Task Number: 060 Area of Concern: CCWA Property  
 Client: Hillshire Brands Personnel: Ryan Jones  
 Project Location: Smyrna GA Weather: 55°F Rain

### 2. WELL DATA

Date Measured: 10-28-13 Time: 0900 Temporary Well:  Yes  No

Casing Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Screen Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Total Depth of Well: 45 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Static Water: 33.04 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Product: \_\_\_\_\_ feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Length of Water Column: 11.96 feet Well Volume: 2.0 gal Screened Interval (from GS): 35-45  
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

### 3. PURGE DATA

Date Purged: 10-28-13 Time: 10:25 Equipment Model(s)

Purge Method:  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Rope/Tubing  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Volume to Purge (minimum): 3 well volumes or 6 gallons  
 Was well purged dry?  Yes  No Pumping Rate: \_\_\_\_\_ gal/min Calibrated?  Yes  No

1. Instr. - SmartROLL
2. Geo Sub
3. Heron WLM
4. \_\_\_\_\_

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
<u>1035</u>	<u>0.1</u>	<u>7.35</u>	<u>16.50</u>	<u>0.387</u>	<u>0</u>	<u>0.59</u>	<u>86</u>	<u>33.20</u>	
<u>1040</u>	<u>2.5</u>	<u>5.82</u>	<u>16.65</u>	<u>0.062</u>	<u>107.5</u>	<u>6.63</u>	<u>52</u>	<u>33.30</u>	
<u>1045</u>	<u>4.0</u>	<u>5.71</u>	<u>16.65</u>	<u>0.053</u>	<u>95.3</u>	<u>7.07</u>	<u>9.78</u>	<u>33.34</u>	
<u>1050</u>	<u>5.0</u>	<u>5.66</u>	<u>16.67</u>	<u>0.050</u>	<u>95.1</u>	<u>7.23</u>	<u>8.12</u>	<u>33.38</u>	<u>slowed pump</u>
<u>1055</u>	<u>5.5</u>	<u>5.64</u>	<u>16.67</u>	<u>0.048</u>	<u>96.70</u>	<u>7.33</u>	<u>6.26</u>	<u>33.41</u>	

Purge data continued on next sheet?

### 4. SAMPLING DATA

Method(s):  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Tubing/Rope  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Depth to Water at Time of Sampling: 33.45 Field Filtered?  Yes  No  
 Sample ID: 13301-11-20 Sample Date: 10-28-13 Sample Time: 1105 # of Containers: 2  
 Duplicate Sample Collected?  Yes  No ID: \_\_\_\_\_ # of Containers: \_\_\_\_\_  
 Equipment Blank Collected?  Yes  No ID: \_\_\_\_\_ # of Containers: \_\_\_\_\_

#### Geochemical Analyses

Ferrous Iron: \_\_\_\_\_ mg/L  
 DO: \_\_\_\_\_ mg/L  
 Nitrate: \_\_\_\_\_ mg/L  
 Sulfate: \_\_\_\_\_ mg/L  
 Alkalinity: \_\_\_\_\_ mg/L

### 5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.



WELL ID: OW-72A

### 1. PROJECT INFORMATION

Project Number: 141054 Task Number: 060 Area of Concern: \_\_\_\_\_  
 Client: Hillshire Brands Personnel: M  
 Project Location: Smyrna GA Weather: ~70° overcast

### 2. WELL DATA

Date Measured: 10-28-13 Time: Am Temporary Well:  Yes  No

Casing Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Screen Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Total Depth of Well: 135 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Static Water: 75.58 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Product: \_\_\_\_\_ feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Length of Water Column: 59.42 feet Well Volume: 9.92 gal Screened Interval (from GS): \_\_\_\_\_  
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

### 3. PURGE DATA

Date Purged: 10-29-13 Time: 1110 Equipment Model(s): \_\_\_\_\_

Purge Method:  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Rope/Tubing  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Volume to Purge (minimum): 3 well volumes or 30 gallons  
 Was well purged dry?  Yes  No Pumping Rate: \_\_\_\_\_ gal/min Calibrated?  Yes  No

1. Blackthorn YS1
2. DRT
3. Geosub
4. \_\_\_\_\_

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<del>1115</del>	<del>2.0</del>	<del>6.22</del>	<del>19.05</del>	<del>245</del>	<del>-167.3</del>	<del>.09</del>	<del>28</del>	<del>91.00</del>	
<del>1120</del>	<del>6.0</del>	<del>6.17</del>	<del>19.18</del>	<del>329</del>	<del>-128.0</del>	<del>.07</del>	<del>21</del>	<del>90.82</del>	
<del>1125</del>	<del>11.0</del>	<del>6.15</del>	<del>19.48</del>	<del>369</del>	<del>-107</del>	<del>.06</del>	<del>11</del>	<del>90.33</del>	<u>Drawdown stabilized</u>
<del>1130</del>	<del>14.0</del>	<del>6.14</del>	<del>19.70</del>	<del>390</del>	<del>-91.3</del>	<del>.04</del>	<del>13.0</del>	<del>90.33</del>	
<del>1135</del>	<del>17.0</del>	<del>6.12</del>	<del>19.76</del>	<del>403</del>	<del>-83</del>	<del>.04</del>	<del>10</del>	<del>90.3</del>	

Purge data continued on next sheet?

### 4. SAMPLING DATA

Method(s):  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Tubing/Rope  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Depth to Water at Time of Sampling: \_\_\_\_\_ Field Filtered?  Yes  No  
 Sample ID: 13302-OW-BA Sample Date: 10-29-13 Sample Time: 1330 # of Containers: 2  
 Duplicate Sample Collected?  Yes  No ID: 13302-EB # of Containers: 2  
 Equipment Blank Collected?  Yes  No ID: ↓ # of Containers: 2

#### Geochemical Analyses

Ferrous Iron: \_\_\_\_\_ mg/L  
 DO: \_\_\_\_\_ mg/L  
 Nitrate: \_\_\_\_\_ mg/L  
 Sulfate: \_\_\_\_\_ mg/L  
 Alkalinity: \_\_\_\_\_ mg/L

### 5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.



# GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: OW-72A

## 3. PURGE DATA (continued from page \_\_\_\_\_)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1140	20.0	6.12	20.55	409	-68	.06			
		1140 Pump shuts down, called AIR & Tried to trouble shoot it. They will bring me a New pump							
<del>1330</del>		pumping again							
<del>1335</del>	20.0	6.13	19.39	376	-56	.06	1.30	91.00	
1340	23	6.12	19.56	377	-53	.04	.79	91.00	
<del>1345</del>	25	6.11	19.48	383	-45.7	.03	.83	91.00	
1350	28	6.11	19.43	389	-41.7	.03	.22	91.00	
<del>1355</del>	32	6.11	19.39	394	-37.40	.02	.17	91.00	
<del>1400</del>	35	6.10	19.35	396	-34.00	.02	.00	91.00	will pump
<del>1405</del>	37	6.10	19.30	394	-33.10	.01	.00	91.00	extra to ensure
1410	40	6.10	19.30	396	-33.00	.01	.00	91.00	due to pump shut off
Sample 1410 All parameters									

Purge data continued on next sheet?

Signature



# GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: OW-74A

## 1. PROJECT INFORMATION

Project Number: 141054 Task Number: 060 Area of Concern: \_\_\_\_\_  
 Client: Hillshire Brands Personnel: M  
 Project Location: Smyrna GA Weather: \_\_\_\_\_

## 2. WELL DATA

Date Measured: 10-26-13 Time: AM Temporary Well:  Yes  No

Casing Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Screen Diameter: 2 inches Type:  PVC  Stainless  Galv. Steel  Teflon®  Other: \_\_\_\_\_  
 Total Depth of Well: 81 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Static Water: 17.66 feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Depth to Product: \_\_\_\_\_ feet From:  Top of Well Casing (TOC)  Top of Protective Casing  Other: \_\_\_\_\_  
 Length of Water Column: 63.34 feet Well Volume: 10.32 gal Screened Interval (from GS): \_\_\_\_\_

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

## 3. PURGE DATA

Date Purged: 10-29-13 Time: 0940

Equipment Model(s)

Purge Method:  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Rope/Tubing  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Volume to Purge (minimum): \_\_\_\_\_ well volumes or 31 gallons  
 Was well purged dry?  Yes  No Pumping Rate: \_\_\_\_\_ gal/min

- Bluetooth Equipment
- DRT
- Geosun b
- \_\_\_\_\_

Calibrated?  Yes  No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<del>0945</del>	3.0	5.85	16.31	115	37.3	3.18	41	17.89	slight drawdown
<del>0950</del>	8.0	5.76	17.15	206	39.8	1.90	76	19.89	appears to
<del>0955</del>	11.0	5.72	17.48	227	21.3	.50	64	19.89	be 15 gpm
1000	16.0	5.70	19.60	225	13.8	.15	16	19.89	
<del>1005</del>	20.0	5.70	19.88	239	-2.9	.10	11	19.89	
1010	24.0	5.69	19.32	246	-70.0	.13	12.1		

Purge data continued on next sheet?

## 4. SAMPLING DATA

Method(s):  Bailer, Size: \_\_\_\_\_  Bladder Pump  2" Sub. Pump  4" Sub. Pump  
 Centrifugal Pump  Peristaltic Pump  Inertial Lift Pump  Other: \_\_\_\_\_  
 Materials: Pump/Bailer  Polyethylene  Stainless  PVC  Teflon®  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Materials: Tubing/Rope  Polyethylene  Polypropylene  Teflon®  Nylon  Other: \_\_\_\_\_  
 Dedicated  Prepared Off-Site  Field-Cleaned  Disposable  
 Depth to Water at Time of Sampling: \_\_\_\_\_ Field Filtered?  Yes  No  
 Sample ID: 13302-OW-74A Sample Date: 10-29-13 Sample Time: 1025 # of Containers: 2  
 Duplicate Sample Collected?  Yes  No ID: \_\_\_\_\_ # of Containers: \_\_\_\_\_  
 Equipment Blank Collected?  Yes  No ID: \_\_\_\_\_ # of Containers: \_\_\_\_\_

### Geochemical Analyses

Ferrous Iron: \_\_\_\_\_ mg/L  
 DO: \_\_\_\_\_ mg/L  
 Nitrate: \_\_\_\_\_ mg/L  
 Sulfate: \_\_\_\_\_ mg/L  
 Alkalinity: \_\_\_\_\_ mg/L

## 5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

1 of 2



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: OW-74A

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
<del>1015</del>	27.0	5.70	19.66	245	-231	.13	9.89	19.91	
<del>1020</del>	31.0	5.69	19.52	245	-210	.14	8.70	19.91	
<del>1025</del>	35.0	5.69	19.78	245	-189	.15	6.13	19.91	
Sample 1025									

2 of 2

Purge data continued on next sheet?   
Signature [Handwritten Signature]

## **Appendix C: Current and Historical Purging Data** *(on CD Rom)*

---

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
MW-1	Mar/96	2	1.0		53.3 F	6.60		0.002
		4	2		55.8 F	6.59		0.002
		6	3		60.3 F	6.59		0.002
	Nov/97	0	0	195	21 C	7.50		0.260
		20	10	48	21 C	6.40		0.190
		30	15	19.8	21 C	5.60		0.200
		40	20	28.9	21 C	5.80		0.200
		45	22.5	19.5	21 C	5.80		0.200
	Dec/98	1	0.5		61.6 F	6.17		2.300
		2.5	1.25		65.8 F	6.23		0.402
		3.5	1.75		65.6 F	6.36		0.263
		6	3		66.1 F	6.34		0.253
		8	4		66.3 F	6.32		0.251
	Apr-01	2	1	19	22.9 C	5.98	1.62	0.216
		4	2	10	22.8 C	6.07	0.34	0.203
		6	3	5	22.7 C	6.06	0.29	0.200
	May-02	2	1	369	21.2 C	5.26	0.05	0.208
		4	2	999	21.2 C	4.79	0.07	0.204
		6	3	243	21.2 C	5.14	0.06	0.204
	Sep-03	1.4	0.7	122	21.6 C	6.37	1.27	0.187
		2.8	1.4	74	21.5 C	6.18	0.63	0.185
		4	2	56.3	21.8 C	6.00	0.74	0.176
		5	2.5	17.4	21.8 C	5.96	1.02	0.172
		5.5	2.8	8.5	21.8 C	5.98	1.02	0.171
MW-1R	May-04	1	1.08	534	25.72 C	6.38	0.84	0.241
		2	2.15	139	26.85 C	6.33	0.64	0.234
		2.5	2.69	73.4	27.57 C	6.31	0.54	0.225
		4	4.30	29.1	27.87 C	6.28	0.60	0.220
		5	5.38	8.4	27.29 C	6.28	0.94	0.219
	Jul-06	4	4.30	106	26.93 C	7.67	2.15	0.290
		5	5.38	92	26.54 C	7.23	2.56	0.350
		6	6.45	72	26.41 C	7.41	2.62	0.360
		7	7.53	44	26.51 C	7.34	2.60	0.390
		9	9.68	31	26.48 C	7.39	2.59	0.360
	Apr-07	0.1	0.09	364.3	21.17 C	6.46	0.87	0.395
		1	0.92	88.5	21.3 C	6.62	0.42	0.392
		1.2	1.10	18.4	21.26 C	6.65	0.45	0.391
		1.5	1.38	12.5	21.33 C	6.64	0.46	0.391
		3	2.75	8.5	21.69 C	6.69	0.43	0.390
		3.3	3.03	6.3	21.89 C	6.70	0.42	0.388
		Oct-07 <sup>a</sup>	0.1	0.14	above range	18.16 C	6.74	3.30
	1	1.41	630	23.67 C	6.59	0.94	0.365	
	1.25	1.76	560	22.98 C	6.61	0.69	0.369	
	1.3	1.83	340	22.52 C	6.60	0.44	0.371	
	1.37	1.93	300	22.28 C	6.61	0.33	0.376	
	1.45	2.04	400	24.85 C	6.62	0.27	0.374	
	2.2	3.10	1080	26.07 C	6.57	0.19	0.364	
	2.57	3.62	373	23.45 C	6.51	1.89	0.358	
	2.7	3.80	223	24.04 C	6.53	2.64	0.356	
	2.8	3.94	871	24.97 C	6.53	2.78	0.355	
	2.9	4.08	436	24.86 C	6.54	2.86	0.353	
	Apr-08 <sup>a</sup>	0.5	0.47	338	22.72 C	6.32	0.46	0.468
		1.25	1.17	145	22.91 C	6.39	0.57	0.464
		1.75	1.64	125	23.75 C	6.41	0.37	0.465
		2.25	2.10	74.3	24.27 C	6.47	0.31	0.469
		2.75	2.57	78.6	24.03 C	6.43	0.23	0.466
		3.25	3.04	77.9	24.79 C	6.46	0.31	0.465
		3.75	3.50	99.8	24.21 C	6.43	0.43	0.463
		4.25	3.97	265	24.07 C	6.45	0.62	0.463
		4.75	4.44	386	23.92 C	6.46	0.60	0.463
		5	4.67	230	23.9 C	6.39	0.46	0.463
		5.25	4.91	180	23.58 C	6.44	0.61	0.462
		5.5	5.14	183	23.73 C	6.45	0.16	0.463
	Oct-08 <sup>a</sup>	0.1	0.15	276	21.78 C	6.18	1.11	0.435
		0.2	0.31	232	22 C	6.03	1.15	0.435
		0.25	0.38	207	22.23 C	5.97	1.14	0.435
		0.3	0.46	131	22.32 C	5.93	1.11	0.435
		0.4	0.62	78.1	22.35 C	5.90	1.06	0.434
		0.5	0.77	44.8	22.41 C	5.89	1.02	0.433
		0.6	0.92	43.6	22.24 C	5.87	0.97	0.433
		0.7	1.08	37.6	22.07 C	5.86	0.90	0.432
		0.77	1.18	42.1	21.8 C	5.84	0.86	0.431
		0.85	1.31	43.2	21.24 C	5.81	0.82	0.430
		0.95	1.46	45.5	20.99 C	5.80	0.80	0.431
		1.05	1.62	42.7	20.24 C	5.81	0.75	0.429
		1.15	1.77	41.9	20 C	5.79	0.70	0.429
		1.25	1.92	43	19.72 C	5.79	0.69	0.429
		1.35	2.08	40.9	19.62 C	5.77	0.65	0.427
	1.45	2.23	36.7	19.18 C	5.76	0.64	0.426	

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-1R		1.55	2.38	37.6	19.04 C	5.75	0.64	0.424	
		1.65	2.54	42.5	18.99 C	5.76	0.65	0.424	
		1.75	2.69	31.5	18.97 C	5.75	0.64	0.423	
		1.85	2.85	33.4	18.98 C	5.75	0.63	0.423	
		1.9	2.92	32.7	18.97 C	5.75	0.63	0.422	
		1.95	3.00	32.5	18.97 C	5.76	0.62	0.422	
	Apr-09 <sup>a</sup>		0.1	0.10	506	21.91 C	6.49	1.92	0.318
			0.3	0.31	733	22.59 C	6.49	0.57	0.324
			0.5	0.52	181	23.38 C	6.45	0.44	0.320
			0.7	0.72	85.3	23.74 C	6.46	0.47	0.320
			1	1.03	63.5	23.47 C	6.43	0.59	0.321
			1.4	1.44	39.2	24.00 C	6.42	0.67	0.322
			1.7	1.75	35.3	23.81 C	6.41	0.73	0.323
			1.9	1.96	24.6	23.81 C	6.40	0.73	0.324
			2.1	2.16	321	24.33 C	6.41	0.78	0.325
			2.3	2.37	223	24.05 C	6.40	0.89	0.324
			2.7	2.78	298	25.03 C	6.45	1.45	0.325
			3.2	3.30	210	24.13 C	6.42	0.45	0.325
			3.75	3.87	145	23.96 C	6.43	0.30	0.327
			4.5	4.64	198	24.91 C	6.45	0.41	0.332
			5	5.15	225	24.23 C	6.40	1.11	0.325
			5.05	5.21	390	18.85 C	6.48	3.08	0.345
			5.3	5.46	305	19.56 C	6.42	4.81	0.322
			5.4	5.57	213	19.14 C	6.40	4.31	0.320
			5.5	5.67	163	18.32 C	6.38	4.17	0.318
			5.55	5.72		17.70 C	6.37	7.13	0.318
			5.6	5.77	154	17.38 C	6.36	6.78	0.318
			5.65	5.82		17.35 C	6.35	3.33	0.317
			5.65	5.82	115	17.50 C	6.35	3.35	0.318
			5.7	5.88	86.4	17.60 C	6.35	3.29	0.317
			5.75	5.93	69.2	17.77 C	6.35	3.08	0.317
			5.8	5.98	58.7	17.85 C	6.35	2.89	0.317
			5.8	5.98	55.6	17.99 C	6.35	2.86	0.317
			5.8	5.98	59.1	18.02 C	6.35	2.87	0.317
	Oct-09		0.25	0.22	183.5	21.37 C	6.74	0.66	0.240
			1	0.86	52.5	21.72 C	6.73	0.57	0.222
			1.35	1.16	30.4	21.90 C	6.66	0.50	0.222
			1.6	1.38	21.5	21.94 C	6.65	0.41	0.220
			1.9	1.64	12.8	22.01 C	6.65	0.36	0.221
			2.05	1.77	10.06	22.07 C	6.64	0.33	0.220
			2.2	1.90	9.96	22.11 C	6.65	0.33	0.220
	Apr-10		0.5	0.39	179	21.56	5.89	0.52	0.194
			1	0.78	100.8	21.93	5.96	0.56	0.193
			1.5	1.17	35.3	22.13	6.06	0.50	0.194
			2	1.56	24.5	22.37	6.08	0.39	0.193
		2.5	1.95	8.78	22.64	6.08	0.32	0.185	
		3	2.34	7.94	22.45	6.05	0.29	0.176	
		3.5	2.73	6.66	22.50	6.00	0.27	0.175	
		4	3.13	17.1	22.54	6.01	0.27	0.172	
		4.5	3.52	40.6	22.59	5.96	0.28	0.176	
		4.75	3.71	60.2	22.95	6.03	0.24	0.177	
		5	3.91	55.9	23.05	6.04	0.63	0.184	
		5.5	4.30	28.1	22.64	6.10	0.37	0.193	
		5.75	4.49	23.8	22.75	6.11	0.35	0.194	
		5.9	4.61	23	22.77	6.13	0.37	0.194	
Oct-10		0.5	0.5	5.85	22.73	6.28	0.39	0.298	
		4.25	3.9	384	39.61	6.23	0.59	0.258	
		5.25	4.9	31.3	24.85	6.29	2.96	0.252	
		5.5	5.1	24.1	25.04	6.27	3.28	0.252	
		5.75	5.3	29.8	24.34	6.25	3.37	0.252	
Apr-11 <sup>a</sup>		0.75	0.6	33.1	22.49	6.31	3.08	0.221	
		1.5	1.3	40.2	23.56	6.31	1.72	0.221	
		3.5	2.9	188	22.96	6.34	1.51	0.213	
		4.5	3.8	61.8	24.21	6.33	2.34	0.205	
		5	4.2	113	24.94	6.33	2.08	0.212	
		5.25	4.4	33.7	23.78	6.38	2.05	0.217	
		6	5.0	22.1	23.37	6.39	1.00	0.227	
		6.25	5.2	20.9	23.58	6.37	1.02	0.227	
		6.5	5.4	28.1	24.04	6.36	1.11	0.225	
		6.75	5.6	29.1	24.1	6.39	1.45	0.225	
Oct-11		0.25	0.3	108	22.03	5.63	1.58	0.266	
		0.75	0.9	69.5	21.88	5.93	0.61	0.262	
		1.25	1.5	109	22.00	5.96	0.56	0.261	
		1.5	1.8	301	22.16	6.15	0.82	0.262	
		1.75	2.1	594	22.98	6.25	0.7	0.266	
Apr-12		0.5	0.6	124	21.86	6.35	1.17	0.254	
		1	1.1	120	22.06	6.33	1.30	0.254	
		1.25	1.4	117	22.25	6.34	1.32	0.254	
		2	2.2	18.6	22.53	6.32	1.03	0.253	

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-1R		2.5	2.8	11.1	22.59	6.32	0.77	0.252	
		3	3.3	17.8	22.55	6.31	0.61	0.252	
		3.25	3.6	49.4	22.55	6.30	0.55	0.252	
		3.5	3.9	33.3	22.23	6.26	0.54	0.251	
	Oct-12	0.25	0.4	364	24.35	6.23	0.81	0.278	
		0.5	0.7	64.2	24.45	6.27	0.51	0.275	
		0.75	1.1	19.1	25.26	6.48	0.39	0.274	
		1	1.4	9.73	25.06	6.4	0.42	0.274	
		1.25	1.8	9.6	25.87	6.43	0.35	0.273	
		1.5	2.1	11.4	26.23	6.4	0.38	0.273	
		1.75	2.5	31.2	26.1	6.4	0.36	0.273	
		2.25	3.2	29.7	26.31	6.39	0.43	0.273	
		2.5	3.5	40.25	26.44	6.42	0.35	0.273	
		2.75	3.9	36.4	25.9	6.42	0.4	0.274	
	Apr-13	0.5	0.5	178	22.31	6.19	0.42	0.181	
		1.50	1.6	41.8	22.65	6.2	0.210	0.176	
		2.00	2.2	29.4	22.72	6.19	0.190	0.177	
		2.75	3.0	53.1	23.14	6.19	0.380	0.176	
		3.00	3.2	205	23.65	6.19	0.740	0.175	
		3.75	4.0	20.6	24.73	6.17	0.200	0.176	
		4.25	4.6	14.7	23.86	6.16	0.140	0.179	
		5.00	5.4	63	24.03	6.14	0.130	0.178	
	MW-2	Mar-96	3	1.2		48.3 F	5.66		0.265
			6	2.3		54.7 F	6.01		0.305
			8	3.1		57 F	6.05		0.310
Nov-97		0	0.0	1080	17 C	6.70		0.270	
		20	7.7	157	16 C	6.00		0.340	
		30	11.5	21	16 C	6.10		0.370	
		35	13.5	9.71	16 C	6.20		0.410	
Dec-98		1	0.4		59.8 F	5.77		5.490	
		3	1.2		63.3 F	5.74		0.404	
		5	1.9		64.1 F	5.75		0.324	
		7	2.7		64.3 F	5.84		0.302	
Apr-01		3	1.2	4	19.9 C	5.28	0.45	0.200	
		6	2.3	4	19.6 C	5.23	1.27	0.187	
		9	3.5	3	19.6 C	5.25	1.43	0.187	
May-02		1	0.4	98	19.1 C	5.35	0.24	0.402	
		2	0.8	67	19.2 C	5.73	0.52	0.512	
		3	1.2	23	19.2 C	5.58	0.51	0.541	
Sep-03 <sup>b</sup>		2.6	1.0	386	19.7 C	5.36	7.29	0.188	
		5.2	2.0	113	20.0 C	5.70	3.91	0.222	
		7.8	3.0	52.8	20.0 C	5.94	2.69	0.235	
		11	4.2	29.8	20.5 C	6.17	1.38	0.263	
		13	5.0	43.2	20.0 C	6.20	0.73	0.264	
		15	5.8	35.9	20.3 C	6.23	0.83	0.278	
		17	6.5	47.2	19.5 C	6.22	0.95	0.262	
		18	6.9	56.5	19.4 C	6.27	1.00	0.285	
May-04		1	0.6	37.7	22.11 C	5.51	0.85	0.180	
		1.5	0.9	22.2	24.79 C	5.58	1.16	0.194	
		2	1.2	18.6	25.78 C	5.61	0.98	0.204	
		2.5	1.5	11.4	27.32 C	5.64	1.17	0.216	
		3	1.8	10.9	27.38 C	5.66	1.05	0.222	
		3.5	2.1	8.2	26.25 C	5.76	1.02	0.232	
		4	2.5	18.7	22.39 C	5.94	2.05	0.323	
		4.5	2.8	15.6	23.4 C	5.92	1.85	0.316	
		5	3.1	9.5	26.51 C	5.92	2.60	0.318	
		5.5	3.4	8.9	27.22 C	5.97	1.96	0.318	
		6	3.7	8.5	26.94 C	5.96	1.95	0.318	
Jul-06		2	1.2	164	20.67 C	7.17	0.35	0.193	
		4	2.5	75.3	21.85 C	7.17	0.24	0.218	
		6	3.7	37.2	21.4 C	7.19	0.42	0.266	
		8	4.9	24.8	22.17 C	7.15	0.49	0.283	
		10	6.1	9.9	22.38 C	7.18	0.75	0.278	
Apr-07		0.5	0.5	417	19.25 C	5.91	1.31	0.187	
		1	1.0	159	19.44 C	6.08	0.45	0.212	
		1.5	1.5	77.4	19.36 C	6.13	0.39	0.222	
		2	2.1	40.2	19.54 C	6.26	0.52	0.270	
		2.5	2.6	31.7	19.63 C	6.28	0.40	0.275	
		4	4.1	17.8	19.54 C	6.31	0.71	0.303	
		7.5	7.7	86.4	21.1 C	6.37	4.40	0.322	
		10	10.3	64.5	20.71 C	6.40	4.67	0.334	
		11	11.3	35.3	21.09 C	6.33	3.65	0.318	
	11.25	11.6	21.3	21.07 C	6.33	3.62	0.318		
	12	12.4	12.5	20.97 C	6.34	3.81	0.324		
	12.25	12.6	8.3	20.83 C	6.34	3.73	0.325		
Oct-07	0.25	0.3	347.0	17.51 C	5.91	1.68	0.235		
	0.50	0.6	231.0	18.01 C	5.72	1.36	0.241		
	0.75	0.9	336.0	17.83 C	5.78	2.04	0.257		
	1.00	1.1	153.0	17.92 C	5.81	4.02	0.269		

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm		
MW-2	Oct-07	1.50	1.7	401.0	17.72 C	5.91	1.56	0.287		
		2.00	2.3	326.0	17.96 C	5.93	1.31	0.323		
		2.50	2.9	305.0	18.29 C	5.95	2.26	0.343		
		2.75	3.2	13.9	18.38 C	5.84	3.31	0.320		
		3.50	4.0	21.3	18.35 C	5.83	2.45	0.319		
		3.75	4.3	24.1	18.18 C	5.87	1.95	0.343		
		4.00	4.6	20.6	18.25 C	5.89	1.95	0.349		
		4.50	5.2	16.8	18.13 C	5.89	1.75	0.354		
		Apr-08 <sup>a</sup>	Apr-08 <sup>a</sup>	0.00	0.0	56.2	17.21 C	5.56	1.47	0.239
				0.45	0.4	62.5	17.84 C	5.65	1.31	0.210
1.00	0.9			83.3	17.83 C	5.66	0.75	0.207		
1.25	1.2			83.3	17.76 C	5.67	0.67	0.208		
1.70	1.6			68.6	17.74 C	5.70	0.50	0.210		
2.00	1.9			58.2	17.76 C	5.72	0.46	0.214		
2.30	2.1			38.5	17.93 C	5.84	0.35	0.232		
2.80	2.6			24.7	18.06 C	5.92	0.31	0.246		
3.30	3.1			16.8	18.24 C	5.97	0.29	0.252		
3.35	3.1			14.4	18.09 C	6.00	0.32	0.256		
3.40	3.1			11.6	18.13 C	5.99	0.33	0.259		
3.50	3.2			9.31	18.04 C	6.02	0.28	0.262		
Oct-08	Oct-08			0.20	1.0	198.0	14.52 C	6.04	4.22	0.255
				0.40	2.0	81.6	15.22 C	6.15	3.49	0.249
				0.60	3.0	201.0	16.6 C	6.26	3.94	0.258
		0.80	4.0	198.0	16.1 C	6.22	3.62	0.274		
		1.00	5.0	211.0	16.22 C	6.25	2.58	0.290		
Apr-09 <sup>a</sup>	Apr-09 <sup>a</sup>	0.00	0.0		16.53 C	5.85	3.30	0.194		
		0.15	0.1	46.2	16.45 C	5.80	3.03	0.192		
		0.20	0.2	32.1	16.35 C	5.80	2.87	0.191		
		0.25	0.2	24.7	16.19 C	5.75	2.81	0.190		
		0.30	0.2	20.2	16.24 C	5.74	2.73	0.189		
		0.35	0.3	16.3	16.34 C	5.73	2.73	0.189		
		0.40	0.3	14.9	16.39 C	5.74	2.50	0.190		
		0.45	0.3	12.3	16.46 C	5.74	2.42	0.192		
		0.50	0.4	10.3	16.82 C	5.76	2.34	0.194		
		0.50	0.4	10.2	17.04 C	5.76	2.33	0.195		
		0.55	0.4	9.43	17.31 C	5.78	2.38	0.195		
		Oct-09 <sup>a</sup>	Oct-09 <sup>a</sup>	0.25	0.1	346.0	18.00 C	5.53	7.73	0.181
				0.60	0.3	262.0	18.04 C	5.40	1.80	0.184
				1.00	0.6	158.3	17.72 C	5.57	1.17	0.193
				1.50	0.8	194.0	17.97 C	5.61	1.00	0.195
2.00	1.1			191.0	17.77 C	5.66	0.86	0.207		
2.35	1.3			211.0	18.49 C	5.69	0.78	0.217		
3.00	1.7			199.0	18.09 C	5.72	0.79	0.212		
3.35	1.9			197.0	18.31 C	5.86	0.69	0.221		
3.75	2.1			205.0	18.14 C	5.78	0.68	0.226		
4.25	2.4			192.0	18.52 C	5.86	0.71	0.235		
4.39	2.5			165.0	17.55 C	5.87	0.66	0.238		
4.55	2.6			109.0	18.24 C	5.90	0.50	0.247		
5.00	2.8			149.0	17.93 C	5.91	0.47	0.252		
5.25	3.0			63.2	17.39 C	5.94	0.57	0.257		
5.65	3.2			43.7	18.48 C	6.01	0.52	0.257		
6.15	3.5			35.7	17.61 C	5.84	0.62	0.257		
6.25	3.5			32.4	17.07 C	5.95	0.75	0.262		
6.35	3.6			29.5	17.43 C	6.02	0.57	0.264		
6.50	3.7			23.5	17.28 C	5.97	0.69	0.267		
7.10	4.0			48.5	18.11 C	6.19	0.88	0.265		
7.35	4.2			17.9	17.81 C	5.95	1.05	0.263		
7.50	4.2			14.6	17.38 C	5.94	0.76	0.267		
8.00	4.5			38.5	18.60 C	6.17	0.63	0.271		
8.30	4.7			115.0	18.50 C	6.07	0.74	0.264		
8.75	4.9			102.5	18.75 C	6.09	1.02	0.259		
8.95	5.1	110.1	17.99 C	6.01	1.08	0.261				
9.25	5.2	91.5	19.06 C	6.14	0.59	0.269				
9.55	5.4	109.7	17.91 C	5.80	0.77	0.266				
10.00	5.6	55.9	19.02 C	6.17	0.63	0.273				
10.10	5.7	142.5	18.89 C	6.14	0.95	0.261				
10.15	5.7	152.3	18.18 C	6.03	0.95	0.258				
10.50	5.9	285.0	19.15 C	6.02	0.69	0.265				
Apr-10 <sup>a</sup>	Apr-10 <sup>a</sup>	0.50	0.2	above range	17.76	5.42	2.30	0.170		
		1.50	0.6	above range	17.91	5.49	1.92	0.170		
		2.00	0.8	above range	18.06	5.57	1.69	0.173		
		3.00	1.1	764.0	18.04	5.58	1.61	0.174		
		3.75	1.4	315.0	18.57	5.59	1.31	0.175		
		4.50	1.7	351.0	18.52	5.61	1.60	0.177		
		5.50	2.1	346.0	18.60	5.62	1.81	0.180		
		6.50	2.5	216.0	18.69	5.66	1.86	0.184		
		7.50	2.8	151.0	18.84	5.67	2.04	0.188		
		8.50	3.2	101.7	18.87	5.69	2.32	0.194		

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm		
MW-2	Apr-10 <sup>a</sup>	9.50	3.6	102.4	18.67	5.72	3.19	0.196		
		11.00	4.2	137.0	18.88	5.74	4.24	0.201		
		12.00	4.5	109.3	18.91	5.75	16.07	0.203		
		13.00	4.9	150.0	18.92	5.71	18.42	0.194		
		14.00	5.3	140.0	18.94	5.85	5.77	0.218		
		15.00	5.7	262.0	18.91	5.80	13.94	0.213		
		16.00	6.0	98.6	19.26	5.85	14.03	0.218		
		17.00	6.4	37.5	19.27	5.85	14.55	0.224		
		17.50	6.6	23.0	19.18	5.85	14.91	0.223		
		18.00	6.8	18.2	19.10	5.85	13.60	0.222		
		18.50	7.0	20.1	19.07	5.86	14.44	0.221		
		Oct-10	0	0	0.0	447	17.77	5.15	3.11	0.177
				1.25	1.5	220	17.41	5.44	1.72	0.168
				2.2	2.6	53.8	17.86	5.63	1.01	0.184
				3.25	3.8	28.5	18.03	5.77	0.59	0.200
				4	4.7	21.5	18.22	5.83	0.49	0.206
				4.15	4.9	21.8	18.28	5.85	0.46	0.208
				4.3	5.1	21.6	18.32	5.86	0.46	0.208
Apr-11 <sup>a</sup>	0.5			0.5	0.4	344	19.12	5.65	1.41	0.180
				2.5	2.0	140	19.26	5.71	1.89	0.177
				3.5	2.8	124	19.31	5.78	1.64	0.184
		4.2	3.4	165	19.95	5.82	1.26	0.193		
		5	4.0	64.8	19.7	5.84	1.34	0.199		
		5.75	4.6	48.4	20.01	5.79	1.77	0.205		
		6.25	5.0	38.8	20.22	5.72	1.94	0.209		
		7.5	6.0	39.6	20.06	5.75	2.95	0.216		
Oct-11	0.25	0.25	0.9	319	18.62	5.92	1.69	0.183		
		0.5	1.9	233	18.78	6.12	0.94	0.199		
		0.6	2.2	221	19.00	6.14	0.77	0.212		
		0.7	2.6	208	18.98	6.22	0.74	0.219		
		0.8	3.0	188	19.31	6.31	0.72	0.228		
		0.9	3.3	146	20.05	6.37	0.59	0.234		
		1	3.7	109	20.01	6.37	0.6	0.237		
		Apr-12	0.75	0.75	0.7	59.8	20.59	5.05	1.44	0.173
				2	2.0	53.7	19.79	5.59	0.49	0.223
				3	2.9	74.8	19.37	5.61	0.41	0.246
4	3.9			210	19.53	5.99	0.36	0.278		
Oct-12	0.75	0.75	3.2	185	20.56	6.25	3.88	0.391		
		1.75	7.4	230	20.35	6.20	4.83	0.383		
		2.35	10.0	509	22.72	6.59	2.96	0.383		
		2.55	10.9	600	24.22	6.63	3.56	0.383		
		2.7	11.5	815	25.3	6.65	3.25	0.387		
		2.85	12.1	ABD	26.03	6.65	3.14	0.387		
		2.95	12.6	ABD	26.48	6.65	3.34	0.389		
		3.1	13.2	713	26.75	6.66	3.88	0.393		
		3.25	13.8	ABD	26.9	6.67	3.88	0.396		
		3.3	14.0	-	26.9	6.66	3.95	0.396		
		3.35	14.3	ABD	26.7	6.65	4.02	0.397		
		Apr-13	0.25	0.25	1.1	132	18.1	5.16	3.08	0.162
0.75	3.2			116	18.61	5.52	2.36	0.161		
1	4.3			58.4	18.63	5.54	2.11	0.158		
1.25	5.3			43.3	18.66	5.54	1.32	0.156		
1.75	7.4			39.2	18.65	5.54	1.2	0.155		
2	8.5			24.8	18.61	5.58	0.98	0.158		
2.25	9.6			29.1	18.87	5.59	0.82	0.166		
2.5	10.6			24.5	19.12	5.68	0.67	0.176		
2.75	11.7			32	18.76	5.89	0.55	0.187		
3.25	13.8			31.3	19.05	5.9	0.53	0.206		
4	17.0			38	18.75	6.05	0.69	0.227		
5	21.3			-	19.02	5.8	1.11	0.212		
Oct-13	0			0	0.0	354	17.73	5.52	2.23	0.138
				0.5	2.1	116	17.76	5.60	1.27	0.133
				1	4.3	64.4	17.76	5.65	1.10	0.138
		1.5	6.4	30.5	17.78	5.69	1.02	0.142		
		2	8.5	15.6	17.81	5.73	0.94	0.145		
		2.5	10.6	27.1	17.80	5.77	0.87	0.148		
		3	12.8	31.7	17.84	5.78	0.85	0.151		
		3.5	14.9	28.7	17.83	5.81	0.80	0.154		
		4	17.0	23.1	17.81	5.83	0.75	0.156		
		4.5	19.1	22.1	17.00	5.85	0.75	0.158		
		5	21.3	14.9	17.80	5.87	0.67	0.159		
		5.5	23.4	13.9	17.77	5.88	0.65	0.160		

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-3		6	25.5	9.48	17.79	5.89	0.61	0.161	
	Mar-96	1.5	1	18.87	50.4 F	6.75		0.131	
		3	2	18.91	56.8 F	6.88		0.153	
		5	3.3	18.88	57.5 F	6.92		0.150	
	Nov-97	1	0.7	610	17 C	5.80		0.130	
		3	2	97.2	18 C	6.00		0.130	
		7	4.7	47.2	18 C	6.00		0.130	
		14	9.3	22.8	18 C	6.10		0.130	
		20	13.3	28.2	18 C	6.10		0.130	
	Dec-98	1	0.7		62.2 F	6.08		3.640	
		2	1.3		64.9 F	6.38		0.325	
		3.5	2.3		65.3 F	6.45		0.207	
		5	3.3		65 F	6.44		0.301	
		6	4.0		64.9 F	6.42		0.277	
	Apr-01	2	1.3	58	20.6 C	5.64	6.40	0.115	
		4	2.7	71	20.6 C	5.61	6.46	0.114	
		6	4.0	27	20.5 C	5.59	6.52	0.117	
	May-03	not sampled due to well damage							
	Sep-03	not sampled due to well damage							
	May-04	replaced with MW-3R							
	MW-3R	May-04	1.5	1.01	745	23.54 C	5.94	7.09	0.113
			2	1.34	208	24.98 C	5.74	6.15	0.111
		3	2.01	72.9	25.13 C	5.77	6.13	0.110	
3.5		2.35	21.1	25.81 C	5.77	5.86	0.110		
4		2.68	14.5	25.34 C	5.75	5.98	0.110		
5		3.36	9	25.32 C	5.70	6.12	0.110		
5.5		3.69	6.5	25 C	5.76	5.94	0.109		
6		4.03	6.1	25.25 C	5.69	5.90	0.109		
6.5		4.36	5.4	25.47 C	5.71	5.89	0.109		
Jul-06		1.7	1.14	> 999	22.29 C	5.90	4.55	0.080	
		3.4	2.28	> 999	24.25 C	6.00	3.46	0.078	
		4	2.68	> 999	24.34 C	5.90	6.43	0.080	
		6	4.03	544	24.91 C	6.03	3.94	0.079	
		8	5.37	347	24.6 C	6.06	3.78	0.078	
		9	6.04	169	23.24 C	6.17	2.65	0.078	
		11.5	7.72	54.6	22.25 C	6.27	1.22	0.077	
13		8.72	19.7	22.72 C	6.35	1.29	0.077		
14		9.40	4.5	22.97 C	6.41	0.79	0.077		
Apr-07		1.2	0.91	122	20.87 C	6.07	3.28	0.142	
		1.8	1.36	22.1	20.74 C	6.14	3.71	0.143	
		4	3.03	4.3	20.73 C	6.20	3.87	0.144	
Oct-07 <sup>a</sup>		0.2	0.22	766	21.59 C	5.99	4.99	0.119	
		1.6	1.73	324	21.76 C	6.03	4.36	0.122	
		2.2	2.38	395	22.05 C	6.04	4.38	0.122	
		2.8	3.03	270	22.39 C	6.06	4.09	0.123	
		3.5	3.78	144	22.56 C	6.03	4.30	0.123	
		4.2	4.54	74.2	22.76 C	6.06	4.33	0.123	
		4.9	5.30	61.9	22.85 C	6.07	4.38	0.123	
		5.3	5.73	46.1	22.97 C	6.04	4.30	0.124	
		6.2	6.70	43.8	22.71 C	6.02	4.60	0.123	
		6.5	7.03	43.2	22.17 C	6.00	4.62	0.123	
		6.8	7.35	46.4	22.18 C	5.99	4.52	0.123	
		Apr-08 <sup>a</sup>	0	0.00	124	24.01 C	5.34	6.30	0.133
			0.125	0.18	183	22.65 C	4.65	5.47	0.119
0.25			0.35	79.3	22.12 C	4.25	4.98	0.117	
0.5			0.70	60.1	21.60 C	4.31	5.20	0.118	
0.75			1.06	29.7	21.40 C	4.38	5.23	0.119	
1			1.41	18.4	21.17 C	4.86	4.92	0.121	
1.25			1.76	15.1	21.05 C	5.07	4.93	0.122	
1.5			2.11	22.8	20.63 C	5.15	5.16	0.121	
2			2.82	14.2	20.56 C	5.31	5.08	0.121	
2.125			2.99	13.4	20.47 C	5.38	5.22	0.122	
2.25			3.17	9.89	20.74 C	5.14	5.68	0.122	
Oct-08 <sup>a</sup>			0.05	0.09	206	19.15 C	5.05	8.54	0.127
		0.15	0.26	163	19.31 C	5.77	6.03	0.125	
		0.25	0.43	115	19.4 C	5.60	6.02	0.125	
		0.4	0.69	59.8	19.44 C	5.53	5.96	0.124	
		0.6	1.03	20.7	19.86 C	5.48	6.00	0.125	
		0.8	1.38	18.5	20.36 C	5.53	5.98	0.127	
		1	1.72	16.5	20.03 C	5.58	5.94	0.127	
		1.1	1.90	20.8	20.12 C	5.54	6.00	0.128	
		1.15	1.98	18.2	19.83 C	5.51	6.07	0.128	
		1.2	2.07	17.4	20.23 C	5.45	6.00	0.128	
		1.3	2.24	11.3	20.14 C	5.41	6.02	0.128	
		1.5	2.59	11.1	20.02 C	5.45	5.96	0.128	
		1.6	2.76	12.3	20.08 C	5.40	5.86	0.128	
		1.7	2.93	9.42	20.1 C	5.40	5.91	0.128	
		MW-3R	Apr-09 <sup>a</sup>	0	0.00	870	18.2 C	6.06	6.40

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-3R		0.15	0.26	408	18.21 C	5.80	6.84	0.083	
		0.25	0.43	169	18.14 C	5.81	6.88	0.087	
		0.4	0.69	168	18.38 C	5.86	6.77	0.096	
		0.6	1.03	117	18.58 C	5.93	6.55	0.106	
		0.8	1.38	90.7	18.71 C	5.95	6.51	0.109	
		1	1.72	71.9	18.85 C	5.97	6.66	0.114	
		1.2	2.07	88.7	18.97 C	6.00	6.55	0.114	
		1.4	2.41	71	19.1 C	6.00	6.65	0.116	
		1.45	2.50	75.2	18.88 C	5.88	7.63	0.116	
		1.53	2.64	67.4	18.85 C	5.89	7.45	0.117	
		1.57	2.71	52.9	18.83 C	5.92	7.30	0.118	
		1.65	2.84	45.4	18.79 C	5.93	8.02	0.117	
		1.75	3.02	37.6	18.84 C	5.98	8.02	0.117	
		1.85	3.19	35.8	18.89 C	5.98	7.77	0.117	
		1.95	3.36	28.9	18.89 C	6.00	7.67	0.119	
		1.97	3.40	29.2	18.89 C	6.00	7.59	0.118	
		2	3.45	27.5	18.9 C	5.99	7.50	0.118	
	Oct-09 <sup>a</sup>		0.3	0.34	70.4	20.75 C	5.70	6.28	0.126
			0.8	0.91	60.1	21.42 C	5.84	6.00	0.130
			1.05	1.19	48.6	21.75 C	5.87	6.01	0.131
		1.25	1.42	42.1	22.00 C	5.86	6.00	0.131	
		1.4	1.59	41.9	21.64 C	5.84	6.00	0.131	
		1.6	1.82	41.9	21.47 C	5.82	5.92	0.131	
		1.9	2.16	36.7	21.36 C	5.81	5.93	0.131	
		2.1	2.39	37.4	21.34 C	5.80	5.89	0.131	
		2.25	2.56	29.9	21.08 C	5.77	5.85	0.132	
		2.45	2.78	28.7	20.95 C	5.77	5.82	0.132	
		2.75	3.13	29.6	20.88 C	5.79	5.81	0.132	
		3.1	3.52	26.6	20.67 C	5.77	5.82	0.132	
		3.2	3.64	26.5	20.38 C	5.74	5.91	0.132	
		3.4	3.86	24.2	20.23 C	5.72	5.86	0.132	
		3.6	4.09	24.8	20.22 C	5.73	5.84	0.132	
Apr-10			0.2	0.10	676	20.39	5.23	3.10	0.132
		0.3	0.16	364	20.06	5.32	3.04	0.128	
		0.6	0.31	256	19.99	5.35	3.07	0.126	
		0.9	0.47	168	19.96	5.37	3.05	0.125	
		1.2	0.62	114	19.96	5.45	3.04	0.124	
		1.5	0.78	71.4	19.97	5.43	3.03	0.123	
		1.8	0.93	63.1	20.04	5.42	3.03	0.122	
		2.3	1.19	55.1	20.04	5.43	3.03	0.121	
		2.8	1.45	52	20.01	5.41	3.05	0.121	
		3.3	1.71	40.8	20.09	5.45	3.06	0.122	
		3.8	1.97	38.4	20.17	5.46	3.06	0.121	
		4.3	2.23	34.6	20.22	5.48	3.12	0.121	
		4.6	2.38	28	20.22	5.49	3.06	0.121	
		5	2.59	25.3	20.23	5.49	3.04	0.120	
		5.4	2.80	22.1	20.26	5.49	3.04	0.122	
		5.8	3.01	21.9	20.29	5.49	3.02	0.121	
	6.2	3.21	19.3	20.39	5.49	3.00	0.122		
Oct-10		0.25	0.1	399	21.92	5.83	6.60	0.137	
		2.75	1.5	34.6	20.96	5.75	6.20	0.127	
		5	2.8	10.8	22.68	5.97	5.79	0.128	
		5.25	2.9	10.2	23.68	6.03	5.60	0.129	
		5.5	3.1	9.73	24.01	6.06	5.58	0.130	
Apr-11		0.25	0.2	138	20.18	5.78	4.45	0.120	
		0.35	0.3	129	20.12	5.76	4.15	0.120	
		0.45	0.4	118	20.11	5.82	4.05	0.120	
		0.55	0.5	72	20.26	5.81	3.98	0.120	
		0.65	0.5	61.4	20.5	5.88	3.92	0.121	
		0.75	0.6	37	20.64	5.91	3.89	0.122	
		0.95	0.8	34.8	20.69	5.93	3.87	0.122	
		1.1	0.9	33.4	20.78	5.95	3.84	0.123	
		1.25	1.0	27.8	20.7	5.97	3.83	0.124	
		1.4	1.2	20.9	20.52	5.95	3.82	0.124	
		1.55	1.3	18.7	20.43	5.97	3.80	0.125	
		1.7	1.4	15.9	20.53	5.97	3.77	0.125	
		1.85	1.5	13.2	20.75	5.98	3.77	0.126	
		2	1.7	15.8	20.97	6.00	3.74	0.126	
		2.15	1.8	11.8	21.06	5.99	3.76	0.126	
		2.3	1.9	9.19	20.79	6.00	3.77	0.126	
Oct-11		0.1	0.1	468	21.65	5.67	7.04	0.145	
		0.13	0.1	556	23.01	5.81	6.51	0.126	
		0.18	0.2	605	21.94	5.91	6.62	0.120	
		0.25	0.3	429	21.48	5.86	6.28	0.120	
		0.3	0.3	366	21.28	5.86	6.21	0.121	
		0.4	0.4	261	21.30	5.90	5.99	0.120	
		0.5	0.5	200	21.15	5.93	5.98	0.121	
		0.95	1.0	162	21.14	5.94	5.81	0.122	
	1.15	1.2	143	21.11	5.95	5.72	0.123		

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-3R	Oct-11	1.5	1.6	108	21.09	5.97	5.67	0.123	
		1.65	1.7	65.6	21.26	5.97	5.54	0.122	
		1.75	1.8	51.4	21.96	6.02	5.39	0.123	
		1.85	1.9	48	21.59	6.04	5.47	0.125	
		2	2.1	81.8	21.39	5.96	5.54	0.122	
		2.25	2.4	79.9	21.37	5.93	5.54	0.118	
		2.4	2.5	69.3	21.12	5.95	5.51	0.119	
		2.8	2.9	47.4	21.63	6.00	5.39	0.120	
		3	3.2	45.8	21.59	6.01	5.36	0.120	
		Apr-12	0	0.0	663	22.13	6.14	4.73	0.141
		0.2	0.4	47.4	21.29	5.86	5.29	0.129	
		0.25	0.5	31.6	21.07	5.89	5.46	0.127	
		0.4	0.8	20.4	20.89	6.01	5.51	0.128	
		0.55	1.0	15.6	20.84	6.03	5.60	0.130	
		0.75	1.4	11.04	20.88	6.09	5.54	0.131	
		0.85	1.6	10.21	21.01	6.17	5.56	0.130	
		1	1.9	9.5	20.84	6.02	5.58	0.131	
		1.15	2.2	8.62	20.86	6.08	5.56	0.131	
		1.25	2.4	8.05	20.84	6.10	5.57	0.131	
		1.4	2.6	7.13	20.92	6.06	5.60	0.131	
		1.5	2.8	6.85	20.87	6.04	5.60	0.133	
		1.65	3.1	6.05	20.84	6.06	5.63	0.132	
		Oct-12	0.17	0.78	32.7	21.09	5.78	5.82	0.154
			0.21	1.0	-	21.10	6.20	5.58	0.151
			0.25	1.1	-	21.86	6.16	5.63	0.146
			0.30	1.4	-	21.97	6.19	5.73	0.146
			0.34	1.6	-	22.07	6.22	5.69	0.146
			0.38	1.7	-	23.78	6.24	5.53	0.146
			0.42	1.9	14.3	24.00	6.23	5.71	0.145
		Oct-12	0.45	2.0	-	24.07	6.23	5.86	0.145
			0.48	2.2	-	24.23	6.24	5.82	0.145
			0.50	2.3	7.37	24.41	6.23	5.50	0.145
			0.53	2.4	-	25.06	6.25	5.63	0.145
			0.55	2.5	-	25.33	6.25	5.70	0.145
			0.58	2.6	-	23.97	6.26	5.80	0.145
			0.61	2.8	-	26.21	6.26	5.63	0.145
			0.63	2.9	-	26.44	6.26	5.41	0.145
			0.66	3.0	5.54	26.52	6.26	5.53	0.145
		Apr-13	0.00	0.00	304.00	21.77	5.94	7.27	0.160
			0.20	0.91	233.00	21.44	5.34	5.43	0.128
			0.50	2.27	175.00	21.82	5.88	5.83	0.133
			0.80	3.64	72.50	21.87	5.81	5.97	0.134
			1.00	4.55	26.50	22.28	5.81	6.22	0.135
			1.10	5.00	18.90	22.21	5.87	6.37	0.135
			1.20	5.45	14.20	22.48	5.97	6.55	0.136
			1.30	5.91	7.15	23.02	6.00	6.90	0.136
			1.40	6.36	6.50	22.95	6.70	6.81	0.136
			1.50	6.82	5.90	23.03	5.96	6.73	0.136
	MW-4	Mar-96	2	1	17.75	53.1 F	6.19		0.528
			4	2	19.15	57.4 F	5.95		0.587
6			3	19.29	58.1 F	5.90		0.603	
Nov-97		7	3.5	600	17 C	6.70		0.540	
		15	7.5	280	18 C	6.70		0.550	
		30	15	100	18 C	6.70		0.550	
		35	17.5	48	18 C	6.60		0.550	
		40	20	34.5	18 C	6.70		0.550	
Dec-98		1	0.5		61.2 F	6.81		0.842	
		2	1		62.1 F	6.73		0.775	
		3	1.5		62 F	6.68		0.812	
		4	2		61.9 F	6.77		0.814	
Apr-01		2	1	24	20.2 F	6.10	0.63	0.633	
		4	2	20	20 F	6.10	0.27	0.642	
		6	3	15	19.7 F	6.09	0.26	0.672	
May-03	not sampled due to well damage								
Sep-04	not sampled due to well damage								
May-04	Replaced with MW-4a								
MW-4a	May-04	0.5	1.39	9.6	20.27 C	6.41	1.16	0.747	
		0.9	1.00	459	19.59 C	6.47	1.47	0.512	
		1.8	2.00	322	20.05 C	6.46	1.02	0.523	
	Jul-06	2	2.22	260	20.04 C	6.48	0.84	0.534	
		1.5	1.67	98.6	21.57 C	7.48	0.27	0.334	
		3	3.33	41.2	20.64 C	7.44	0.20	0.313	
	Apr-07	4.5	5.00	40.1	20.63 C	7.46	0.26	0.341	
		5.5	6.11	30.2	20.61 C	7.42	0.25	0.340	
		0.3	0.63	22.5	19.19 C	7.32	1.42	1.168	
	May-07	1.2	2.50	7.5	19.69 C	7.38	0.35	1.205	
		1.8	3.75	3.2	19.71 C	7.40	0.53	1.209	
				390	22.9 C	7.53	1.63	1.480	
			55.4	22.7 C	7.57	0.78	1.520		

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-4a	May-07			25.4	23.1 C	7.50	0.37	1.490	
				21.8	24.6 C	7.45	0.44	1.490	
				16.2	25.1 C	7.46	0.47	1.510	
	Jun-07			15.3	29.6 C	7.35	0.22	1.420	
				14.9	29.7 C	7.39	0.42	1.410	
				13.5	29.7 C	7.42	0.44	1.410	
	Oct-07	not sampled due to insufficient water in well							
	Apr-08	not sampled due to insufficient water in well							
	Oct-08	not sampled due to insufficient water in well							
	Apr-09	not sampled due to insufficient water in well							
	Oct-09	not sampled due to insufficient water in well							
	Apr-10	0.2	0.19	345	18.18	6.24	1.49	1.434	
		0.3	0.28	129	18.25	6.49	2.14	1.443	
		0.5	0.47	58.9	18.3	6.61	2.52	1.439	
		0.7	0.65	32.2	18.36	6.7	2.71	1.423	
		0.9	0.84	19.8	18.4	6.75	2.81	1.400	
		1.1	1.03	13.7	18.42	6.81	2.78	1.379	
		1.3	1.21	5.44	18.43	6.83	2.77	1.357	
		1.5	1.40	4.33	18.45	6.85	2.75	1.337	
		1.7	1.59	4.59	18.47	6.86	2.73	1.319	
		1.9	1.78	3.12	18.49	6.87	2.72	1.303	
		2.1	1.96	4.77	18.49	6.87	2.71	1.294	
		2.3	2.15	3.2	18.53	6.88	2.71	1.289	
		2.5	2.34	3.83	18.52	6.88	2.71	1.29	
		2.7	2.52	2.64	18.5	6.88	2.69	1.293	
	Oct-10	0	0.0	187	21.04	6.83	0.72	0.929	
		1.35	2.5	1.68	20.35	6.65	0.19	0.925	
		1.5	2.7	1.27	20.23	6.63	0.22	0.924	
		1.65	3.0	1.33	20.19	6.63	0.19	0.922	
		1.8	3.3	1.29	20.16	6.63	0.17	0.920	
	Apr-11 <sup>a</sup>	0.25	0.6	121	17.85	6.40	6.13	0.923	
		0.4	1.0	14.6	18.01	6.57	6.10	0.918	
		0.5	1.3	4.65	18.11	6.60	5.85	0.918	
	0.6	1.6	4.03	18.12	6.62	5.25	0.920		
	0.75	1.9	2.89	18.16	6.62	4.83	0.921		
	0.9	2.3	2.09	18.17	6.63	4.70	0.922		
	1.075	2.8	5.86	18.19	6.64	4.56	0.927		
	1.225	3.2	39.2	18.26	6.64	4.47	0.929		
	1.275	3.3	14	18.24	6.64	4.51	0.931		
	1.325	3.4	6.11	18.23	6.65	4.44	0.931		
	1.375	3.6	4.64	18.28	6.64	4.40	0.931		
	1.425	3.7	2.7	18.34	6.64	4.33	0.932		
	1.475	3.8	2.88	18.42	6.64	4.38	0.934		
	1.575	4.1	5.26	18.48	6.64	4.34	0.936		
	1.725	4.5	6.08	18.53	6.64	4.42	0.938		
	1.8	4.7	5.98	18.57	6.63	4.42	0.938		
	1.875	4.9	5.86	18.64	6.63	4.34	0.939		
	1.95	5.1	9.87	18.65	6.63	4.45	9.400		
Oct-11	not sampled due to insufficient water in well								
Apr-12	not sampled due to insufficient water in well								
Oct-12	not sampled due to insufficient water in well								
Oct-13	0	0	41.5	19.01	6.37	0.84	0.852		
	0.2	0.5	0.58	19.11	6.42	0.76	0.855		
	0.4	1.0	0.87	18.95	6.42	0.72	0.863		
	0.6	1.6	0.52	18.92	6.43	0.64	0.868		
	1	2.6	0.33	18.91	6.45	0.46	0.867		
	1.4	3.6	0.21	18.89	6.47	0.37	0.861		
	1.6	4.1	0.11	18.86	6.45	0.34	0.855		
	1.8	4.7	0.15	18.84	6.48	0.32	0.854		
MW-4b	May-04	0.1	0.012	7.4	20.89 C	10.62	8.56	0.343	
		0.15	0.017	5	21.32 C	10.52	8.27	0.345	
		0.2	0.023	4.4	21.44 C	10.47	7.99	0.345	
		0.3	0.035	4.2	21.07 C	10.48	8.02	0.356	
		0.5	0.058	4.1	21.28 C	10.47	7.74	0.353	
		0.75	0.087	4.1	21.43 C	10.46	7.69	0.351	
	Apr-07	5	0.400	138	19.87 C	9.64	2.33	0.190	
		12	0.960	69.6	20.24 C	10.37	0.33	0.485	
		14	1.120	319	18.81 C	9.77	1.35	0.389	
		15	1.200	90.5	20.75 C	9.76	1.19	0.379	
		15.5	1.240	67.7	19.38 C	9.62	3.63	0.384	
		16	1.280	416	24.54 C	7.53	5.00	0.001	
		20	1.600	30.5	24.51 C	7.51	4.95	0.030	
	Oct-07 <sup>a</sup>	0.1	0.012	234	21.13 C	8.13	4.49	0.571	
		0.3	0.035	194	20.31 C	8.23	1.42	0.584	
		0.6	0.069	23.9	20.29 C	8.02	0.27	0.583	
		0.95	0.110	50.5	20.28 C	7.88	0.07	0.583	
		1.2	0.138	47.3	20.31 C	7.81	0.11	0.582	
		1.5	0.173	53.9	20.93 C	7.80	0.03	0.583	
		1.8	0.208	55.3	20.50 C	7.79	0.02	0.583	

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		2.05	0.236	46.4	20.20 C	7.76	0.03	0.582
		2.15	0.248	40	21.30 C	7.74	0.03	0.582
		2.4	0.277	34.7	21.45 C	7.74	0.01	0.580
		2.6	0.300	34.1	20.96 C	7.74	0.04	0.582
		2.85	0.329	28.4	20.86 C	7.70	0.01	0.580
MW-4b	Oct-07 <sup>a</sup>	3.05	0.352	27.3	20.87 C	7.70	0.02	0.580
		3.1	0.358	25.2	21.32 C	7.71	0.02	0.581
		3.25	0.375	24.1	20.95 C	7.72	0.00	0.580
		3.5	0.404	22	20.77 C	7.70	0.01	0.580
		3.75	0.433	20.9	20.67 C	7.69	0.05	0.579
		4	0.461	18.9	20.42 C	7.66	0.03	0.579
		4.2	0.484	19.1	20.27 C	7.65	0.03	0.578
		4.3	0.496	17	20.24 C	7.64	0.04	0.578
		4.5	0.519	17.2	20.88 C	7.63	0.03	0.577
		4.7	0.542	14.7	19.97 C	7.62	0.03	0.577
		4.95	0.571	15	19.92 C	7.61	0.05	0.576
		5.2	0.600	14.2	19.75 C	7.59	0.04	0.576
		5.25	0.606	49.7	16.75 C	7.58	6.00	0.588
		5.4	0.623	14.4	17.18 C	7.82	1.46	0.606
		5.65	0.652	11.1	17.59 C	7.82	0.42	0.561
		6.1	0.704	9.15	17.65 C	7.80	0.31	0.553
		6.25	0.721	9.23	17.60 C	7.76	0.30	0.551
		6.45	0.744	8.18	17.67 C	7.79	0.31	0.550
		6.6	0.761	7.81	17.62 C	7.79	0.31	0.550
	Apr-08 <sup>a</sup>	0.45	0.053	213	17.60 C	8.31	1.14	0.565
		1	0.117	30.3	17.47 C	7.91	0.14	0.564
		1.3	0.152	18.1	17.41 C	7.81	0.12	0.563
		1.8	0.211	15.3	17.51 C	7.76	0.11	0.562
		2.25	0.263	12.5	17.57 C	7.74	0.11	0.562
		2.5	0.292	11.6	17.13 C	7.71	0.12	0.562
		2.7	0.316	10.9	16.45 C	7.71	0.10	0.562
		2.71	0.317	12.3	16.39 C	7.70	0.09	0.561
		2.9	0.339	15.1	16.87 C	7.68	0.08	0.560
		3.1	0.363	8.15	17.42 C	7.73	0.07	0.562
	Oct-08 <sup>a</sup>	1	0.119	36.5	18.14 C	9.87	0.72	0.506
		2	0.238	38.3	18.16 C	9.97	0.44	0.506
		2.75	0.328	58.1	18.42 C	10.29	0.38	0.512
		3.5	0.417	366	18.62 C	10.34	0.39	0.511
		4	0.477	209	18.08 C	10.04	0.47	0.508
		4.5	0.536	145	18.15 C	9.92	0.58	0.506
		5.25	0.626	74.3	18.52 C	9.47	1.39	0.505
		5.75	0.685	40.7	18.2 C	9.73	0.47	0.506
		6	0.715	31.6	16.76 C	9.86	0.47	0.506
		6.2	0.739	31.3	18.24 C	9.71	0.60	0.504
		7	0.834	25.4	18.96 C	9.58	0.70	0.505
		7.5	0.894	24.6	18.62 C	9.50	0.69	0.505
		8.5	1.013	639	19.57 C	9.83	0.53	0.515
		0.05	0.006	52.1	13.62 C	9.20	4.66	0.521
		0.2	0.024	32.4	13.2 C	8.94	2.79	0.516
		0.27	0.032	37.5	12.02 C	8.72	1.64	0.515
		0.3	0.036	35.3	9.65 C	8.52	1.67	0.512
		0.35	0.042	30.2	8.99 C	8.42	1.78	0.513
		0.37	0.044	26.5	8.35 C	8.30	1.90	0.512
		0.4	0.048	30.1	9.86 C	8.34	1.99	0.514
		0.5	0.060	30.1	11.2 C	8.35	1.69	0.513
		0.6	0.072	30.4	11.92 C	8.26	1.93	0.512
		0.75	0.089	29.6	12.06 C	8.24	1.33	0.512
		0.85	0.101	29.5	11.25 C	8.21	1.02	0.511
		0.95	0.113	29.7	9.91 C	8.12	1.03	0.510
		0.97	0.116	28.5	9 C	8.05	1.08	0.511
		0.99	0.118	28.4	8.72 C	7.95	1.18	0.510
		1.05	0.125	28.7	8.9 C	7.95	1.45	0.512
		1.15	0.137	27.7	10.73 C	8.53	1.50	0.513
		1.2	0.143	28	11.23 C	8.52	1.62	0.512
		1.25	0.149	28.1	13.23 C	8.52	1.72	0.513
		1.27	0.151	27.8	13.86 C	8.49	1.42	0.514
		1.3	0.155	27.2	14.14 C	8.48	1.40	0.514
	Apr-09 <sup>a</sup>	0	0.000		16.78 C	7.61	4.46	0.581
		0	0.000		16.43 C	7.59	0.41	0.590
		0.05	0.006	14.9	16.1 C	7.59	0.15	0.590
		0.05	0.006	14.1	15.89 C	7.64	0.06	0.590
		0.05	0.006	18.1	15.91 C	7.77	0.19	0.592
		0.1	0.012		16.26 C	7.62	0.16	0.591
		0.15	0.018		17.08 C	7.90	0.10	0.597
		0.25	0.030	23.7	17.24 C	7.93	0.08	0.600
		0.3	0.036		17.74 C	7.94	0.04	0.602
		0.35	0.042	17.8	18.02 C	7.95	0.05	0.603
		0.4	0.048	18.3	18.16 C	7.95	0.06	0.603

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		0.4	0.048		18.44 C	7.96	0.22	0.603
		0.45	0.054		19.01 C	7.96	0.10	0.603
		0.5	0.060		19.49 C	7.96	0.09	0.604
		0.5	0.060	15.9	19.94 C	7.96	0.04	0.605
		0.5	0.060	15.1	19.86 C	7.96	0.03	0.606
		0.5	0.060	13.8	19.69 C	7.95	0.06	0.606
		0.5	0.060		19.66 C	7.95	0.07	0.606
		0.5	0.060		19.81 C	7.94	0.05	0.606
MW-4b	Apr-09 <sup>a</sup>	0.5	0.060		19.72 C	7.95	0.06	0.607
		0.5	0.060		19.51 C	7.98	0.05	0.607
		0.5	0.060		19.36 C	7.94	0.04	0.607
		0.5	0.060		19.38 C	7.94	0.06	0.607
		0.55	0.066		19.61 C	7.95	0.03	0.607
		0.55	0.066		20.21 C	7.98	0.05	0.607
		0.55	0.066		20.27 C	7.98	0.05	0.608
		0.6	0.072		19.89 C	8.02	0.05	0.606
		0.6	0.072	12.4	19.93 C	8.02	0.04	0.607
		0.6	0.072	12.5	20.01 C	8.02	0.04	0.607
		0.65	0.078	12.5	20.08 C	7.98	0.04	0.607
		0.65	0.078		20.15 C	8.02	0.04	0.607
		0.65	0.078	12.3	20.18 C	8.09	0.05	0.607
		0.65	0.078	12.4	20.19 C	8.05	0.04	0.607
	Oct-09	0.5	0.060	127.7	18.50 C	9.29	0.35	0.575
		1	0.120	63.3	18.60 C	9.43	0.27	0.573
		1.25	0.150	37.7	18.79 C	9.32	0.22	0.572
		1.5	0.180	23.9	18.82 C	9.49	0.19	0.574
		1.6	0.192	21.6	18.81 C	9.40	0.15	0.571
		1.65	0.198	18.9	18.83 C	9.42	0.16	0.574
		1.75	0.210	16.02	18.02 C	9.44	0.15	0.571
		1.8	0.216	27.7	19.13 C	9.49	0.16	0.571
		1.925	0.231	14.41	19.26 C	9.47	0.33	0.570
		1.97	0.236	13.19	19.17 C	9.50	0.26	0.570
		2.1	0.251	11.42	19.06 C	9.50	0.25	0.570
		2.15	0.257	10.61	18.76 C	9.50	0.26	0.570
		2.18	0.261	16.09	18.82 C	9.44	0.18	0.569
		2.25	0.269	8.21	19.57 C	9.65	1.25	0.569
		2.3	0.275	7.73	19.18 C	9.60	0.84	0.569
		2.34	0.280	7.15	19.11 C	9.53	0.82	0.568
	Apr-10	0.2	0.021	29.9	19.57	6.89	1.44	0.409
		0.4	0.042	18	19.12	7.36	0.52	0.493
		0.6	0.063	15.6	19.01	7.50	0.35	0.506
		0.9	0.094	12.5	19.02	7.54	0.31	0.507
		1.1	0.115	11.7	19.14	7.58	0.28	0.508
		1.3	0.136	17.4	19.23	7.57	0.26	0.508
		1.5	0.157	13	19.38	7.60	0.26	0.508
		1.7	0.178	9.65	19.43	7.62	0.25	0.508
		1.8	0.188	13.6	19.59	7.63	0.24	0.508
		1.9	0.199	13.8	19.75	7.65	0.24	0.508
		2.05	0.214	12.2	19.57	7.66	0.23	0.508
		2.1	0.219	11.5	19.54	7.65	0.23	0.508
		2.25	0.235	9.8	19.55	7.66	0.23	0.508
	Oct-10	0	0.0	263	18.70	6.84	3.86	0.382
		3	0.3	3.87	18.51	8.01	0.42	0.508
		6	0.6	3.34	18.94	7.87	0.27	0.507
		8.5	0.9	2.73	19.20	7.72	0.23	0.488
		8.7	0.9	2.82	19.20	7.72	0.23	0.485
		8.9	1.0	2.49	19.19	7.72	0.23	0.483
	Apr-11 <sup>a</sup>	0.25	0.028	110	21.06	7.81	5.59	0.404
		0.35	0.040	32.3	20.34	7.95	3.39	0.489
		0.45	0.051	19.3	21.06	7.94	2.79	0.493
		0.6	0.068	17	21.53	7.84	2.55	0.490
		0.8	0.090	11.6	21.62	7.78	2.60	0.485
		1	0.113	8.22	21.8	7.75	2.55	0.482
		1.2	0.136	6.48	21.99	7.73	2.53	0.477
		1.4	0.158	6.13	22.28	7.73	2.45	0.475
		1.5	0.169	6.24	22.3	7.72	2.46	0.470
		1.6	0.181	4.83	22.38	7.73	2.54	0.468
		1.7	0.192	4.93	22.16	7.73	2.58	0.466
		1.8	0.203	4.94	21.72	7.74	2.54	0.464
		1.9	0.215	5.11	21.78	7.75	2.54	0.463
		2	0.226	5.01	21.76	7.75	2.59	0.460
		2.05	0.232	4.93	21.48	7.75	2.62	0.461
		2.1	0.237	4.84	21.44	7.76	2.65	0.459
		2.15	0.243	5.13	21.54	7.76	2.61	0.459
	Oct-11	0.15	0.0	>1000	19.95	8.99	2.44	0.444
		0.25	0.0	259	19.24	8.79	1.29	0.459
		0.35	0.0	109	19.20	8.72	1.11	0.459
		0.45	0.1	54	18.99	8.46	0.89	0.451

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-4b	Oct-11	0.75	0.1	42.3	18.97	8.31	0.75	0.447	
		0.85	0.1	29.5	18.87	8.05	0.61	0.441	
		1	0.1	21.3	18.91	7.93	0.5	0.437	
		1.2	0.1	16.5	18.92	7.89	0.44	0.436	
		1.4	0.2	12.9	18.97	7.87	0.39	0.436	
		1.6	0.2	8.95	18.92	7.85	0.36	0.436	
		1.8	0.2	7.90	18.92	7.84	0.33	0.435	
		2	0.2	9.11	18.90	7.82	0.32	0.435	
		2.2	0.3	7.2	18.94	7.80	0.33	0.433	
		2.4	0.3	7.67	18.90	7.78	0.34	0.432	
		2.6	0.3	7.37	18.81	7.76	0.38	0.431	
		2.8	0.3	7.35	18.91	7.74	0.42	0.429	
		3.25	0.4	5.81	18.85	7.73	0.46	0.429	
		3.5	0.4	5.76	18.87	7.74	0.48	0.429	
		Apr-12	0.25	0.03	>1000	17.68	8.62	0.53	0.420
	1	0.12	7.69	18.01	7.87	0.29	0.412		
	2	0.25	6.24	18.36	7.71	0.20	0.410		
	2.6	0.32	4.11	18.37	7.69	0.18	0.410		
	3.1	0.38	2.08	18.41	7.69	0.16	0.409		
	3.5	0.43	3.75	18.61	7.71	0.16	0.408		
	3.6	0.45	3.12	18.78	7.73	0.14	0.407		
	3.8	0.47	2.2	19.13	7.68	0.15	0.406		
	4.1	0.51	1.9	19.21	7.71	0.13	0.405		
	4.3	0.53	2.1	19.25	7.74	0.14	0.405		
	4.5	0.56	1.68	19.65	7.73	0.14	0.405		
	Oct-12	0.53	0.07	45.7	19.05	8.41	4.03	0.403	
	1.32	0.16	6.17	19.08	7.84	0.72	0.397		
	2.11	0.26	5.32	19.17	7.61	0.30	0.389		
	2.91	0.36	4.17	19.21	7.49	0.14	0.380		
	3.63	0.45	12.83	19.27	7.36	0.09	0.368		
	4.29	0.53	2.88	19.33	7.22	0.05	0.357		
	4.89	0.60	1.72	19.41	7.13	0.05	0.350		
	5.42	0.67	-	19.55	7.07	0.05	0.344		
	5.88	0.73	-	20.48	7.06	0.03	0.336		
	6.27	0.77	-	20.52	7.06	0.02	0.328		
	6.80	0.84	-	21.7	7.06	0.02	0.319		
	7.07	0.87	-	21.54	7.07	0.04	0.316		
	7.13	0.88	2.11	22.16	7.08	0.04	0.314		
	7.26	0.90	-	22.85	7.09	0.03	0.314		
	Apr-13	0	0	70.5	19.68	7.23	1.31	0.412	
	1	0.1	12.7	19.79	7.69	0.61	0.427		
	1.5	0.2	6.58	19.8	7.94	0.44	0.427		
	2	0.2	6.22	19.94	7.84	0.33	0.427		
	2.2	0.3	6.02	19.63	7.47	0.24	0.425		
	2.5	0.3	6	19.84	7.49	0.22	0.424		
	2.7	0.3	5.6	19.9	7.49	0.2	0.422		
	2.9	0.4	5.5	19.92	7.47	0.2	0.421		
	Oct-13	0	0.0	0.60	18.61	7.51	0.37	0.322	
	0.2	0.0	0.42	18.60	7.56	0.33	0.327		
	0.4	0.0	0.63	18.68	7.56	0.22	0.328		
	0.5	0.1	0.37	18.80	7.56	0.19	0.330		
	0.6	0.1	1.25	18.89	7.58	0.18	0.332		
	0.7	0.1	1.10	18.92	7.58	0.17	0.333		
	MW-5	Mar-96	5	1	17.98	56.2 F	7.05		0.136
		10	2	1.31	57.8 F	7.20		0.153	
		15	3	3.25	55 F	7.22		0.131	
		Nov-97	0	0	55.6	19 C	8.20		0.130
		15	3	3.79	19 C	8.20		0.110	
		20	4	0.89	19 C	7.70		0.110	
		Dec-98	1.5	0.3		62.2 F	6.68		1.100
2.5		0.5		66.2 F	7.19		0.155		
4		0.8		66.3 F	7.54		0.209		
6		1.2		64.07 F	7.71		0.140		
8		1.6		65.9 F	7.84		0.310		
Dec-98		10	2		65.8 F	7.48		0.274	
12		2.4		64.9 F	7.84		0.248		
14		2.8		65.2 F	7.83		0.242		
16		3.2		61.4 F	7.82		0.202		
Apr-01		5	1	2	21.1 C	7.43	1.21	0.146	
10		2	13	21.0 C	7.53	3.05	0.131		
15		3	5	21.0 C	7.51	3.10	0.129		
May-02		5	1	87	22.3 C	5.45	0.60	0.167	
10		2	157	21.7 C	5.85	0.56	0.163		
15		3	91	21.6 C	5.95	0.53	0.161		
Sep-03		5	1	46	20.9 C	7.15	1.97	0.110	
10		2	20	21.1 C	7.38	1.23	0.108		
15		3	9.8	21.4 C	7.52	1.49	0.106		
May-04	1	0.21	2.4	21.41 C	7.15	1.21	0.115		
2.5	0.53	-4.8	22.71 C	7.38	0.77	0.111			

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-5	Jul-06	4	0.84	5.2	22.91 C	7.43	0.65	0.111	
		4.6	0.97	33.8	21.53 C	7.34	0.04	0.073	
		9.2	1.94	6.4	21.75 C	7.63	0.02	0.071	
		13.8	2.91	8.6	21.74 C	7.70	0.13	0.071	
	Apr-07	2.5	0.54	8.54	20.99 C	7.19	3.11	0.128	
		5	1.08	5.14	20.99 C	7.14	0.59	0.120	
		7.5	1.61	1.85	20.81 C	7.20	0.40	0.114	
		10	2.15	2.23	20.92 C	7.20	0.35	0.116	
		12	2.58	3.96	20.98 C	7.16	0.44	0.117	
		14	3.01	3.11	20.98 C	7.18	1.04	0.115	
		15	0.34	5.5	21.16 C	7.33	0.44	0.151	
	Oct-07	1	0.23	14.8	20.74 C	7.42	0.56	0.167	
		1.5	0.34	5.5	21.16 C	7.33	0.44	0.151	
		2.5	0.57	3.3	21.18 C	7.32	0.36	0.142	
		3	0.69	3.1	21.16 C	7.34	0.34	0.138	
	Apr-08 <sup>a</sup>	4	0.86	8.26	21.36 C	6.96	0.60	0.150	
		5.5	1.18	6.13	21.38 C	6.98	0.61	0.139	
		6.5	1.40	4.45	21.48 C	7.03	0.56	0.134	
		7.5	1.61	1.61	21.42 C	7.11	0.42	0.130	
		9.25	1.99	0.75	21.45 C	7.21	0.31	0.125	
		10.5	2.26	1.81	21.37 C	7.19	0.47	0.125	
		11.5	2.47	1.08	21.46 C	7.22	0.28	0.124	
		13	2.80	0.68	21.56 C	7.22	0.27	0.124	
		13.75	2.96	0.9	21.50 C	7.24	0.28	0.123	
		14.25	3.06	0.39	21.71 C	7.23	0.28	0.123	
		Oct-08	0.5	0.12	16.5	20.69 C	6.85	0.70	0.158
			1.5	0.35	12.1	21.01 C	6.58	0.53	0.151
			2	0.47	8.63	20.97 C	6.51	0.45	0.142
	2.5		0.59	8.34	20.95 C	6.53	0.45	0.142	
	Apr-09	0.5	0.11	22.5	20.13 C	6.82	1.19	0.153	
		1	0.21	23.9	19.34 C	6.91	1.33	0.153	
		1.2	0.26	18.8	18.54 C	6.92	1.27	0.149	
		1.3	0.28	12.3	18.46 C	6.94	1.07	0.143	
		1.4	0.30	6.82	18.31 C	6.97	0.80	0.135	
		1.5	0.32	6.49	18.29 C	6.99	0.68	0.133	
		1.6	0.34	15.2	20.39 C	6.95	0.98	0.136	
		1.8	0.38	9.75	19.70 C	6.94	1.26	0.138	
		2	0.43	4.33	19.60 C	7.00	0.76	0.132	
		2.5	0.59	8.34	20.95 C	6.53	0.45	0.142	
	Oct-09	0.75	0.15	16.42	20.80 C	7.42	0.46	0.144	
		1.25	0.26	15.88	21.00 C	7.35	0.31	0.134	
		2	0.41	24.5	21.30 C	7.30	0.23	0.129	
		2.75	0.56	26	21.31 C	7.27	0.21	0.129	
		3.25	0.67	26.1	21.35 C	7.29	0.22	0.128	
		3.8	0.78	14.51	21.51 C	7.34	0.19	0.129	
		4.3	0.88	15.44	21.43 C	7.35	0.17	0.127	
		5	1.03	8.66	21.43 C	7.32	0.18	0.128	
		6	1.23	8.43	21.55 C	7.35	0.22	0.127	
		Apr-10	1	0.20	15.5	20.92	7.56	0.33	0.141
			2	0.41	14.2	21.02	7.17	0.09	0.124
3			0.61	17.4	21.16	7.09	0.12	0.122	
3.5	0.72		17.1	21.12	7.09	0.16	0.122		
4	0.82		13.1	21.06	7.13	0.16	0.122		
4.25	0.87		7.46	21.28	7.13	0.10	0.122		
4.5	0.92		8.87	21.2	7.13	0.11	0.122		
5	1.03		8.66	21.43 C	7.32	0.18	0.128		
Oct-10	0.25	0.1	16.42	20.80 C	7.42	0.46	0.144		
	3.5	0.8	43.9	19.74	7.29	1.71	0.132		
	3	0.6	31.1	21.52	7.23	0.26	0.122		
	5	1.1	19.6	20.86	7.37	0.53	0.124		
	6.5	1.4	5.62	21.06	7.36	0.64	0.124		
	7	1.5	2.58	21.12	7.40	0.32	0.125		
	7.5	1.6	3.31	21.00	7.40	0.32	0.125		
	Apr-11	1	0.2	20.5	21.18	7.62	1.48	0.130	
		2	0.4	20.15	21.19	7.56	1.25	0.127	
		3	0.6	19.4	21.18	7.48	1.17	0.126	
4.5		0.9	13.9	21.25	7.42	1.03	0.126		
5		1.0	14.5	21.18	7.40	0.96	0.127		
5.1		1.0	9.51	21.16	7.44	0.90	0.128		
5.15		1.0	6.31	21.23	7.51	0.79	0.128		
5.25		1.1	5.93	21.23	7.49	0.78	0.129		
Oct-11		0.75	0.2	91.2	20.78	7.24	0.79	0.121	
		1.5	0.3	34.9	21.37	7.27	0.74	0.119	
	2.25	0.5	27.9	21.11	7.10	0.84	0.119		
	3	0.7	12.6	21.67	7.25	0.67	0.120		
	3.75	0.8	9.58	21.78	7.10	0.64	0.119		
	4.5	1.0	8.97	21.57	7.19	0.65	0.120		
	5.25	1.2	17.3	21.26	6.91	4.55	0.119		
	6	1.3	15.6	21.70	7.32	3.02	0.121		
	6.75	1.5	16	22.35	7.29	1.59	0.121		
	7.5	1.6	12.3	22.15	7.15	1.47	0.121		
8.25	1.8	18.4	22.08	7.31	0.81	0.122			

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		9	2.0	5.90	22.41	7.24	0.91	0.122
		9.75	2.1	5.76	22.26	7.28	0.61	0.123
		10.5	2.3	1.98	22.52	7.28	0.62	0.124
		11.25	2.5	0.93	22.82	7.3	0.52	0.125
		12	2.6	0.87	22.72	7.38	0.41	0.126
		12.75	2.8	5.59	22.63	7.36	0.44	0.126
		13.5	3.0	13.0	22.14	7.08	0.91	0.124
		14.25	3.1	8.97	21.54	6.99	0.78	0.123
		15	3.3	0.79	21.54	7.08	0.4	0.126
	Apr-12	1.00	0.2	13.2	20.57	7.25	0.79	0.134
		2.00	0.4	5.84	20.80	7.12	0.57	0.123
		2.75	0.6	7.94	20.69	7.02	0.56	0.122
		4.00	0.8	8.25	20.83	7.01	0.53	0.122
		4.75	1.0	5.27	20.97	7.00	0.40	0.122
		5.50	1.1	5.72	21.07	6.93	0.42	0.121
		6.25	1.3	4.88	21.02	6.92	0.37	0.121
		7.25	1.5	3.88	21.04	6.96	0.33	0.121
		8.00	1.7	1.9	21.10	6.99	0.30	0.121
		9.00	1.9	1.29	21.13	6.99	0.29	0.121
		10.00	2.1	1.26	21.04	6.97	0.30	0.121
		10.75	2.2	1.06	21.08	6.96	0.28	0.120
	Apr-12	11.50	2.4	1.14	21.05	6.94	0.26	0.121
		13.00	2.7	1.22	21.03	6.91	0.26	0.119
		14.00	2.9	0.87	21.04	6.92	0.24	0.119
		14.75	3.1	0.8	21.03	6.93	0.23	0.118
	Oct-12	1.00	0.2	17.1	20.75	7.51	0.71	0.134
		2.00	0.4	7.05	21.11	7.13	0.49	0.124
		3.75	0.8	3.46	21.12	7.08	0.51	0.122
		4.75	1.1	2.78	21.17	7.10	0.53	0.122
		5.75	1.3	3.6	21.17	7.14	0.47	0.121
		6.75	1.5	1.27	21.27	7.24	0.32	0.122
		7.75	1.7	1.96	21.16	7.28	0.27	0.121
		8.75	1.9	2.36	21.25	7.16	0.42	0.121
		9.75	2.2	2.15	21.23	7.26	0.24	0.119
		10.75	2.4	2.49	21.27	7.30	0.21	0.118
		11.75	2.6	1.75	21.21	7.33	0.19	0.117
		12.75	2.8	1.86	21.31	7.34	0.17	0.116
		13.75	3.0	1.53	21.31	7.33	0.17	0.116
		14.75	3.3	1.23	21.27	7.34	0.16	0.115
		15.75	3.5	0.8	21.37	7.36	0.14	0.115
		16.5	3.7	0.76	21.40	7.34	0.16	0.115
	Apr-13	1.00	0.22	22.60	20.98	6.50	0.34	0.118
		3.00	0.67	9.01	21.23	6.66	0.26	0.116
		6.00	1.33	5.90	21.19	6.70	0.29	0.113
		8.00	1.77	2.21	21.20	6.80	0.15	0.113
		9.50	2.11	1.58	21.23	6.86	0.12	0.113
		11.00	2.44	1.25	21.20	6.92	0.10	0.112
		13.00	2.88	1.04	21.20	6.90	0.09	0.112
		14.00	3.10	1.01	21.23	6.92	0.08	0.111
		15.00	3.33	0.98	21.25	6.91	0.07	0.111
MW-6	Mar-96	4	0.9		57.1 F	5.06		0.742
		8	1.7		58.5 F	5.32		0.820
		11.5	2.5		57.7 F	5.27		0.860
	Nov-97	0	0.0	84.4	17 C	7.10		0.770
		35	7.6	19.6	17 C	7.20		0.750
		55	12.0	21.1				
	Dec-98	3.61	0.8		66.2 F	6.71		0.976
		5.61	1.2		67.7 F	6.74		0.818
		6	1.3		67.1 F	6.70		0.792
		7	1.5		67.5 F	6.73		0.791
		9	2.0		66.6 F	6.74		0.798
		11	2.4		66.9 F	6.72		0.786
	Apr-01	4	0.9	1	21.3 C	6.51	0.26	0.448
		8	1.7	0	20.7 C	6.61	0.03	0.528
		12	2.6	0	20.4 C	6.48	-0.13	0.535
	May-02	3	0.7	42	20.7 C	6.00	0.22	0.597
		6	1.3	28	20.6 C	5.92	0.11	0.595
		9	2.0	96	20.6 C	5.93	0.82	0.576
	Sep-03	5	1.1	0	20.4 C	6.25	0.31	0.211
		10	2.2	0	20.4 C	6.28	0.27	0.227
		15	3.3	0	20.4 C	6.34	0.26	0.227
	May-04	2	0.6	9.7	22.08 C	6.81	1.09	0.438
		3	0.9	9.2	24.12 C	6.81	0.65	0.448
		4	1.3	8.4	23.36 C	6.81	0.61	0.453
		4.5	1.4	7.7	23.56 C	6.81	0.58	0.450
	Jul-06	3.3	1.0	51	20.1 C	7.11	1.22	0.295
		6	1.9	10	19.97 C	7.17	0.64	0.391
		9	2.8	8.1	19.99 C	7.18	0.62	0.409
	Apr-07	1	0.3	57.2	21.06 C	6.98	0.70	0.511

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
MW-6		3	0.9	6.32	21.08 C	7.02	0.25	0.517
		5	1.6	2.34	21.03 C	7.00	0.22	0.505
		7.5	2.4	1.52	20.86 C	6.99	0.20	0.495
		10	3.2	1.1	21.34 C	6.98	0.20	0.479
		Oct-07	0.3	0.1	65.7	20.94 C	6.45	0.61
		0.8	0.2	62.2	21.21 C	6.43	0.46	0.188
		1.1	0.2	48.4	21.26 C	6.41	0.49	0.186
		1.8	0.4	5.48	21.53 C	6.46	0.33	0.199
		2.4	0.5	3.32	21.63 C	6.48	0.24	0.209
		2.8	0.6	3.8	21.51 C	6.49	0.23	0.210
		3.3	0.7	2.2	21.86 C	6.48	0.21	0.208
	Apr-08	0.5	0.1	27.9	20.71 C	6.44	0.63	0.105
		1	0.3	16.7	20.64 C	6.32	0.44	0.111
		2	0.6	6.25	20.41 C	6.32	0.32	0.138
		3	0.8	8.62	20.35 C	6.37	0.26	0.164
	Oct-08	0.75	0.2	90.4	19.97 C	8.23	1.11	0.210
		1.25	0.4	21.7	20.2 C	8.24	0.71	0.347
		2.5	0.8	8.69	20.24 C	8.21	0.61	0.380
		4	1.3	5.89	20.24 C	8.16	0.55	0.382
	Apr-09	0.5	0.1	54.3	19.93 C	6.67	0.70	0.201
		1	0.3	27.3	20.36 C	6.65	0.60	0.202
		1.5	0.4	12.5	20.5 C	6.68	0.43	0.210
		2	0.6	6.22	20.3 C	6.69	0.40	0.217
		2.5	0.7	4.3	20.43 C	6.69	0.35	0.222
	Oct-09 <sup>a</sup>	0.5	0.1	85.1	20.07 C	6.31	0.72	0.144
		1.25	0.4	38.2	20.54 C	6.32	0.49	0.138
		1.65	0.5	23.8	20.98 C	6.26	0.41	0.148
		2.5	0.7	27.9	21.06 C	6.39	0.35	0.167
		3.4	1.0	25.3	21.01 C	6.41	0.39	0.188
		4.25	1.2	15.95	20.91 C	6.49	0.29	0.199
		5	1.4	15.98	20.79 C	6.49	0.25	0.203
		6	1.7	13.19	20.86 C	6.53	0.22	0.207
		7.1	2.0	13.32	20.98 C	6.51	0.21	0.216
		8.25	2.3	14.42	20.87 C	6.60	0.24	0.219
		9.75	2.7	12.66	20.67 C	6.66	0.29	0.223
		10.5	2.9	12.66	20.68 C	6.67	0.28	0.224
		11.5	3.2	14.84	20.65 C	6.69	0.25	0.223
		12.5	3.5	11.8	20.86 C	6.72	0.27	0.224
		13.8	3.9	11.19	20.68 C	6.68	0.28	0.224
		14.1	3.9	11.66	20.61 C	6.61	0.37	0.225
		14.75	4.1	9.91	20.89 C	6.74	0.34	0.225
	Apr-10	1	0.3	133	21.24	5.61	0.24	0.119
		2	0.6	85.3	21.17	5.65	0.29	0.132
		3	0.8	47.1	21.19	6.12	0.31	0.208
		3.75	1.1	32.9	21.65	6.31	0.25	0.234
		4.5	1.3	53.8	21.91	6.39	0.21	0.245
		6	1.7	23	21.19	6.31	0.19	0.255
		7	2.0	115	21.15	6.35	0.16	0.260
		8	2.2	13.8	21.2	6.41	0.16	0.269
		9	2.5	8.59	21.11	6.38	0.14	0.281
		11	3.1	4.95	21.07	6.46	0.12	0.283
		12	3.4	3.28	21.13	6.48	0.11	0.288
		13	3.6	2.95	21.14	6.48	0.09	0.292
		14	3.9	3.06	21.16	6.48	0.09	0.291
		16	4.5	2.65	21.16	6.49	0.07	0.292
	Oct-10	0.5	0.2	4.91	21.21	7.04	0.56	0.530
		1	0.4	1.08	21.05	7.01	0.49	0.533
		2	0.7	0.74	21.04	7.00	0.51	0.516
		2.5	0.9	0.81	21.41	7.00	0.51	0.518
		3	1.1	0.57	21.40	7.00	0.47	0.518
	Apr-11 <sup>a</sup>	0.5	0.1	130	19.67	6.55	2.58	0.306
		0.75	0.2	72.3	20.40	6.51	2.07	0.295
		1.25	0.4	28.5	20.43	6.50	2.08	0.280
		2	0.6	16.4	20.49	6.48	2.01	0.284
		2.75	0.8	6.45	20.44	6.49	2.24	0.286
		4.5	1.3	4.06	20.37	6.50	2.18	0.289
		5	1.5	3.25	20.37	6.50	2.13	0.292
	Oct-11	1.25	0.5	3.40	20.47	7.05	0.36	0.419
		2.5	0.9	2.59	20.52	7.02	0.37	0.430
		3.75	1.4	3.84	20.60	7.01	0.42	0.432
		5	1.9	8.91	20.18	6.92	1.23	0.421
		5.75	2.1	6.73	21.13	6.94	0.43	0.430
		8.75	3.3	5.19	20.38	6.79	0.14	0.415
		10	3.7	3.75	20.39	6.86	0.15	0.405
		11.5	4.3	3.95	20.39	6.90	0.15	0.402
		13	4.9	4.48	20.40	6.89	0.16	0.394
	Apr-12	1	0.3	11.8	20.41	7.10	0.68	0.423
		2	0.7	5.12	20.57	7.10	0.52	0.433
		3	1.0	1.64	20.75	7.08	0.40	0.436

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		4	1.4	0.85	20.81	7.07	0.32	0.438
		5	1.7	0.75	20.80	7.05	0.28	0.434
		6	2.1	0.42	20.80	7.04	0.25	0.432
		7	2.4	0.13	20.83	7.02	0.23	0.431
		8	2.8	0.12	20.93	7.02	0.20	0.428
		9	3.1	0.10	20.97	7.02	0.18	0.427
		10	3.5	0.05	20.98	7.01	0.17	0.427
		11	3.8	0	21.01	7.00	0.16	0.426
		12	4.2	0	21.05	7.00	0.15	0.425
		13	4.5	0	21.08	6.94	0.14	0.426
		14	4.9	0	21.06	6.99	0.13	0.428
	Oct-12	1	0.4	14.7	21.69	6.77	0.60	0.470
		2	0.8	4.75	21.83	6.86	0.28	0.477
		4	1.6	2.49	21.85	6.84	0.22	0.473
		5	2.0	1.22	21.92	6.92	0.19	0.475
		6.0	2.4	1.0	22.0	6.9	0.2	0.5
		7.5	3.0	1.1	21.8	7.0	0.2	0.5
		8.5	3.4	1.1	21.9	6.9	0.2	0.5
	Apr-13	1.25	0.5	67.90	20.59	6.10	1.00	0.180
		2.5	1.0	19.00	20.70	6.14	0.37	0.180
		5	2.0	6.09	20.72	6.19	0.26	0.194
		5.5	2.2	4.28	20.64	6.22	0.23	0.205
		6.5	2.6	3.03	20.74	6.22	0.19	0.209
		7	2.8	3.15	20.74	6.29	0.15	0.214
		7.75	3.1	1.87	20.71	6.24	0.14	0.215
		8.5	3.4	1.75	20.80	6.24	0.12	0.218
		10.8	4.4	1.69	20.76	6.25	0.12	0.221
	Oct-13	2	0.8	25.00	21.03	6.20	0.21	135.700
		4.5	1.8	2.88	21.18	6.25	0.41	144.000
		6	2.4	7.80	21.53	6.32	0.41	158.000
		8	3.2	5.41	21.42	6.34	0.39	163.000
		10	4.0	3.00	22.15	6.33	0.29	163.000
		12	4.9	2.89	22.11	6.31	0.28	159.000
MW-7	Mar-96	3	1.25	19.1	55.4 F	7.68		0.074
		6	2.5	19.15	57.4 F	7.94		0.076
		9.5	4.0	19.15	57.1 F	8.00		0.087
	Nov-97	0	0.0	1409	13 C			0.060
		20	8.3	346	16 C			0.060
		25	10.4	185	15 C			0.060
		30	12.5	235	18 C			0.060
		35	14.6	146	15 C			0.060
		40	16.7	97	15 C			0.060
		45	18.8	49	16 C			0.060
		50	20.8	85	15 C			0.060
	Dec-98	1	0.4		65.4 F	5.62		4.180
		4	1.7		65.4 F	6.18		0.183
		6	2.5		64.1 F	6.31		0.246
		8	3.3		64.7 F	6.32		0.234
		10	4.2		63.8 F	6.25		0.131
	Apr-01	3	1.3	64	20.3 C	5.54	7.17	0.057
		6	2.5	53	20.1 C	5.18	7.44	0.063
		9	3.8	10	20.1 C	5.65	7.52	0.063
	May-02	2	0.8	280	19.9 C	5.38	4.07	0.067
		4	1.7	148	19.8 C	4.61	4.01	0.064
		6	2.5	251	19.7 C	4.69	4.00	0.064
	Sep-03 <sup>b</sup>	2.4	1	95.2	20.0 C	5.20	6.68	0.067
		4.8	2	28.1	20.1 C	5.24	5.67	0.071
		12	5	>999	20.3 C	5.27	7.18	0.077
	May-04	0.5	0.34	192	25.17 C	5.64	6.37	0.095
		0.75	0.51	68	27.47 C	5.74	6.46	0.094
		1	0.68	47.6	26.27 C	5.75	6.50	0.094
		1.3	0.88	40.3	26.48 C	5.75	6.65	0.094
		1.5	1.02	36	26.5 C	5.74	6.44	0.094
		1.75	1.19	26.6	25.55 C	5.75	6.48	0.094
		2	1.36	18.9	27.11 C	5.70	6.35	0.094
		2.25	1.53	13.5	27.59 C	5.71	6.18	0.093
		2.4	1.63	13.3	28.62 C	5.71	6.30	0.094
		2.7	1.84	9.2	26.11 C	5.75	6.33	0.095
		3	2.04	7.6	26.81 C	5.69	6.32	0.095
MW-7R	May-04	1.5	0.89	59.9	24.71 C	7.37	6.51	0.095
		1.8	1.07	42	24.31 C	6.45	6.27	0.095
		1.9	1.13	29.4	24.27 C	6.10	6.27	0.094
		2.3	1.37	35.3	23.8 C	5.94	6.17	0.093
		2.5	1.49	20.6	27.01 C	5.86	6.21	0.093
		3	1.79	13	26.64 C	5.80	6.33	0.093
		4	2.38	9.5	26.65 C	5.79	6.35	0.093
		4.2	2.50	9.3	26.56 C	5.78	6.31	0.093
	Jul-06	11	6.55	59.9	24.71 C	7.37	6.51	0.095
		15	8.93	42	24.31 C	6.45	6.27	0.095

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
MW-7R		20	11.90	29.4	24.27 C	6.10	6.27	0.094
		22	13.10	35.3	23.8 C	5.94	6.17	0.093
	Apr-07	4.5	3.41	829	19.57 C	5.92	7.06	0.105
		6	4.55	429	19.47 C	5.84	6.89	0.104
		7	5.30	286	19.56 C	5.82	6.86	0.105
		10	7.58	82.5	19.68 C	5.82	7.22	0.104
		14	10.61	11.9	19.57 C	5.81	6.82	0.105
		14.5	10.98	6.32	19.61 C	5.81	6.81	0.104
	Oct-07 <sup>a</sup>	0.3	0.27	1100	18.79 C	5.91	4.79	0.115
		1.5	1.36	630	19.57 C	5.96	4.98	0.105
		2.4	2.18	258	19.44 C	5.96	4.78	0.104
		3.5	3.18	134	19.97 C	5.94	4.74	0.104
		4.4	4.00	108	19.91 C	5.95	4.75	0.104
		5.6	5.09	118	19.66 C	5.95	4.86	0.104
		6.7	6.09	58	19.76 C	5.92	5.92	0.104
		7.6	6.91	52	19.81 C	5.92	4.77	0.103
		8.8	8.00	53	19.82 C	5.90	4.95	0.103
		9.5	8.64	43.1	19.61 C	5.89	5.00	0.103
		10	9.09	40.6	19.63 C	5.89	4.93	0.103
		10.4	9.45	38.9	19.88 C	5.89	5.06	0.103
	Apr-08 <sup>a</sup>	0.25	0.26	654	20.06 C	6.21	4.94	0.153
		0.75	0.78	702	20.25 C	6.01	4.91	0.129
		1.5	1.56	401	20.97 C	5.96	4.80	0.125
		2.5	2.60	262	21.02 C	5.94	4.37	0.123
		3.75	3.91	147	20.77 C	5.92	4.95	0.121
		5	5.21	114.2	20.31 C	5.84	4.57	0.120
		5.25	5.47	209	21.91 C	5.90	4.69	0.119
		5.35	5.57	135	21.23 C	5.96	5.12	0.119
	Oct-08 <sup>a</sup>	0.1	0.11	475	18.7 C	6.08	3.53	0.138
		0.25	0.27	292	19.23 C	5.85	4.21	0.125
		0.5	0.54	151	19.4 C	5.74	5.30	0.114
		1	1.09	120	19.72 C	5.70	5.52	0.111
		1.2	1.30	86	19.73 C	5.78	5.59	0.110
		1.4	1.52	61.3	19.28 C	5.72	5.74	0.109
		1.5	1.63	56.3	19.01 C	5.69	5.75	0.109
		1.7	1.85	49.3	18.93 C	5.69	5.72	0.109
		2	2.17	46.5	18.36 C	5.70	5.60	0.108
		2.1	2.28	42.2	18.02 C	5.70	5.68	0.108
		2.2	2.39	48.7	18.3 C	5.64	5.74	0.108
		2.3	2.50	35.3	18.44 C	5.62	5.73	0.108
		2.5	2.72	30.2	18.37 C	5.62	5.70	0.108
		2.6	2.83	31.5	18.34 C	5.60	5.70	0.108
		2.7	2.93	32.7	18.27 C	5.60	5.75	0.108
		2.8	3.04	32.5	18.25 C	5.61	5.71	0.108
	Apr-09 <sup>a</sup>	0.2	0.21	715	18.27 C	6.04	6.09	0.117
		0.5	0.52	484	18.4 C	5.97	5.90	0.114
		0.6	0.62	323	17.76 C	5.99	5.81	0.114
		0.7	0.72	467	17.5 C	5.97	5.94	0.114
		0.8	0.82	326	17.36 C	5.97	5.88	0.114
		0.9	0.93	263	17.75 C	5.99	5.77	0.113
		1	1.03	267	17.82 C	5.99	5.62	0.114
		1.1	1.13	276	17.91 C	5.99	5.24	0.114
		1.2	1.24	190	18.86 C	5.94	6.04	0.113
		1.6	1.65	94.4	18.94 C	5.95	6.05	0.113
		2	2.06	48.8	18.97 C	5.94	6.02	0.113
		2.6	2.68	25.3	19.04 C	5.94	6.02	0.111
		3.2	3.30	13.6	19.11 C	5.94	6.04	0.111
		3.7	3.81	11.9	19.15 C	5.94	6.03	0.111
		3.9	4.02	11.3	19.08 C	5.94	6.10	0.111
		4.1	4.23	9.6	19.12 C	5.93	6.10	0.111
	Oct-09 <sup>a</sup>	0.05	0.04	176	19.27 C	6.06	4.43	0.140
		0.45	0.35	129	19.19 C	5.87	5.20	0.125
		1.2	0.94	63.7	19.04 C	5.75	5.73	0.118
		1.95	1.52	41.2	19.01 C	5.73	5.73	0.117
		2.9	2.27	30.1	19.02 C	5.71	5.69	0.117
		3.5	2.73	18.5	19.02 C	5.72	5.69	0.117
		4.1	3.20	24.5	19.13 C	5.75	5.58	0.117
		4.3	3.36	19.9	19.11 C	5.73	5.69	0.117
		5.1	3.98	12.3	19.04 C	5.71	5.65	0.117
		5.5	4.30	13.9	19.04 C	5.71	5.67	0.117
		6	4.69	13.2	19.04 C	5.70	5.68	0.117
	Apr-10 <sup>a</sup>	0.25	0.14	above range	20.85	5.79	3.30	0.139
		1.25	0.69	698	21.07	5.51	5.33	0.116
		2.25	1.25	282	20.97	5.60	5.11	0.116
		3.5	1.94	137	21.05	5.59	5.41	0.116
		4.5	2.50	418	20.89	5.61	5.46	0.116
		5.5	3.06	100	20.95	5.65	5.45	0.116
		6.5	3.61	83.5	20.76	5.65	5.47	0.116

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		7.25	4.03	34.1	20.68	5.46	5.50	0.116
		9	5.00	68.3	20.97	5.71	5.48	0.116
		11	6.11	21.1	20.49	5.59	5.50	0.115
		11.25	6.25	22.4	20.74	5.73	5.46	0.116
		12	6.67	16.9	21.02	5.75	5.45	0.116
		12.5	6.94	23	21.42	5.79	5.42	0.116
	Oct-10	0.5	0.3	229	20.01	5.95	6.40	0.129
		2.75	1.6	67.8	20.36	5.90	7.04	0.124
		4.5	2.6	66.1	20.59	5.90	6.99	0.123
		7.5	4.3	32.9	19.68	5.86	7.10	0.124
		8.5	4.9	28.1	19.62	5.86	7.19	0.123
		9.5	5.4	30.3	19.62	5.86	7.17	0.124
	Apr-11 <sup>a</sup>	0.5	0.3	602	19.52	5.76	6.47	0.128
		1.5	1.0	262	19.64	5.83	6.93	0.122
		4.5	3.0	193	19.64	5.83	6.93	0.121
		5.5	3.7	109	19.72	5.83	6.94	0.122
		7	4.7	106	19.8	5.80	6.96	0.122
		9	6.0	74.1	19.86	5.78	6.95	0.122
		10	6.7	78.4	19.86	5.75	6.98	0.122
		12	8.1	51.2	19.9	5.75	6.96	0.122
	Apr-11 <sup>a</sup>	13.5	9.1	88.7	19.63	5.72	7.03	0.122
		16	10.7	29.6	19.48	5.72	7.01	0.121
		19.5	13.1	19	19.47	5.70	6.99	0.123
		20	13.4	23.5	19.45	5.67	7.00	0.122
		20.5	13.8	18.7	19.5	5.66	6.94	0.122
		22	14.8	23.2	19.46	5.64	6.93	0.122
	Oct-11	0.5	0.4	894	19.61	5.88	5.48	0.122
		2	1.4	615	19.15	5.69	5.97	0.118
		4	2.8	340	19.16	5.83	6.00	0.117
		6	4.3	193	19.18	5.73	5.96	0.117
		8	5.7	130	19.25	5.76	5.95	0.117
	Apr-12	1.25	1.4	76.1	18.86	5.94	5.22	0.120
		2.5	2.7	51.4	18.93	5.93	5.20	0.118
		4	4.4	34.3	19.00	5.92	5.13	0.118
		5	5.5	18.4	18.95	5.91	5.09	0.118
		6	6.6	13.7	19.01	5.90	5.05	0.117
		7	7.7	9.21	19	5.89	5.02	0.117
	Oct-12	0.75	1.0	305	20.94	5.32	6.19	0.122
		1.5	2.1	51.2	20.74	5.57	6.32	0.116
		2	2.7	53.9	20.92	5.78	6.29	0.117
		2.5	3.4	52.6	21.18	5.89	6.26	0.116
		3.5	4.8	27.1	21.20	5.90	6.28	0.116
		4.75	6.5	25.4	21.14	5.89	6.31	0.116
		5.25	7.19	24.70	21.12	5.90	6.31	0.12
	Apr-13	1.00	1.37	60.30	19.56	5.53	5.43	0.122
		2.00	2.74	37.60	19.52	5.33	5.64	0.120
		3.00	4.11	9.33	19.59	5.34	5.72	0.119
		4.00	5.48	5.98	19.60	5.34	5.72	0.118
		5.00	6.85	4.73	19.83	5.36	5.72	0.119
MW-8	Mar-96	4	1.7	18.92	54.5 F	6.49		0.585
		8	3.3	18.88	57.1 F	6.25		0.619
		12	5.0	18.91	56.5 F	6.20		0.630
	Nov-97	12	5.0	> 1000	18 C	6.60		1.260
		25	10.4	650	17 C	6.60		1.260
		55	22.9	700	17 C	6.60		1.260
		75	31.3	635	17 C	6.60		1.260
		82	34.2	620	17 C	6.60		1.260
	Dec-98	1	0.4		61.5 F	6.48		2.060
		3	1.3		62.5 F	6.46		1.950
		5	2.1		61.9 F	6.30		2.160
		7	2.9		62.9 F	6.22		1.990
		10	4.2		62.6 F	6.25		2.060
		12	5.0		62.9 F	6.25		2.060
	Apr-01	3	1.3	40	20.4 C	6.21	0.09	0.601
		6	2.5	22	19.5 C	6.20	0.30	0.641
		9	3.8	19	19.2 C	6.19	-0.13	0.819
	May-02	1	0.4	999	19.8 C	5.79	2.34	1.100
	Sep-03 <sup>b</sup>	2	0.8	359	19 C	6.36	0.61	0.575
		4	1.7	405	19.6 C	6.27	0.36	0.611
		6	2.5	68.2	19.7 C	6.41	0.31	0.831
		8	3.3	23.9	19.8 C	6.46	2.13	1.100
		11	4.6	8.4	19.4 C	6.50	0.27	1.090
	May-04	2	1.1	35.7	21.05 C	6.36	0.38	0.862
		3	1.7	17	21.72 C	6.24	0.69	1.080
		4	2.3	19.1	24.25 C	6.19	1.35	1.100
		5	2.8	32	27.94 C	6.13	2.81	1.090
		6	3.4	16	26.19 C	6.17	1.80	0.927
		7	4.0	35.3	22.44 C	6.21	1.52	0.955

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-8		8	4.5	9.7	28.7 C	6.16	1.12	1.100	
		8.5	4.8	8.7	25.49 C	6.17	1.25	1.110	
		9	5.1	7.8	24.46 C	6.17	1.16	1.120	
		9.5	5.4	9.9	23.36 C	6.17	1.03	1.110	
		10	5.6	10.5	22.91 C	6.19	0.91	1.110	
		10.5	5.9	8.4	22.18 C	6.22	0.80	1.120	
		11	6.2	8	22.23 C	6.21	0.80	1.120	
	May-05		2.4	1.0	106	19.44 C	6.35	0.47	0.372
			4.8	2.0	25.9	19.27 C	6.38	0.38	0.492
			5.2	2.2	22.8	19.23 C	6.39	0.35	0.514
	Jul-06		1.5	0.8	422	19.46 C	7.39	2.10	0.577
			3	1.7	367	19.65 C	7.20	1.64	0.663
			5	2.1	124	19.48 C	7.05	0.12	0.904
			6	2.6	100	19.49 C	7.03	0.11	0.918
			8	3.4	52.6	19.50 C	6.99	0.09	0.941
	Apr-07		1.5	0.9	320	20.42 C	6.92	0.49	1.733
			2	1.2	58.4	20.35 C	6.95	0.44	1.879
			4	2.4	38.7	20.38 C	6.99	0.83	2.044
			6.5	3.9	38.2	20.39 C	6.99	0.55	2.077
			8.5	5.1	25.5	20.38 C	6.99	0.53	2.066
	May-07				299	23.5 C	7.28	1.93	1.640
					372	22.5 C	7.24	0.55	1.620
					205	22.1 C	7.23	0.26	1.580
					195	21.7 C	7.23	0.17	1.560
	Oct-07 <sup>a</sup>		0	0.0	168.8	17.51 C	6.36	2.75	1.237
			0.2	0.2	140.3	18.07 C	6.40	2.18	1.200
			0.3	0.3	105.2	18.32 C	6.37	1.64	1.176
			0.4	0.4	73.9	18.8 C	6.38	1.12	1.164
			0.6	0.6	57.1	19.03 C	6.37	0.78	1.174
			0.75	0.7	44.7	19.01 C	6.37	0.72	1.176
			0.85	0.8	25.5	19.54 C	6.36	0.81	1.174
			1	0.9	18.8	19.76 C	6.37	0.78	1.173
			1.2	1.1	15.5	20.27 C	6.38	0.73	1.173
			1.3	1.2	14.3	20.73 C	6.38	0.73	1.173
			1.4	1.3	12.4	21.26 C	6.38	0.71	1.170
			1.4	1.3	11.3	21.98 C	6.38	0.68	1.171
		1.5	1.4	10.8	22.15 C	6.38	0.65	1.174	
		1.5	1.4	9.13	22.47 C	6.38	0.65	1.176	
Apr-08 <sup>a</sup>		0.15	0.1	268	20.59 C	6.55	1.12	1.204	
		0.3	0.3	187	20.41 C	6.36	1.22	1.074	
		0.5	0.4	104	19.91 C	6.28	0.67	0.940	
		0.9	0.8	79.1	19.83 C	6.25	0.54	0.942	
		1.25	1.0	92.4	19.75 C	6.33	0.43	1.003	
		1.5	1.3	135	19.69 C	6.36	0.42	1.041	
		1.9	1.6	163	19.8 C	6.39	0.43	1.075	
		2.3	1.9	165	19.7 C	6.43	0.46	1.120	
		2.6	2.2	152	19.62 C	6.46	0.47	1.170	
		3	2.5	142	19.65 C	6.45	0.48	1.174	
		3.4	2.8	132	19.64 C	6.47	0.44	1.182	
		3.5	2.9	141	19.6 C	6.47	0.41	1.187	
		3.6	3.0	145	19.51 C	6.47	0.40	1.189	
Oct-08		0.15	0.1	143	18.16 C	5.17	1.37	0.892	
		0.2	0.2	61.2	18.02 C	6.89	1.05	0.872	
		0.22	0.2	52.9	18.34 C	7.41	1.02	0.859	
		0.25	0.2	48.7	18.37 C	7.40	0.99	0.861	
		0.3	0.3	36.8	18.58 C	7.02	0.91	0.904	
		0.35	0.3	28.2	18.64 C	6.92	0.91	0.943	
		0.4	0.4	23.7	18.76 C	6.88	0.90	0.970	
		0.45	0.4	23.4	18.98 C	6.74	0.80	1.026	
		0.5	0.5	23.8	19.06 C	6.73	0.78	1.036	
		0.55	0.5	20.5	19.02 C	6.57	0.79	1.055	
		0.6	0.5	19.2	19.02 C	6.46	0.85	1.065	
		0.65	0.6	17.3	19.03 C	6.41	0.85	1.072	
		0.7	0.6	16.3	19.03 C	6.35	0.89	1.083	
		0.75	0.7	12.1	19.05 C	6.34	0.91	1.087	
		0.8	0.7	11.8	19.18 C	6.30	0.96	1.098	
		0.85	0.8	10.8	19.36 C	6.30	1.02	1.108	
		0.9	0.8	9.43	19.41 C	6.30	1.08	1.118	
Apr-09 <sup>a</sup>		0.05	0.1	761	21.39 C	7.19	9.00	0.967	
		0.15	0.2	685	21.62 C	7.18	8.30	0.967	
		0.25	0.3	575	21.18 C	7.07	7.68	0.982	
		0.35	0.4	479	20.88 C	6.77	6.25	1.015	
Apr-09 <sup>b</sup>		0.5	0.5	286	20.52 C	6.69	5.10	1.044	
		0.7	0.7	195	20.18 C	6.61	4.01	1.072	
		0.8	0.9	100.7	20.15 C	6.58	2.56	1.101	
		1.05	1.1	75.1	20.07 C	6.51	2.05	1.121	
		1.2	1.3	45.1	20.01 C	6.51	1.60	1.129	
		1.25	1.3	24.1	19.92 C	6.49	1.41	1.133	

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		1.45	1.5	16.3	19.88 C	6.48	0.88	1.133
		1.6	1.7	11.6	19.52 C	6.49	0.79	1.133
		1.65	1.8	11.4	19.76 C	6.49	0.71	1.136
		1.7	1.8	11.1	20.10 C	6.49	0.59	1.139
		1.85	2.0	7.56	20.06 C	6.49	0.54	1.140
	Oct-09 <sup>a</sup>	0.0	0.0	287	18.67 C	6.28	1.67	0.819
		0.3	0.2	44.1	18.96 C	6.40	1.15	0.797
		0.55	0.4	27.5	19.04 C	6.40	1.00	0.834
		0.85	0.6	18.5	19.04 C	6.41	0.88	0.880
		1.1	0.8	17.7	19.06 C	6.41	0.78	0.906
		1.35	1.0	12.5	19.09 C	6.42	1.09	0.930
		1.5	1.1	12.6	19.12 C	6.42	0.78	0.940
		1.85	1.3	14.3	19.13 C	6.42	0.64	0.947
		1.95	1.4	12.5	19.34 C	6.43	0.69	0.951
		2.05	1.5	13.3	19.4 C	6.43	0.75	0.958
		2.3	1.6	13.7	19.32 C	6.43	0.64	0.969
		2.5	1.8	10.8	19.3 C	6.42	0.58	0.970
		2.6	1.9	11.6	19.3 C	6.42	0.58	0.972
		2.7	1.9	9.8	19.28 C	6.42	0.56	0.974
	Apr-10 <sup>a</sup>	0.2	0.1	538	19.28	6.25	1.31	0.319
		0.5	0.4	434	18.82	6.22	0.94	0.358
		1	0.7	243	18.63	6.30	0.65	0.462
		1.5	1.1	170	18.65	6.34	0.58	0.509
		2.25	1.6	120	18.66	6.38	0.52	0.555
		3	2.1	72.5	18.6	6.41	0.49	0.592
		3.7	2.6	69.1	18.57	6.42	0.46	0.622
		4.4	3.1	50.2	18.57	6.44	0.43	0.647
		5.1	3.6	37.4	18.83	6.45	0.41	0.664
		5.8	4.1	33.5	18.84	6.47	0.39	0.680
		6.5	4.6	29.5	18.83	6.49	0.38	0.690
		7.2	5.1	40.5	18.78	6.50	0.36	0.699
		7.9	5.6	33.3	18.69	6.50	0.36	0.706
		8.7	6.2	23.5	18.65	6.49	0.34	0.711
		9.4	6.7	24.3	18.63	6.48	0.32	0.717
		9.75	7.0	22.8	18.66	6.49	0.32	0.719
		10.1	7.2	22.2	18.79	6.49	0.31	0.722
		10.45	7.5	20.5	18.8	6.49	0.31	0.726
	Oct-10	0	0.0	285	20.37	6.72	2.36	0.815
		2.25	0.9	27.0	19.60	6.65	0.33	0.924
		5.65	2.4	15.0	19.41	6.64	0.25	0.952
		6.45	2.7	12.0	19.37	6.64	0.30	0.968
		6.85	2.9	11.8	19.38	6.63	0.29	0.970
		7.25	3.0	9.8	19.40	6.64	0.30	0.974
	Apr-11 <sup>a</sup>	0.25	0.2	592	20.60	6.72	5.27	1.039
		0.6	0.4	394	19.06	6.44	4.48	1.030
		1	0.6	221	18.88	6.59	4.18	1.028
		1.45	0.9	105	18.77	6.68	4.10	1.043
		2	1.3	62.5	18.67	6.70	4.09	1.036
		2.6	1.7	45.7	18.57	6.72	4.02	1.021
		3.35	2.2	34.8	18.70	6.71	3.95	1.023
		4.15	2.7	29.5	18.60	6.72	3.94	1.029
		4.8	3.1	27.4	18.93	6.76	3.91	1.036
		5.4	3.5	32.7	19.19	6.72	3.95	1.042
		6	3.9	34.2	18.94	6.72	3.94	1.028
		6.3	4.1	27.4	18.89	6.73	3.90	1.026
		6.6	4.3	31.8	18.86	6.72	3.94	1.031
		6.9	4.5	28.2	18.91	6.73	3.91	1.033
	Oct-11	0.25	0.2	436	19.24	6.56	3.61	0.937
		0.5	0.5	437	19.22	6.53	3.03	0.919
		0.75	0.7	415	19.18	6.52	3.37	0.903
		1	0.9	192	19.17	6.50	3.19	0.887
		1.25	1.1	129	19.17	6.51	3.63	0.885
		1.5	1.4	62.2	19.18	6.52	3.60	0.886
		1.75	1.6	48.3	19.19	6.52	3.50	0.885
		2	1.8	36.3	19.20	6.52	3.57	0.885
		2.25	2.0	26.4	19.20	6.53	3.84	0.884
		2.5	2.3	22.5	19.20	6.54	3.86	0.883
		2.75	2.5	17.2	19.18	6.54	3.97	0.883
		3	2.7	14.1	19.19	6.54	4.15	0.884
		3.25	2.9	12.6	19.17	6.54	4.26	0.884
		3.5	3.2	8.75	19.18	6.54	4.86	0.884
	Nov-11	0.5	0.5	683	18.74	6.18	3.20	0.812
		0.75	0.8	654	18.53	6.18	1.87	0.809
		1	1.0	609	18.67	6.31	1.87	0.812
		1.25	1.3	387	18.78	6.38	1.79	0.815
		1.5	1.5	271	18.77	6.37	1.71	0.819
		1.75	1.8	219	18.80	6.39	1.60	0.822
		2	2.0	177	18.75	6.42	1.53	0.825
	Nov-11	2.25	2.3	128	18.76	6.43	1.49	0.827

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-8		2.5	2.6	120	18.71	6.45	1.47	0.832	
		2.75	2.8	67.0	18.70	6.45	1.48	0.834	
		3	3.1	42.2	18.74	6.45	1.49	0.837	
		3.25	3.3	35.5	18.78	6.46	1.51	0.841	
		Apr-12	0.05	0.1	34.5	21.08	6.07	0.70	1.022
			0.2	0.2	27	20.61	6.14	0.50	1.027
			0.4	0.5	21.8	20.82	6.35	0.47	1.029
			0.5	0.6	20.4	20.59	6.40	0.45	1.030
			0.6	0.7	20.1	20.05	6.33	0.37	1.029
			0.75	0.9	14.6	19.94	6.29	0.33	1.029
			1	1.1	14.4	19.98	6.38	0.29	1.030
			1.25	1.4	15.5	19.92	6.41	0.27	1.031
			1.4	1.6	13.25	19.92	6.43	0.27	1.032
			1.6	1.8	10.66	20.01	6.46	0.24	1.033
			1.75	2.0	9.45	19.99	6.47	0.22	1.035
			2	2.3	9.3	20.12	6.50	0.22	1.036
			2.2	2.5	9.82	20.04	6.48	0.20	1.036
			2.4	2.8	8.3	20.11	6.50	0.20	1.037
			2.5	2.9	7.61	20.14	6.50	0.19	1.037
			2.75	3.2	6.5	20.09	6.50	0.19	1.037
			0.1	0.2	>1000	22.96	6.47	0.48	1.103
		Oct-12	0.19	0.4	>1000	23.99	6.71	0.15	1.120
		Apr-13	0	0.0	70.0	20.80	6.38	3.22	1.09
			0.1	0.1	84.3	19.73	5.98	0.68	1.10
			0.5	0.6	51.5	19.02	6.07	0.39	1.07
			1.2	1.4	15.8	18.93	6.17	0.32	1.07
			1.5	1.7	13.4	18.92	6.22	0.29	1.07
			1.8	2.1	13.9	18.87	6.24	0.26	1.06
			2.4	2.8	9.13	18.89	6.27	0.24	1.06
		Oct-13	0	0.0	48.70	19.33	6.58	5.58	0.726
			0.5	0.6	11.70	18.81	6.52	0.59	0.729
			1	1.1	3.08	18.71	6.50	0.52	0.718
			1.5	1.7	1.95	18.69	6.52	0.41	0.703
			2	2.3	0.31	18.70	6.50	0.34	0.699
			2.25	2.6	0.09	18.80	6.52	0.34	0.702
			2.5	2.9	0.09	18.82	6.50	0.32	0.706
			2.75	3.2	0.26	18.84	6.51	0.31	0.707
	MW-9a	Dec-01	2	1.3	702	19.2 C	6.76	1.67	0.743
			7	4.7	535	20.1 C	6.97	2.76	0.928
			10	6.7	219	20.2 C	6.97	2.63	0.969
			12	8.0	134	20.6 C	6.99	2.97	0.987
		May-02	2	1.3	999	20.8 C	5.94	0.30	0.284
			4	2.7	639	21.2 C	5.00	0.12	0.476
			6	4.0	279	21.3 C	4.94	0.15	0.510
			2	1.3	> 1000	20.5 C	4.93	0.79	0.199
			4	2.7	> 1000	19.9 C	4.83	0.47	0.191
			6	4.0	> 1000	20.1 C	5.07	0.81	0.273
		Sep-03 <sup>b</sup>	1.5	1.0	203	21.1 C	6.88	0.49	0.705
		3	2.0	90.1	21.1 C	6.64	0.33	0.625	
		4.5	3.0	78	21.4 C	6.83	0.33	0.773	
		5.5	3.7	93.2	21.4 C	6.90	0.31	0.737	
		7.5	5.0	83.9	20.8 C	6.78	0.27	0.579	
		8.5	5.7	93.6	20.8 C	6.80	0.27	0.596	
May-04		1	0.9	217	22.37 C	6.33	2.04	0.331	
		1.5	1.4	27.5	26.01 C	6.28	0.82	0.379	
		2	1.8	20.2	25.89 C	6.36	0.64	0.411	
		2.5	2.3	18.8	27.08 C	6.33	0.51	0.422	
		3	2.8	19.2	27.47 C	6.32	0.48	0.421	
		3.5	3.2	12.8	26.44 C	6.37	0.60	0.524	
		4	3.7	11.7	26.47 C	6.43	0.51	0.557	
		4.5	4.1	12.5	27.52 C	6.48	0.35	0.571	
		5	4.6	13.6	29.15 C	6.50	0.33	0.575	
		5.5	5.0	24.2	26.28 C	6.49	0.29	0.570	
		6	5.5	37	22.13 C	6.43	0.55	0.616	
		7	6.4	20.9	23.94 C	6.52	0.35	0.664	
		7.5	6.9	9.5	24.87 C	6.50	0.32	0.654	
Jul-06		3	2.8	8.6	20.87 C	6.42	1.78	0.278	
		5	4.6	3.1	20.92 C	6.64	2.55	0.391	
		7	6.4	5.8	20.94 C	6.75	2.58	0.450	
		8.5	7.8	5.7	20.92 C	6.81	2.33	0.476	
Apr-07		0.1	0.1	47.5	20.30 C	6.67	1.95	0.376	
		0.9	0.8	21.9	19.86 C	6.62	1.02	0.531	
		2.8	2.5	8.3	19.83 C	6.63	1.02	0.569	
		3.5	3.1	4.2	19.83 C	6.74	0.98	0.571	
Oct-07		0.1	0.1	96	19.43 C	6.48	1.12	0.860	
		0.25	0.1	39.6	19.98 C	6.44	1.07	0.874	
		0.4	0.2	28.6	19.89 C	6.44	0.80	0.872	
		0.6	0.4	16.7	20.3 C	6.45	0.60	0.883	
		0.75	0.4	14	20.37 C	6.45	0.46	0.884	

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-9a		0.9	0.5	11.5	20.44 C	6.45	0.39	0.881	
		1.1	0.7	11.4	20.52 C	6.44	0.27	0.879	
		1.25	0.7	10.4	20.57 C	6.44	0.24	0.877	
		1.4	0.8	7.48	20.54 C	6.44	0.23	0.873	
	Apr-08	0.1	0.1	57.6	17.58 C	6.67	0.81	0.699	
		0.25	0.2	52.9	17.83 C	6.73	0.59	0.727	
		0.35	0.2	38.2	18.18 C	6.74	0.48	0.728	
		0.55	0.3	30.5	18.44 C	6.70	0.65	0.669	
		0.75	0.5	21.7	18.54 C	6.65	0.70	0.590	
		1	0.6	17.2	18.51 C	6.51	0.59	0.461	
		1.25	0.8	14.7	18.51 C	6.47	0.50	0.433	
		1.4	0.9	13.1	18.6 C	6.48	0.45	0.442	
		1.6	1.0	10.25	18.56 C	6.50	0.42	0.457	
		1.9	1.2	7.2	18.56 C	6.52	0.40	0.473	
	Oct-08	0.1	0.1	526	20.71 C	7.98	1.15	0.480	
		0.75	0.7	154	21.34 C	7.75	1.11	0.537	
		1.25	1.1	56.1	21.33 C	7.82	0.88	0.644	
		1.75	1.5	28.3	21.48 C	7.87	0.73	0.706	
		2.25	2.0	12.2	21.51 C	7.89	0.61	0.747	
		2.75	2.4	7.35	21.5 C	7.89	0.53	0.766	
		3.5	3.0	5.77	21.53 C	7.88	0.48	0.776	
		4.25	3.7	5.82	21.53 C	7.88	0.45	0.782	
	Apr-09	0.25	0.2	374	19.17 C	5.83	3.98	0.068	
		0.5	0.3	53.4	19.56 C	5.84	2.90	0.078	
		1	0.6	28.4	19.57 C	5.99	2.43	0.116	
		2	1.2	13.3	19.83 C	6.13	1.97	0.167	
		3	1.9	9.46	19.85 C	6.28	1.49	0.232	
		3.5	2.2	6.95	19.64 C	6.34	1.27	0.276	
		4	2.5	9.26	19.78 C	6.44	1.00	0.335	
		4.5	2.8	7.82	19.84 C	6.44	0.95	0.340	
		5	3.1	5.2	19.83 C	6.44	0.90	0.342	
		6	3.7	6.83	19.89 C	6.43	0.85	0.349	
		6.75	4.2	5.52	19.97 C	6.41	0.85	0.337	
	Oct-09	0.15	0.1	36.3	22.63 C	6.40	1.36	0.279	
		0.3	0.2	18.8	22.06 C	6.10	1.22	0.171	
		0.5	0.3	14.4	22.08 C	6.54	1.36	0.109	
		0.8	0.5	11.9	22.14 C	5.62	1.39	0.083	
		1.2	0.8	8.34	22.19 C	5.62	1.22	0.093	
		1.3	0.8	7.52	22.19 C	5.66	1.15	0.098	
		1.5	0.9	6.88	22.15 C	5.68	1.06	0.105	
	MW-9b	Dec-01	20	3.3	8	20.3 C	10.76	1.01	0.960
			40	6.7	3	19.7 C	9.61	1.02	0.790
		60	10.0	3	19.8 C	9.13	1.03	0.792	
May-02		20	3.3	264	20.8 C	8.69	0.91	1.080	
		40	6.7	44	20.6 C	6.80	0.06	1.080	
		60	10.0	32	20.6 C	6.79	0.05	1.070	
		6	1.0	152	20.7 C	6.07	0.39	1.150	
		12	2.0	128	20.3 C	5.98	0.23	1.140	
		18	3.0	54	20.3 C	6.02	0.36	1.130	
Sep-03 <sup>b</sup>		6	1.0	247	23.4 C	7.24	0.37	1.490	
		12 <sup>c</sup>	2.0	576	22.9 C	7.24	0.35	1.440	
		18 <sup>c</sup>	3.0	763	21.9 C	7.34	0.32	1.370	
		24 <sup>c</sup>	4.0	> 999	21.9 C	7.36	0.32	1.360	
		30 <sup>c</sup>	5.0	>999	21.9 C	7.32	0.34	1.370	
May-04		1	0.3	17.1	21.58 C	6.76	0.48	1.500	
		1.5	0.4	10.9	22.27 C	6.76	0.41	1.500	
		2	0.5	15.8	21.57 C	6.78	0.46	1.510	
		2.5	0.6	7.8	23.65 C	6.77	0.37	1.490	
		3	0.8	7.3	23.75 C	6.79	0.43	1.510	
		3.5	0.9	8.1	23.53 C	6.79	0.41	1.520	
		4	1.0	6.3	23.73 C	6.79	0.41	1.520	
Jul-06		4	1.0	6.2	22.04 C	6.76	0.01	0.886	
		7	1.8	18.5	22.18 C	6.76	1.08	0.911	
		8	2.0	10	24.26 C	6.78	0.69	0.876	
		8.5	2.2	8	24.90 C	6.77	0.40	0.887	
Apr-07		1	0.2	25.2	20.26 C	11.20	1.87	0.680	
		2.5	0.5	30.7	20.34 C	11.08	3.88	0.528	
		5	0.9	450	21.13 C	8.56	2.16	0.626	
		7.5	1.4	358	20.71 C	7.26	0.79	1.023	
		9	1.7	190	20.8 C	7.16	5.21	1.022	
		10	1.8	80	21.14 C	7.13	5.69	1.025	
		12	2.2	77	21.97 C	7.13	5.42	1.034	
		14	2.6	177	21.77 C	7.21	6.41	1.033	
		15	2.8	63.2	21.71 C	7.27	5.81	1.184	
		16	2.9	27.9	20.39 C	7.20	5.42	1.179	
		17	3.1	12.4	20.32 C	7.15	5.27	1.181	
		18	3.3	10.3	20.31 C	7.16	5.16	1.132	
		18.5	3.4	11.3	20.16 C	7.19	4.81	1.183	

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
MW-9b	Oct-07 <sup>a,d</sup>	20	3.7	9.6	20.19 C	7.18	4.84	1.185
		1	0.2	37.6	20.19 C	7.23	0.42	0.789
		2.1	0.3	26.7	20.15 C	7.23	0.48	0.792
		3.7	0.6	68	20.55 C	7.23	0.16	0.788
		5	0.8	50.06	21.19 C	7.24	0.10	0.782
		6.1	1.0	26.3	21.1 C	7.24	0.10	0.785
		7.2	1.2	24.4	21.28 C	7.28	0.09	0.786
		8	1.3	54.8	21.61 C	7.36	0.14	0.778
		9.3	1.5	80.1	21.69 C	7.35	0.13	0.775
		10.3	1.7	81.5	22.11 C	7.37	0.11	0.774
		11.6	1.9	55.5	21.46 C	7.30	0.66	0.777
		12.6	2.1	35.2	21.3 C	7.31	1.95	0.767
		13.1	2.2	64	22.24 C	7.34	3.05	0.762
		13.5	2.2	94	23.23 C	7.34	4.57	0.780
		14	2.3	97	25.29 C	7.34	4.31	0.787
	14.5	2.4	130	24.48 C	7.33	4.85	0.787	
	15.1	2.5	130	29.73 C	7.39	4.12	0.811	
	16.4	2.7	105.5	20.34 C	7.39	2.95	0.799	
	17.6	2.9	37.5	20.25 C	7.27	1.67	0.795	
	18	3.0	35.2	20.09 C	7.26	1.73	0.794	
	18.5	3.0	36	20.42 C	7.25	1.78	0.793	
	Apr-08 <sup>a</sup>	0.15	0.0	267	17.54 C	7.05	0.25	0.831
	0.3	0.1	175	16.8 C	7.14	0.32	0.830	
	0.45	0.1	191	15.87 C	7.14	0.56	0.825	
	0.6	0.1	202	16.81 C	7.19	0.41	0.817	
	0.67	0.1	278	16.99 C	7.20	0.52	0.810	
	0.8	0.1	124	16.23 C	7.19	0.68	0.797	
	0.9	0.2	119	15.84 C	7.17	0.68	0.791	
	1.1	0.2	63.3	16.14 C	7.19	0.66	0.789	
	1.3	0.2	66.2	16.67 C	7.19	0.69	0.786	
	1.5	0.3	73.5	16.76 C	7.18	0.59	0.787	
	1.7	0.3	67.5	17 C	7.16	0.66	0.784	
	1.9	0.3	38.6	17.53 C	7.20	0.51	0.789	
	2.1	0.4	37.2	17.85 C	7.23	0.60	0.795	
	2.3	0.4	72.9	17.97 C	7.21	0.36	0.799	
	2.5	0.4	28.1	18.51 C	7.22	0.32	0.798	
	2.7	0.5	22.6	19.51 C	7.23	0.29	0.804	
	2.9	0.5	21.7	20.14 C	7.25	0.24	0.809	
	3.1	0.5	20	20.45 C	7.26	0.23	0.811	
	3.3	0.6	29.8	20.5 C	7.25	0.36	0.814	
	3.5	0.6	21.9	20.65 C	7.24	0.24	0.813	
	3.7	0.6	32	20.94 C	7.26	0.19	0.814	
	3.9	0.7	26.7	20.3 C	7.27	0.14	0.813	
	4.1	0.7	27.5	21.01 C	7.27	0.12	0.814	
	4.3	0.7	25.8	21.04 C	7.27	0.10	0.815	
	4.5	0.8	28.9	21.14 C	7.31	0.21	0.817	
	4.7	0.8	22.6	21.17 C	7.23	0.12	0.817	
	4.9	0.8	23.4	21.38 C	7.24	0.07	0.818	
	5.1	0.9	19.1	22.17 C	7.25	0.06	0.818	
	5.3	0.9	22.3	21.74 C	7.24	0.04	0.818	
	5.5	0.9	18.5	22.01 C	7.25	0.04	0.820	
	5.7	1.0	16.3	22.08 C	7.23	0.09	0.822	
	6.1	1.0	18.6	22.91 C	7.27	0.04	0.827	
	6.3	1.1	16.6	22.71 C	7.23	0.04	0.822	
	6.5	1.1	17.2	22.36 C	7.23	0.04	0.823	
	7.25	1.2	16.5	22.09 C	7.26	0.24	0.828	
	7.5	1.3	17	22.64 C	7.25	0.10	0.828	
8.5	1.4	15.8	22.78 C	7.25	0.06	0.830		
9.5	1.6	15.1	22.82 C	7.26	0.05	0.831		
10	1.7	16.5	22.63 C	7.25	0.05	0.826		
10.5	1.8	17.4	22.67 C	7.25	0.05	0.825		
11	1.9	14.8	22.39 C	7.25	0.04	0.823		
Oct-08	0.25	0.0	63.2	19.52 C	8.62	1.33	0.809	
0.5	0.1	33.9	19.88 C	8.65	1.02	0.806		
1	0.2	13.9	20.04 C	8.65	0.87	0.809		
2	0.3	8.44	19.96 C	8.62	0.78	0.803		
3	0.5	8.33	20.02 C	8.52	0.70	0.808		
Apr-09	0.1	0.0	126	19.28 C	7.04	0.94	0.830	
0.2	0.0	48.2	19.05 C	7.01	0.77	0.834		
0.3	0.0	24.6	19.34 C	7.01	0.71	0.836		
0.4	0.1	20.8	19.18 C	7.01	0.63	0.835		
0.6	0.1	20.3	19.34 C	7.01	0.57	0.835		
0.8	0.1	19.9	19.02 C	7.01	0.57	0.834		
1	0.2	13.5	19.46 C	7.00	0.51	0.833		
1.2	0.2	9.09	19.63 C	7.02	0.41	0.832		
1.4	0.2	7.14	19.51 C	7.03	0.39	0.830		
1.6	0.2	7.72	19.17 C	7.03	0.38	0.828		
1.8	0.3	5.03	19.75 C	7.01	0.39	0.832		

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
	Oct-09	0.2	0.0	19.36	21.31 C	8.93	0.53	0.811
		0.25	0.0	17.76	21.19 C	8.84	0.47	0.812
		0.35	0.1	13.37	21.38 C	8.74	0.39	0.815
		0.65	0.1	22.6	21.17 C	8.68	0.35	0.818
		1.1	0.2	16.74	21.14 C	8.54	0.29	0.820
		1.35	0.2	11.97	21.15 C	8.53	0.30	0.819
		1.5	0.2	9.71	21.32 C	8.50	0.29	0.819
		1.8	0.3	7.89	21.22 C	8.60	0.25	0.821
MW-10	Dec-01	2	1.2	999	19.5 C	6.10	1.56	0.471
		6	3.7	336	20.4 C	6.30	1.33	0.483
		10	6.1	72	19.8 C	6.31	1.54	0.497
	May-02	2	1.2	342	21.6 C	6.40	1.90	0.266
		4	2.4	104	20.8 C	4.66	0.53	0.260
		6	3.7	52	20.6 C	4.61	0.49	0.260
	Sep-03	4	2.4	217	22.1 C	5.81	6.97	0.219
		4.5	2.7	68.4	23.5 C	5.76	6.24	0.215
		5	3.0	9.4	22.8 C	5.83	0.76	0.212
	May-04	1	0.6	280	23.38 C	5.78	8.88	0.000
		2	1.3	102	22.46 C	6.07	0.66	0.358
		3	1.9	47.1	23.02 C	6.06	0.56	0.357
		3.5	2.2	26.2	23.21 C	6.05	0.51	0.357
		5	3.2	16.5	23.73 C	6.03	0.43	0.363
		6	3.8	6.6	23.76 C	6.03	0.41	0.367
	Jul-06	2	1.3	230	22.72 C	6.46	8.63	0.331
		4	2.6	14.2	22.69 C	6.33	8.00	0.340
		5	3.2	8.9	22.68 C	6.35	9.63	0.348
	Apr-07	0.2	0.1	32.5	21.91 C	6.42	1.25	0.438
		1.2	0.8	19.5	22.23 C	6.32	0.80	0.438
		2	1.3	11.7	21.30 C	6.07	0.48	0.450
		3.2	2.0	6.2	21.22 C	5.95	0.69	0.456
		4	2.5	2.9	21.23 C	5.85	0.74	0.461
		5	3.1	1.9	21.20 C	5.82	0.76	0.455
	Oct-07	0	0.0	175	21.21 C	5.79	8.47	0.585
		0.1	0.1	161	21.8 C	5.72	6.70	0.583
		0.2	0.1	76.6	22 C	5.46	2.67	0.581
		0.4	0.3	46.7	21.67 C	5.39	1.41	0.587
		0.6	0.4	41.8	22 C	5.37	0.92	0.596
		0.7	0.4	29.7	22.28 C	5.41	0.93	0.598
		0.8	0.5	16	22.23 C	5.37	0.71	0.607
		1	0.6	12.3	22.12 C	5.37	0.69	0.608
		1.25	0.8	11.3	21.68 C	5.36	0.63	0.609
		1.4	0.9	12.3	21.42 C	5.32	0.52	0.606
		1.6	1.0	12.4	21.5 C	5.35	0.54	0.604
		1.8	1.1	7.3	21.28 C	5.36	0.48	0.605
	Apr-08	0.2	0.1	50.3	21.75 C	6.00	0.84	0.433
		0.3	0.2	32.7	21.64 C	5.95	0.80	0.434
		0.5	0.3	25.4	21.66 C	5.95	1.46	0.435
		0.7	0.5	21.5	21.61 C	5.95	1.36	0.436
		1	0.7	13.7	21.55 C	5.90	1.00	0.439
		1.2	0.8	7.92	21.53 C	5.84	0.82	0.446
	Oct-08	0.1	0.1	302	19.48 C	5.84	1.25	0.368
		0.15	0.1	156	19.48 C	5.83	1.11	0.365
		0.25	0.2	65.9	19.56 C	5.82	0.92	0.359
		0.3	0.2	37.1	19.55 C	5.77	0.78	0.354
		0.35	0.3	36.4	19.51 C	5.74	0.76	0.354
		0.55	0.4	24.7	19.45 C	5.69	0.66	0.349
		0.65	0.5	18.2	19.65 C	5.63	0.59	0.351
		0.7	0.6	14.7	19.6 C	5.61	0.59	0.354
		0.85	0.7	12.6	19.67 C	5.57	0.56	0.360
		0.95	0.8	11.6	19.78 C	5.56	0.55	0.371
		1.15	0.9	7.82	20.17 C	5.56	0.53	0.391
	Apr-09	0.15	0.1	217	20.66 C	6.21	0.90	0.369
		0.35	0.2	165	20.61 C	6.14	0.53	0.375
		0.45	0.3	104	20.59 C	6.13	0.54	0.373
		0.55	0.4	79.2	20.55 C	6.11	1.05	0.368
		0.75	0.5	51.7	20.47 C	6.12	0.75	0.359
		1	0.7	42.9	20.44 C	6.08	1.72	0.348
		1.1	0.7	40.7	20.38 C	6.05	1.19	0.334
		1.2	0.8	29.6	20.29 C	6.12	1.84	0.325
		1.3	0.9	18.8	20.18 C	6.10	1.41	0.322
		1.45	1.0	18.3	20.17 C	6.09	1.49	0.320
		1.6	1.1	17.5	20.19 C	6.08	1.57	0.320
		1.65	1.1	15	20.15 C	6.07	1.86	0.320
		1.75	1.2	12.12	20.06 C	6.09	2.48	0.320
		1.8	1.2	8.95	20.03 C	6.06	2.42	0.321
	Oct-09 <sup>3</sup>	0	0.0	140	21.53 C	6.28	1.29	0.499
		0.4	0.3	30.4	21.6 C	6.41	0.56	0.510
		1	0.7	22.3	21.7 C	6.43	0.56	0.550
		1.4	1.0	14.1	21.65 C	6.50	0.55	0.641

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-10		1.95	1.4	10.4	21.64 C	6.54	0.56	0.692	
		2.3	1.6	12.3	21.62 C	6.55	0.55	0.714	
		2.5	1.8	19.2	21.53 C	6.56	0.59	0.717	
		2.8	2.0	17.6	21.68 C	6.56	0.47	0.726	
		3.05	2.2	20.97	21.67 C	6.57	0.39	0.727	
		3.3	2.3	18.2	21.57 C	6.59	0.33	0.732	
		3.5	2.5	14.5	21.6 C	6.59	0.31	0.734	
		3.75	2.7	11.6	21.58 C	6.60	0.27	0.737	
		4	2.8	9.46	21.59 C	6.60	0.30	0.739	
	Apr-10 <sup>a</sup>		0.2	0.1	148	23.3	5.88	2.18	0.299
			0.35	0.2	98.2	23.23	5.92	1.25	0.299
			0.45	0.3	76.2	23.04	5.94	1.23	0.301
			0.55	0.4	53.9	23.42	5.91	1.26	0.305
			0.65	0.5	40.1	23.41	5.92	1.31	0.312
			0.75	0.5	30.5	23.04	5.93	1.35	0.321
			0.85	0.6	22.2	22.79	5.93	1.36	0.331
			0.95	0.7	18.4	23.07	5.96	1.34	0.340
			1.05	0.7	14.9	23	5.97	1.32	0.347
			1.15	0.8	12.1	22.82	5.97	1.29	0.355
	Apr-10 <sup>b</sup>		1.25	0.9	7.23	22.73	5.97	1.24	0.361
			1.4	1.0	6.27	22.66	5.97	1.21	0.368
			1.6	1.1	5.89	22.83	6.00	1.18	0.373
			1.8	1.3	5.04	22.41	6.03	1.14	0.378
			2	1.4	4.16	21.89	5.96	1.10	0.381
			2.2	1.5	4.51	21.79	5.96	1.08	0.382
			2.4	1.7	4.21	21.61	5.95	1.06	0.384
			2.6	1.8	4.96	21.63	5.95	1.05	0.384
	Oct-10		0	0.0	79.0	22.84	5.96	2.36	0.183
			1	0.7	6.10	22.44	6.16	0.87	0.284
			1.9	1.3	3.55	22.04	6.19	0.66	0.336
			2	1.3	3.68	22.05	6.20	0.65	0.338
			2.1	1.4	3.09	21.98	6.20	0.66	0.338
	Apr-11 <sup>a</sup>		0.25	0.2	45.3	20.96	4.93	3.99	0.265
			0.75	0.5	72.2	23.84	5.47	6.00	0.032
			2	1.3	179	23.47	5.64	6.15	0.031
			3	1.9	185	22.61	5.82	5.76	0.052
			3.75	2.4	188	22.9	6.01	5.26	0.064
			4.25	2.7	155	22.93	6.19	5.00	0.082
			4.65	2.9	125	22.66	6.16	4.85	0.092
			5.05	3.2	114	22.19	6.17	4.64	0.102
			5.35	3.4	72.8	21.69	6.24	4.46	0.119
			5.65	3.6	61.5	21.3	6.30	3.87	0.141
			5.95	3.8	52.3	21.1	6.41	3.43	0.162
			6.25	4.0	35	21.25	6.55	3.23	0.178
			6.55	4.1	22.5	21.06	6.33	3.19	0.191
			6.7	4.2	17	21.18	6.31	3.17	0.199
			6.85	4.3	13.1	21.24	6.29	3.21	0.203
			7	4.4	9.62	21.29	6.25	3.23	0.208
	Oct-11		0.15	0.1	26.40	21.34	5.93	0.75	0.252
			0.25	0.2	26.93	21.51	5.88	0.76	0.253
			0.4	0.3	21.8	21.30	5.87	0.49	0.256
			1	0.6	17.1	21.25	5.85	0.55	0.260
			1.2	0.8	16.3	21.38	5.86	0.60	0.262
			1.3	0.8	11.73	21.36	5.85	0.63	0.266
			1.5	1.0	9.85	21.37	5.86	0.61	0.269
			2	1.3	7.84	21.29	5.87	0.61	0.273
			2.4	1.6	9.73	21.30	5.87	0.60	0.278
			2.6	1.7	6.81	21.33	5.88	0.60	0.282
			2.75	1.8	4.77	21.41	5.89	0.65	0.285
			3	1.9	4.64	21.48	5.89	0.69	0.288
			3.25	2.1	4.62	21.37	5.90	0.78	0.291
			3.5	2.3	4.65	21.42	5.91	0.83	0.293
			3.75	2.4	4.70	21.44	5.91	0.90	0.295
			4	2.6	4.56	21.52	5.93	0.94	0.297
			4.25	2.8	4.60	21.44	5.93	0.96	0.298
			4.5	2.9	4.60	21.37	5.94	0.97	0.300
			4.75	3.1	4.30	21.37	5.93	0.96	0.301
	Apr-12		0.1	0.1	30	19.01	5.78	1.28	0.260
			0.25	0.2	28.2	19.3	5.76	1.09	0.255
			0.6	0.4	25.8	19.4	5.78	1.25	0.255
			0.8	0.5	53.5	19.83	5.74	1.09	0.255
			1.1	0.7	41	20.14	5.73	0.99	0.256
			1.25	0.8	18.8	20.07	5.89	1.07	0.258
			1.4	0.9	15.3	20.22	5.81	1.16	0.258
			1.6	1.0	9.62	20.35	5.95	1.34	0.257
			1.75	1.1	9.42	20.37	5.82	1.36	0.256
			1.9	1.2	8.65	20.6	5.87	1.27	0.255
			2	1.2	8.42	20.8	5.82	1.13	0.254
			2.25	1.4	6.12	20.99	5.81	1.02	0.253

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		2.5	1.5	6.74	21.01	5.83	0.93	0.253
		2.8	1.7	7.59	21.12	5.75	0.76	0.252
		3.1	1.9	8.25	21.19	5.78	0.78	0.251
		3.3	2.0	8.65	21.09	5.71	0.71	0.249
		3.8	2.3	7.31	21.07	5.66	0.60	0.249
		4.4	2.7	7.26	21.15	5.71	0.54	0.249
		4.8	2.9	6.35	21.21	5.72	0.55	0.250
		5	3.1	4.21	21.23	5.74	0.55	0.250
	Oct-12	0.13	0.1	-	23.18	6.02	3.81	0.268
		0.53	0.4	17.6	22.59	5.75	1.92	0.268
		1.59	1.3	-	22.61	5.69	1.21	0.264
		2.38	1.9	18.1	22.62	5.84	0.77	0.285
		2.91	2.4	-	22.47	5.83	1.85	0.309
		3.43	2.8	3.84	22.29	5.82	1.83	0.341
		3.96	3.2	-	22.6	5.78	1.87	0.338
		4.23	3.4	3.91	22.64	5.88	1.81	0.339
	Apr-13	0.00	0.0	68.10	22.47	4.46	2.41	0.276
		0.20	0.1	30.10	21.19	4.59	0.86	0.268
		0.80	0.5	17.00	21.21	4.99	1.30	0.270
		1.50	0.9	5.50	21.18	5.29	1.39	0.265
		2.00	1.2	4.61	21.24	5.42	1.34	0.263
		2.50	1.5	3.70	21.26	5.41	1.27	0.265
		3.00	1.8	2.53	21.22	5.40	1.10	0.269
		4.00	2.5	2.30	21.12	5.42	0.90	0.271
		5.00	3.1	2.25	21.32	5.55	0.88	0.274
MW-11	Dec-01	2	0.7	999	16.3 C	6.90	1.31	0.596
		6	2.0	813	17.5 C	6.85	1.29	0.553
		10	3.3	150	17.3 C	6.78	1.04	0.513
		15	5.0	134	17.4 C	6.76	1.15	0.507
	May-02	2	0.7	> 1000	19 C	5.41	0.97	0.332
		4	1.3	690	18.3 C	5.47	1.14	0.273
		6	2.0	512	18.3 C	5.83	1.20	0.221
	Sep-03 <sup>b</sup>	3	1.0	144	18.0 C	6.18	0.42	0.259
		5	1.7	82.7	18.1 C	6.19	0.34	0.258
		7	2.3	66.6	18.1 C	6.36	0.34	0.257
		12 <sup>c</sup>	4.0	43.7	18.1 C	6.52	0.49	0.255
		20 <sup>d</sup>	6.7	242	18.1 C	6.54	0.33	0.240
	May-04	2	1.0	222	20.92 C	6.70	0.81	0.322
		3	1.5	146	21.45 C	6.48	0.98	0.307
		4	1.9	73.1	22.24 C	6.44	0.60	0.299
		5	2.4	29	22.44 C	6.43	0.51	0.309
		5.5	2.7	23.9	22.57 C	6.37	0.41	0.307
		6	2.9	14	23.44 C	6.35	0.51	0.304
		6.5	3.2	10.6	22.84 C	6.39	0.38	0.300
		7	3.4	9	22.61 C	6.38	0.35	0.302
		7.5	3.6	8.7	22.82 C	6.35	0.35	0.302
	Jul-06	8	2.7	26.1	18.2 C	7.56	0.51	0.295
		9	3.0	21.3	18.18 C	7.55	0.38	0.295
		10	3.3	10.1	18.14 C	7.52	0.27	0.290
	Apr-07	2	1.0	551	18.51 C	6.67	0.75	0.309
		6	3.1	71.7	18.40 C	6.48	0.36	0.285
		7	3.6	51.1	18.41 C	6.49	0.30	0.285
		8	4.1	20.5	18.31 C	6.47	0.24	0.284
		11	5.6	56.3	18.27 C	6.47	1.47	0.282
		11.5	5.9	14.7	18.28 C	6.46	0.33	0.282
		12	6.2	8.92	18.26 C	6.45	0.30	0.282
	Oct-07	0.2	0.2	751	17.78 C	7.07	2.20	0.426
		0.6	0.6	540	18.23 C	6.93	0.39	0.423
		1.3	1.3	213	18.5 C	6.89	0.29	0.424
		1.6	1.6	107	18.58 C	6.87	0.25	0.423
		2.1	2.1	45	18.61 C	6.86	0.24	0.420
		2.6	2.7	29.7	18.59 C	6.85	0.19	0.418
		3.2	3.3	24.2	18.59 C	6.84	0.19	0.417
	Apr-08	1	0.4	298	18.65 C	6.46	1.43	0.210
		2.5	1.1	74.5	18.14 C	6.39	0.81	0.213
		3.5	1.5	70.8	18.26 C	6.45	0.55	0.221
		4.25	1.8	72.2	18.15 C	6.33	0.45	0.231
		5	2.2	24.7	18.18 C	6.29	0.43	0.219
		5.5	2.4	22.1	18.23 C	6.27	0.35	0.219
		6	2.6	20.3	18.23 C	6.30	0.36	0.228
		6.5	2.8	13.3	18.31 C	6.30	0.28	0.226
		6.75	2.9	12	18.27 C	6.27	0.28	0.225
		7	3.0	9.15	18.32 C	6.28	0.26	0.224
	Oct-08	0.25	0.3	above range	17.63 C	8.19	0.61	0.344
		0.5	0.6	above range	18.00 C	8.32	0.66	0.419
		1	1.3	332	17.95 C	8.29	0.83	0.445
		1.5	1.9	393	18.01 C	8.23	0.88	0.452
		2	2.5	174	18.01 C	8.18	0.88	0.460

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
MW-11		3	3.8	333	17.98 C	8.12	0.79	0.460
		4	5.1	45.7	18.01 C	8.08	0.68	0.458
		4.5	5.7	21.3	18.05 C	8.03	0.60	0.456
		5	6.3	20.1	18.12 C	7.98	0.56	0.452
		5.25	6.6	22.9	18.01 C	7.95	0.51	0.455
		5.5	7.0	352	17.92 C	7.69	0.99	0.452
		5.75	7.3	248	17.97 C	7.75	0.57	0.466
	Apr-09	1.5	0.7	195	17.57 C	6.19	3.25	0.181
		3	1.4	114	17.60 C	6.19	1.66	0.214
		4.5	2.2	91.3	17.77 C	6.18	1.18	0.214
		6	2.9	75.5	17.76 C	6.18	0.94	0.216
		7	3.3	40.3	17.78 C	6.18	0.82	0.220
		7.5	3.6	30	17.79 C	6.18	0.78	0.220
		8	3.8	26.7	17.82 C	6.19	0.74	0.224
		8.5	4.1	19	17.84 C	6.18	0.72	0.220
		9	4.3	14.8	17.93 C	6.18	0.67	0.219
		9.25	4.4	14.6	17.99 C	6.19	0.69	0.219
		9.5	4.5	31.2	18.18 C	6.13	0.98	0.202
		10	4.8	19	17.89 C	6.17	0.92	0.219
		10.5	5.0	13.3	17.84 C	6.16	0.79	0.216
		11	5.3	9.8	17.83 C	6.16	0.69	0.219
	Oct-09	0.5	0.3	498	17.47 C	6.37	3.22	0.413
		1.5	0.8	161.4	17.57 C	6.17	0.59	0.388
		2.5	1.3	85.4	17.59 C	6.17	0.46	0.366
		3.25	1.7	52.2	17.62 C	6.21	0.40	0.350
		4	2.1	36.1	17.65 C	6.22	0.34	0.352
		4.4	2.3	21.2	17.63 C	6.25	0.31	0.336
		4.75	2.5	17.74	17.62 C	6.26	0.57	0.333
		5.25	2.8	14.63	17.75 C	6.34	0.33	0.354
		5.75	3.0	11.65	17.86 C	6.43	0.26	0.348
		6.1	3.2	10.78	17.89 C	6.43	0.28	0.347
		6.25	3.3	9.01	17.88 C	6.43	0.28	0.347
	Apr-10 <sup>a</sup>	1	0.3	above range	17.22	6.22	1.85	0.311
		2.75	0.9	316	17.29	6.21	1.11	0.264
		3.75	1.2	107.8	17.35	6.23	0.78	0.267
		5.25	1.7	76.7	17.39	6.25	0.63	0.270
		6.25	2.0	48.5	17.42	6.25	0.55	0.271
		7.25	2.4	26.2	17.44	6.25	0.49	0.273
		9.5	3.1	16.2	17.46	6.25	0.41	0.274
		11.25	3.7	42.4	17.45	6.26	0.34	0.278
		12.5	4.1	57.3	17.51	6.27	0.27	0.280
		14.25	4.6	27	17.5	6.26	0.27	0.279
		15.25	5.0	16.8	17.57	6.26	0.28	0.277
		17	5.5	21.5	17.58	6.25	0.29	0.276
		17.5	5.7	14.1	17.6	6.25	0.30	0.276
		18	5.9	24.3	17.58	6.25	0.32	0.277
	Oct-10	0.5	0.4	264	17.39	6.72	0.28	0.492
		1.5	1.1	127	17.46	6.73	0.17	0.487
		2.75	2.0	8.93	17.47	6.69	0.20	0.470
		4	2.9	8.8	17.44	6.67	0.36	0.464
		4.75	3.5	4.97	17.68	6.67	0.30	0.466
	Apr-11	3	1.3	246	17.38	6.44	3.46	0.294
		5	2.2	145	17.39	6.41	3.23	0.289
		6	2.6	240	17.43	6.43	3.02	0.301
		6.5	2.8	103	17.38	6.45	2.81	0.305
		7	3.0	144	17.23	6.51	2.69	0.365
		8	3.5	187	18.12	6.37	2.67	0.285
		10	4.3	42.3	17.92	6.37	2.63	0.288
		12	5.2	26.5	17.75	6.37	2.80	0.289
		15	6.5	19.2	17.71	6.37	2.64	0.288
		17	7.4	12.1	17.74	6.39	2.61	0.295
		19	8.3	8.72	17.68	6.39	2.58	0.295
	Oct-11	0.15	0.2	695	17.41	6.59	1.20	0.500
		0.5	0.7	653	17.75	6.71	0.49	0.515
		1	1.4	767	17.62	6.68	0.35	0.525
		1.5	2.1	688	17.61	6.64	0.33	0.516
		2	2.8	213	18.23	6.70	0.32	0.516
		2.5	3.5	80.7	18.15	6.73	0.29	0.528
	Apr-12	1.25	1.0	107.7	17.39	6.67	0.77	0.454
		2.25	1.8	44.7	17.53	6.67	0.85	0.453
		3.75	3.0	28.8	17.58	6.64	0.67	0.451
		4.25	3.5	12.9	17.58	6.62	0.56	0.448
		5	4.1	8.22	17.6	6.60	0.49	0.443
		6	4.9	3.29	17.59	6.60	0.41	0.440
		7	5.7	3.1	17.63	6.59	0.37	0.437
	Oct-12	0.09	1.0	215	17.98	6.46	5.44	0.508
		0.15	1.7	215	17.76	6.60	4.43	0.515
		0.25	2.8	231	17.66	6.73	4.62	0.518
		0.35	3.9	110	17.74	6.71	4.89	0.517

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		0.45	5.0	68.2	17.67	6.76	4.65	0.518
		0.5	5.6	118	17.76	6.73	3.88	0.516
	13-Apr	1.25	13.89	176	18.01	6.29	0.87	0.414
		2.5	27.78	76.1	18.02	5.96	0.47	0.362
		3	33.33	37.8	18.08	5.9	0.41	0.334
		4	44.44	42.1	17.98	5.86	0.41	0.319
		4.75	52.78	32.1	18.00	5.87	0.39	0.311
		5	55.56	23.6	18.07	5.88	0.35	0.315
		5.5	61.11	22.3	18.20	5.93	0.3	0.327
		6	66.67	23.4	18.10	5.92	0.3	0.314
		6.5	72.22	19.2	18.11	5.93	0.28	0.311
		7	77.78	14.6	18.04	5.91	0.26	0.304
		7.5	83.33	9.68	18.01	5.92	0.25	0.304
	13-Oct	1	5.99	205	20.12	6.64	0.11	437
		2	11.98	13.9	20.14	6.49	0.10	368
		3.5	20.96	4.0	19.26	6.43	0.05	377
		5.5	32.93	2.4	19.40	6.43	0.02	373
		8	47.90	0.0	19.53	6.43	0.01	374
MW-12	Dec-01	3	2.1	999	16.4 C	7.13	1.64	0.504
		6	4.3	845	16.3 C	7.18	1.59	0.508
		9	6.4	745	16.4 C	7.16	1.83	0.501
	May-02			not sampled due to insufficient water in the well				
	Sep-03	2	1.4	97.4	18.5 C	6.73	0.59	0.332
		3	2.1	36.9	18.5 C	6.69	0.37	0.331
		7	5.0	12.1	18.6 C	6.77	0.30	0.335
		8	5.7	8.8	18.6 C	6.80	0.29	0.336
	May-04	0.25	0.2	19	20.54 C	6.34	1.99	0.333
		0.5	0.5	14.1	20.81 C	6.25	1.18	0.328
		0.75	0.7	12.3	22.01 C	6.19	1.07	0.320
		1	0.9	9.5	23.58 C	6.24	0.98	0.326
		1.25	1.1	7.9	24.96 C	6.22	0.92	0.328
	Jul-06	1	0.9	90.1	21.51 C	7.30	0.27	0.357
		2	1.8	113.4	22.72 C	7.15	0.34	0.359
		3.5	3.2	335	25.21 C	7.07	0.21	0.360
		5.5	5.0	47.3	19.86 C	7.20	0.10	0.114
		7	6.4	44.2	25.55 C	7.14	0.24	0.363
		9	8.3	39.1	19.34 C	7.20	0.07	0.369
		11	10.1	28.6	19.43 C	7.19	0.06	0.373
		12	11.0	27	19.50 C	7.18	0.07	0.374
	Apr-07	0.5	0.7	11.5	18.34 C	6.75	0.87	0.445
		1.2	1.6	7.5	18.34 C	6.77	0.37	0.451
		1.8	2.4	5.3	18.33 C	6.73	0.27	0.454
		2.5	3.3	3.2	18.30 C	6.77	0.26	0.455
	May-07			27.5	24.1 C	6.85	3.57	0.478
				25.5	22.4 C	6.91	0.54	0.474
				22.7	21.5 C	6.97	0.14	0.475
				14.4	21.5 C	7.02	0.07	0.479
				11.6	21.5 C	7.03	0.02	0.482
				9.3	21.4 C	7.04	0.01	0.485
	Oct-07 <sup>d</sup>	0	0.0	230	19.6 C	6.48	4.20	0.418
		0.1	0.4	137	19.95 C	6.29	1.90	0.409
		0.15	0.6	99.7	20.54 C	6.26	1.69	0.405
		0.25	0.9	17.1	19.61 C	6.26	2.18	0.409
		0.4	1.5	30.4	19.94 C	6.24	2.57	0.410
		0.5	1.9	25.6	20.14 C	6.18	4.38	0.406
		0.6	2.2	25.4	20.08 C	6.17	4.58	0.402
		0.75	2.8	13.9	20.05 C	6.15	4.93	0.397
		0.8	3.0	13.9	20.18 C	6.14	4.92	0.393
		0.9	3.3	14.8	20.41 C	6.13	5.07	0.392
		1	3.7	15.9	20.35 C	6.11	5.55	0.390
		1	3.7	13.5	20.36 C	6.11	5.40	0.389
		1.1	4.1	16.1	20.37 C	6.10	5.40	0.386
		1.5	5.6	10.02	20.01 C	6.12	3.30	0.401
		1.6	5.9	7.32	20.23 C	6.12	2.83	0.406
		1.6	5.9	5.9	20.24 C	6.14	1.58	0.410
		1.7	6.3	5.65	20.8 C	6.15	1.03	0.409
		1.7	6.3	5.32	20.9 C	6.16	1.00	0.409
		1.8	6.7	5.37	21.5 C	6.16	0.96	0.406
	Apr-08	0	0.0	17.1	21.46 C	6.34	1.67	0.381
		0.15	0.3	13.7	20.63 C	6.26	0.88	0.380
		0.2	0.4	8.81	19.79 C	6.21	0.54	0.383
		0.3	0.6	6.76	19.37 C	6.33	0.85	0.388
		0.5	1.0	5.26	19.36 C	6.29	0.60	0.390
		0.7	1.3	4.22	19.36 C	6.30	0.44	0.393
	Oct-08			Used a bailer, not enough water in the bailer for water quality or to collect sample.				
	Apr-09	0.35	1.0	129	19.05 C	6.84	3.62	0.418
		0.7	2.0	69.7	18.78 C	6.53	2.76	0.427
		0.87	2.5	68.4	19.00 C	6.45	3.74	0.427
		1.04	3.0	65.8	18.86 C	6.45	4.47	0.428

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-12		1.18	3.4	58.6	19.03 C	6.39	3.72	0.429	
		1.39	4.0	61	18.86 C	6.39	4.47	0.431	
		1.56	4.5	29	19.03 C	6.42	3.40	0.434	
		1.74	5.0	66.5	18.71 C	6.43	2.92	0.429	
		1.98	5.7	60.4	18.68 C	6.39	2.45	0.433	
	Oct-09		Used a bailer due to insufficient water in well for pump						
		0.4	0.5		19.11 C	7.05	1.02	0.411	
		0.8	1.0	203	19.59 C	6.62	1.42	0.387	
		1.2	1.6		20.58 C	6.50	0.74	0.388	
		1.6	2.1	112.9	19.66 C	6.46	1.40	0.384	
		2	2.6		19.93 C	6.48	1.13	0.383	
		2.4	3.1	117.4	20.26 C	6.51	1.32	0.384	
	Apr-10		0.2	0.1	356	19	6.23	0.76	0.428
		0.3	0.2	410	18.69	6.30	0.46	0.425	
		0.4	0.2	395	18.45	6.34	0.64	0.424	
		0.6	0.4	245	18.25	6.37	0.59	0.428	
		0.8	0.5	164	18.22	6.41	0.53	0.437	
		1.1	0.7	119	18.2	6.36	0.49	0.448	
		1.35	0.8	76.3	18.29	6.37	0.48	0.455	
		1.6	1.0	57.5	18.46	6.32	0.46	0.460	
		1.8	1.1	45.2	18.46	6.37	0.42	0.464	
		2	1.2	31.3	18.55	6.38	0.40	0.467	
		2.2	1.4	23.7	18.58	6.40	0.39	0.469	
		2.4	1.5	16.6	18.52	6.41	0.38	0.472	
		2.6	1.6	18.2	18.48	6.41	0.37	0.474	
		2.8	1.7	14.2	18.54	6.40	0.38	0.475	
		3	1.9	12.6	18.42	6.41	0.38	0.475	
		3.2	2.0	8.72	18.39	6.38	0.38	0.475	
	Oct-10		0	0.0	ADL	20.47	6.07	1.58	0.363
		1.8	1.9	50.2	19.30	6.31	0.44	0.363	
		2.4	2.6	13.8	19.19	6.42	0.40	0.364	
		2.6	2.8	10.2	19.15	6.46	0.38	0.365	
		2.8	3.0	9.60	19.11	6.49	0.35	0.366	
	Apr-11 <sup>a</sup>		0.25	0.3	ADL	18.36	6.26	5.06	0.370
		0.45	0.6	205	17.97	6.09	4.98	0.367	
		0.65	0.8	36.2	18.41	6.49	5.05	0.368	
		0.85	1.1	22.8	18.42	6.51	4.86	0.368	
		1.05	1.3	11.3	18.76	6.54	4.63	0.369	
		1.25	1.6	11.1	18.90	6.56	4.45	0.370	
		1.45	1.8	8.88	19.00	6.58	4.33	0.370	
	Apr-11 <sup>b</sup>		1.65	2.1	5.65	18.99	6.59	4.37	0.371
		1.85	2.3	5.24	18.88	6.60	4.31	0.372	
		2.05	2.6	5.24	18.59	6.59	4.23	0.372	
		2.25	2.8	4.61	18.67	6.59	4.11	0.373	
		2.35	2.9	4.58	18.87	6.60	4.03	0.373	
		2.45	3.1	3.53	19.07	6.61	3.91	0.374	
	Oct-11		Not sampled due to access restrictions						
	Apr-12		0.1	1	>1000	19.9	6.03	1.02	0.474
			0.2	2	>1000	18.78	6.41	0.89	0.415
			0.3	3	>1000	18.53	6.20	1.20	0.409
		0.4	4	>1000	18.36	5.96	1.24	0.410	
		0.5	5	>1000	18.96	6.38	1.02	0.406	
Oct-12		Not sampled due to insufficient water							
13-Apr		0	0	56.5	18.92	6.16	1.53	0.456	
		0.2	0.3	40.3	18.73	5.67	0.57	0.459	
		0.3	0.4	8.17	18.66	6.18	0.89	0.454	
		0.5	0.6	8.12	20.46	6.45	0.43	0.454	
		0.7	0.9	5.21	18.77	6.05	0.34	0.455	
		1	1.3	3.75	19.07	6.33	0.35	0.449	
		1.2	1.5	3.01	19.20	6.38	0.34	0.447	
		1.5	1.9	5.47	19.20	6.37	0.31	0.444	
13-Oct		0	0	0	19.48	6.58	1.71	0.328	
		0.4	0.5	35.2	18.72	6.64	0.56	0.323	
		0.75	0.9	9.71	18.57	6.65	0.47	0.322	
		1	1.3	5.48	18.69	6.66	0.41	0.322	
		1.3	1.6	6.12	18.54	6.66	0.33	0.323	
		1.45	1.8	3.55	18.63	6.66	0.31	0.323	
		1.6	2	3.01	18.56	6.66	0.28	0.323	
MW-13a	Dec-01	2	2	953	15.7 C	6.42	7.04	0.514	
		4	4	41	16.7 C	6.26	8.76	0.501	
	May-02	1	1	> 1000	19.6 C	6.04	3.26	0.191	
		2	2	534	19.8 C	6.04	3.29	0.190	
		3	3	410	19.8 C	6.05	3.38	0.185	
	May-02	1	1	999	19.6 C	6.08	3.27	0.187	
		2	2	778	19.9 C	6.05	3.27	0.188	

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		3	3	234	19.8 C	6.07	3.38	0.183
	Sep-03	not sampled due to well damage						
	May-04	Replaced with MW-13aR						
MW-13aR	May-04	0.12	0.08	84.9	20.07 C	6.27	4.81	0.230
		0.24	0.17	65.7	20.09 C	6.23	4.32	0.229
		0.36	0.25	57.8	20.65 C	6.20	4.33	0.228
		0.48	0.34	47	21.29 C	6.19	4.58	0.230
		0.6	0.42	35.9	20.38 C	6.25	4.56	0.234
		0.72	0.51	33	19.75 C	6.24	4.48	0.230
		0.84	0.59	44.9	19.62 C	6.21	4.13	0.232
		0.96	0.68	27.8	21.04 C	6.18	3.89	0.229
		1	0.70	25.9	23.14 C	6.19	3.77	0.227
		1.12	0.79	25.2	23.4 C	6.21	3.92	0.232
		1.24	0.87	23.5	24.01 C	6.22	3.93	0.233
		1.36	0.96	21	24.83 C	6.24	3.82	0.233
		1.48	1.04	22.5	24.94 C	6.21	3.83	0.223
		1.6	1.13	27.7	24.88 C	6.20	3.86	0.234
		1.7	1.20	27.3	24.73 C	6.20	3.87	0.233
		1.8	1.27	25.9	24.6 C	6.19	3.89	0.231
		1.9	1.34	23.6	24.56 C	6.19	3.85	0.230
		1.95	1.37	21.9	24.52 C	6.18	3.93	0.228
		2	1.41	20.3	24.4 C	6.17	3.88	0.227
		2.12	1.49	19.9	24.36 C	6.17	3.85	0.225
		2.24	1.58	19.3	24.73 C	6.17	4.40	0.213
		2.36	1.66	16.2	24.77 C	6.17	4.27	0.214
		2.48	1.75	15.6	24.74 C	6.16	4.23	0.215
		2.6	1.83	15.7	24.61 C	6.17	4.14	0.216
		2.72	1.92	15.7	24.62 C	6.12	4.20	0.213
		2.84	2.00	15.8	24.59 C	6.15	4.24	0.217
		3	2.11	15.5	24.33 C	6.13	4.25	0.213
		3.12	2.20	14.5	24.41 C	6.13	4.21	0.213
		3.24	2.28	13.7	24.66 C	6.14	4.16	0.213
		3.36	2.37	11.6	25.05 C	6.13	4.15	0.212
		3.48	2.45	11.6	25.3 C	6.13	4.18	0.211
		3.6	2.54	15.6	25.39 C	6.12	4.16	0.208
		3.72	2.62	14	25.21 C	6.12	4.36	0.209
		3.84	2.70	13.6	25.36 C	6.12	4.21	0.210
		3.96	2.79	13.3	25.34 C	6.13	4.23	0.206
		4.08	2.87	13	25.33 C	6.11	4.21	0.208
		4.2	2.96	9.8	25.09 C	6.19	4.56	0.201
		4.25	2.99	9.7	25.06 C	6.18	4.60	0.201
	Jul-06	10	7.04	161	18.22 C	5.55	0.93	0.084
		12	8.45	59	18.27 C	5.64	0.90	0.084
		15	10.56	100	19.01 C	5.96	0.94	0.084
		25	17.61	80	18.47 C	5.75	0.80	0.084
		26	18.31	10.2	18.47 C	5.76	0.79	0.084
MW-13aR	Apr-07	2.5	1.87	> 1000	17.80 C	5.24	6.62	0.125
		5	3.73	367	17.84 C	5.23	6.61	0.124
		6	4.48	339	18.14 C	5.24	6.56	0.123
		6.5	4.85	161.7	17.86 C	5.27	6.87	0.124
		12	8.96	327	18.09 C	5.24	6.67	0.123
		15	11.19	181	17.94 C	5.26	6.63	0.124
		18	13.43	134.2	18.01 C	5.24	6.59	0.124
		20	14.93	98.9	17.99 C	5.23	6.69	0.123
		22	16.42	41.7	17.82 C	5.27	6.52	0.124
		25	18.66	20.9	17.79 C	5.24	6.42	0.124
		25.5	19.03	12.2	17.81 C	5.24	6.40	0.124
		30	22.39	8.6	17.81 C	5.23	6.38	0.124
	Oct-07	0.6	0.80	above range	18.38 C	5.42	5.29	0.120
		1.2	1.60	above range	18.08 C	5.45	5.57	0.122
		1.7	2.27	680	18.56 C	5.48	5.82	0.121
		2.1	2.80	274	18.29 C	5.46	5.87	0.119
		2.4	3.20	720	19.31 C	5.47	5.42	0.122
		3.2	4.27	367	18.36 C	5.48	5.91	0.118
		3.5	4.67	724	18.41 C	5.49	5.53	0.120
		3.9	5.20	294	19.43 C	5.53	5.63	0.121
		4.3	5.73	375	18.74 C	5.56	5.72	0.119
		5	6.67	259	18.76 C	5.64	5.69	0.113
	Apr-08 <sup>a</sup>	0.1	0.14	above range	19.74 C	6.57	5.44	0.244
		0.3	0.41	above range	21.03 C	6.92	0.22	0.290
		0.4	0.54	above range	21.34 C	7.02	1.62	0.302
		0.75	1.01	above range	19.55 C	7.00	2.71	0.270
		1.25	1.69	above range	20.48 C	6.99	3.39	0.250
		1.75	2.36	395	20.29 C	6.98	3.17	0.247
		2.25	3.04	299	18.93 C	6.99	4.97	0.244
		2.75	3.72	259	18.33 C	7.01	3.96	0.242
		3.25	4.39	above range	20.49 C	7.03	1.54	0.241
		3.75	5.07	above range	21.37 C	7.07	2.12	0.241
		4.25	5.74	242	20.66 C	7.08	1.56	0.236

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		4.4	5.95	285	20.53 C	7.08	1.44	0.234
		4.6	6.22	524	19.2 C	7.08	0.78	0.231
		4.8	6.49	365	19.71 C	7.07	0.57	0.233
		4.9	6.62	315	18.34 C	7.07	0.80	0.233
		5	6.76	295	18.51 C	7.07	0.76	0.233
	Oct-08	0.01	0.02	322	16.45 C	5.81	7.87	0.146
		0.05	0.09	342	16.45 C	5.54	7.49	0.135
		0.1	0.17	395	16.51 C	5.51	7.24	0.132
		0.2	0.34	332	16.61 C	5.42	7.17	0.128
		0.25	0.43	239	16.58 C	5.38	6.97	0.126
		0.35	0.60	196	16.55 C	5.35	6.89	0.125
		0.4	0.69	164	16.50 C	5.33	6.97	0.124
		0.45	0.78	113	16.47 C	5.30	6.88	0.123
		0.5	0.86	55.1	16.46 C	5.30	6.82	0.122
		0.55	0.95	42.8	16.43 C	5.28	6.70	0.121
		0.6	1.03	26.8	16.40 C	5.25	6.91	0.120
		0.65	1.12	17.7	16.39 C	5.25	6.65	0.120
		0.75	1.29	16.3	16.37 C	5.24	6.58	0.120
		0.8	1.38	14.3	16.37 C	5.23	6.49	0.120
		0.85	1.47	12.29	16.39 C	5.22	6.45	0.119
		0.95	1.64	8.63	16.41 C	5.22	6.41	0.119
	Apr-09 <sup>a</sup>	0	0.00	602	16.09 C	5.70	7.57	0.142
		0.05	0.10	614	16.23 C	5.77	6.95	0.144
		0.1	0.21	591	16.31 C	5.78	6.85	0.143
		0.15	0.31	493	16.47 C	5.78	6.84	0.143
		0.25	0.52	490	16.51 C	5.75	6.67	0.141
		0.3	0.63	231	16.50 C	5.73	6.70	0.136
		0.4	0.83	116	16.63 C	5.69	6.71	0.133
		0.45	0.94	60.7	16.51 C	5.65	6.77	0.131
		0.5	1.04	31.8	16.51 C	5.61	6.83	0.128
		0.55	1.15	22.1	16.52 C	5.59	6.91	0.128
		0.65	1.35	25.1	16.59 C	5.60	6.78	0.124
		0.7	1.46	17.7	16.53 C	5.56	6.78	0.121
		0.75	1.56	14.1	16.48 C	5.56	6.76	0.120
		0.8	1.67	13.9	16.49 C	5.55	6.79	0.121
		0.8	1.67	12	16.69 C	5.56	6.66	0.121
		0.8	1.67	9.73	16.68 C	5.56	6.69	0.120
	Oct-09 <sup>a</sup>	0.05	0.05	251	18.09 C	5.52	6.04	0.128
		0.3	0.33	245	17.48 C	5.37	6.34	0.123
		0.75	0.82	252	17.3 C	5.35	6.17	0.121
		1.05	1.14	176	17.45 C	5.34	6.25	0.121
		1.4	1.52	43.6	17.15 C	5.30	6.16	0.120
		1.9	2.07	31.2	17.15 C	5.30	6.14	0.120
		2.15	2.34	28.6	17.21 C	5.32	6.06	0.120
		2.4	2.61	17.4	17.18 C	5.31	6.07	0.120
		2.6	2.83	13.7	17.17 C	5.31	6.07	0.120
		2.95	3.21	10.8	17.17 C	5.31	6.06	0.119
		3.15	3.42	9.76	17.17 C	5.31	6.04	0.120
	Apr-10	0.75	0.37	above range	17.74	4.59	6.57	0.244
		2	0.99	249	17.97	4.85	6.40	0.230
		3.25	1.61	53.7	17.99	4.93	6.22	0.226
		4.5	2.23	20.8	17.98	4.98	6.07	0.222
	Apr-10	6	2.97	18.5	18.04	5.02	5.98	0.220
		7.25	3.59	44.2	17.88	5.01	5.93	0.215
		9.75	4.83	64.2	17.75	5.02	5.86	0.217
		11	5.45	55.5	17.69	5.00	5.74	0.220
		13	6.44	121	17.64	5.06	5.67	0.215
		14	6.93	25.3	18.03	5.11	5.63	0.217
		14.5	7.18	17.9	17.96	5.11	5.66	0.213
		15.5	7.67	10.08	17.94	5.09	5.65	0.214
	Oct-10	0.5	0.3	424	17.84	5.19	6.89	0.169
		6.25	3.6	43.6	18.29	5.23	6.95	0.159
		7.5	4.3	29.2	18.41	5.25	6.86	0.158
		8	4.5	22.4	18.47	5.28	6.69	0.158
		8.5	4.8	27.3	18.16	5.26	6.88	0.158
	Apr-11 <sup>a</sup>	0.5	0.4	ADL	17.79	5.61	8.53	0.135
		2.5	2.0	705	17.96	5.69	8.79	0.137
		5	4.1	278	17.84	5.75	8.78	0.136
		6.5	5.3	170	18.18	5.74	8.74	0.135
		8.5	6.9	174	18.15	5.76	8.78	0.135
		9.5	7.7	160	18.22	5.76	8.78	0.137
		10	8.1	161	18.2	5.68	8.64	0.136
		11.5	9.3	61.7	18.29	5.63	8.70	0.138
		12	9.8	106	18.99	5.56	9.01	0.138
		12.5	10.2	273	18.58	5.60	8.93	0.137
	Oct-11			Not sampled due to access restrictions				
	Apr-12	0.1	0.2	468	16.9	5.04	6.25	0.165
		0.25	0.5	889	16.83	5.27	5.95	0.153

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		0.3	0.6	675	16.84	5.37	5.95	0.147
		0.5	1.0	104	16.89	5.37	6.03	0.141
		0.6	1.2	110	16.92	5.33	6.16	0.136
		0.75	1.4	118	16.85	5.30	6.35	0.133
		0.85	1.6	58.9	16.89	5.31	6.49	0.132
		0.95	1.8	50.6	16.9	5.32	6.55	0.132
		1	1.9	92.3	16.83	5.32	6.61	0.132
		1.1	2.1	123	16.95	5.30	7.12	0.131
		1.2	2.3	93.6	16.95	5.31	7.81	0.130
		1.3	2.5	43.5	16.88	5.33	7.96	0.128
		1.4	2.7	40.3	16.96	5.30	7.71	0.128
		1.5	2.9	35	16.95	5.30	7.98	0.127
		1.6	3.1	40.5	16.91	5.31	8.43	0.128
		1.75	3.4	14.7	16.86	5.30	8.37	0.127
		1.9	3.7	10.79	16.83	5.30	8.72	0.127
		2.1	4.0	7.26	16.86	5.30	9.14	0.126
		2.3	4.4	6.14	16.83	5.31	8.71	0.127
		2.6	5.0	6.31	16.84	5.31	8.02	0.127
	Oct-12	0.1	0.4	249	17.58	6.01	7.48	0.206
	Apr-13	0	0.0	450	18.34	5.78	7.92	0.175
MW-13b	Dec-01	20	0.8	999	15.8 C	9.06	7.66	0.503
		30	1.3	999	16 C	8.86	8.37	0.486
		40	1.7	999	16.1 C	8.11	7.95	0.446
		50	2.1	990	16.1 C	8.18	7.60	0.359
		80	3.3	395	15.7 C	8.11	7.82	0.308
		100	4.2	150	15.2 C	8.09	7.90	0.290
		120	5.0	130	15 C	8.10	7.59	0.279
	May-01	20	0.8	999	17.3 C	4.57	3.52	0.180
		40	1.7	999	17.4 C	5.26	3.41	0.233
	Sep-03 <sup>b</sup>	10	1.7	764	18.0 C	5.61	6.53	0.200
		20	3.4	400	18.1 C	5.75	6.44	0.190
		30	5.1	188	18.0 C	5.86	6.35	0.155
		40	6.8	189	18.0 C	5.88	6.33	0.153
	May-04	1	0.2	316	20.6 C	5.97	4.58	0.135
		11	1.9	14.1	21.07 C	5.65	5.25	0.117
		13.5	2.3	9.8	20.85 C	5.63	5.44	0.116
		14	2.4	9.1	21.13 C	5.59	5.12	0.116
		15	2.5	8.7	21.15 C	5.61	5.45	0.116
	Jul-06	6	1.0	12	18.71 C	6.43	0.36	0.086
		7	1.2	10	18.55 C	6.43	0.49	0.087
		10	1.7	9.8	18.53 C	6.43	0.51	0.085
	Apr-07	4	0.7	488	17.47 C	5.92	5.61	0.134
		7	1.2	158	17.40 C	5.83	5.67	0.130
		12	2.1	29.4	17.48 C	5.80	5.72	0.128
		15	2.6	130	17.64 C	5.87	5.91	0.131
		18	3.1	36.4	17.42 C	5.84	5.94	0.130
		19.5	3.4	14.2	17.50 C	5.78	5.82	0.130
		21	3.7	7.9	17.57 C	5.78	5.84	0.130
	Oct-07 <sup>a</sup>	0.2	0.0	1001	17.91 C	6.63	0.57	0.238
		1.2	0.2	473	18.57 C	6.08	1.20	0.158
		2.1	0.4	935	19.07 C	5.97	4.20	0.137
		4.5	0.9	444	18.04 C	5.91	4.04	0.130
		7.3	1.4	74	17.73 C	5.84	4.12	0.125
		10.9	2.1	37.1	17.68 C	4.21	4.19	0.124
		12.4	2.4	18.8	17.76 C	5.85	4.33	0.123
		13.8	2.7	18.5	17.67 C	5.82	4.29	0.123
		15.5	3.0	12.8	17.74 C	5.85	4.22	0.123
		17.4	3.4	13.6	17.78 C	5.83	4.26	0.123
		18.2	3.5	11.2	17.72 C	5.83	4.08	0.123
		18.8	3.6	9.87	17.72 C	5.82	4.14	0.123
	Apr-08 <sup>a</sup>	1	0.2	362	18.83 C	6.62	1.10	0.249
		2	0.4	333	17.87 C	6.20	1.93	0.168
		3	0.6	456	18.39 C	5.98	3.20	0.152
		4	0.8	275	17.85 C	5.92	3.98	0.146
		5	0.9	248	17.55 C	5.87	3.87	0.145
		5.5	1.0	352	18.53 C	5.85	3.50	0.145
		6	1.1	137	18.41 C	5.85	3.49	0.143
		6.75	1.3	205	18.86 C	5.86	3.57	0.143
		7.5	1.4	162	18.55 C	5.83	3.74	0.142
		8.5	1.6	215	18.66 C	5.79	3.60	0.142
		10	1.9	213	18.77 C	5.84	3.84	0.142
		11	2.1		18.38 C	5.82	3.94	0.141
		12	2.3	262	17.48 C	5.93	3.29	0.144
		13	2.5	181	17.36 C	5.92	3.77	0.138
		13.75	2.6	165	17.63 C	5.91	3.80	0.137
		14.5	2.7	50.7	17.74 C	5.95	4.18	0.136
		15.25	2.9	26.7	18.05 C	5.91	3.99	0.134
		15.75	3.0	28.8	18.01 C	5.91	3.97	0.134

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm		
MW-13b		16.25	3.1	19.8	17.69 C	5.92	4.08	0.133		
		16.75	3.2	23.3	17.47 C	5.86	4.06	0.133		
		17.25	3.3	28.2	17.57 C	5.85	4.02	0.133		
		18.5	3.5	59.8	18.02 C	5.90	4.12	0.133		
		20	3.8	35.4	18.43 C	5.88	4.15	0.132		
		20.75	3.9	14.5	18.47 C	5.89	4.04	0.132		
		21.5	4.1	8.54	18.47 C	5.91	4.08	0.133		
	Oct-08	1	0.2	122	17.25 C	6.42	-0.05	0.152		
		2	0.4	164	17.41 C	6.14	-0.02	0.134		
		3	0.6	207	17.45 C	6.11	-0.01	0.136		
		4	0.8	70.6	17.50 C	5.83	4.72	0.132		
		5	1.0	125	17.45 C	5.75	4.33	0.130		
		6	1.2	49.7	17.51 C	5.74	4.46	0.129		
		7	1.4	22.9	17.52 C	5.72	4.56	0.128		
		8	1.6	24.4	17.53 C	5.72	4.58	0.127		
		9	1.8	16.6	17.53 C	5.73	4.59	0.127		
		10	2.0	11.9	17.52 C	5.72	4.61	0.127		
		11	2.2	8.89	17.52 C	5.72	4.62	0.127		
	Apr-09	0.75	0.1	588	17.31 C	6.33	3.55	0.167		
		1.25	0.2	568	17.45 C	6.04	3.90	0.148		
		2	0.4	262	17.60 C	5.96	4.43	0.143		
		2.75	0.5	109	17.62 C	5.91	4.73	0.138		
		3.75	0.7	40.5	17.64 C	5.89	4.84	0.135		
		4.5	0.9	34.4	17.62 C	5.88	4.85	0.134		
		5	1.0	21.9	17.71 C	5.86	4.93	0.134		
		5.75	1.1	19.1	17.75 C	5.88	4.90	0.133		
		6.5	1.3	16.8	17.76 C	5.88	4.88	0.133		
		7	1.4	15	17.57 C	5.87	4.92	0.133		
		7.25	1.4	11.9	17.48 C	5.86	4.92	0.133		
		7.5	1.5	12	17.46 C	5.86	5.50	0.133		
		7.75	1.5	11.1	17.56 C	5.89	5.05	0.133		
		8	1.6	9.55	17.50 C	5.89	4.97	0.133		
	Oct-09	1	0.2	393	17.27 C	5.31	2.71	0.145		
		1.5	0.3	425	17.48 C	5.19	2.74	0.146		
		2.25	0.4	134	17.55 C	5.06	3.64	0.133		
		3	0.5	74.3	17.59 C	4.98	3.72	0.131		
		5	0.9	33.4	17.52 C	4.99	3.73	0.130		
		6	1.1	36.1	17.53 C	4.98	3.80	0.129		
		7	1.3	27.4	17.61 C	5.02	3.85	0.130		
		8	1.5	20.6	17.59 C	5.06	3.91	0.131		
		8.75	1.6	19.9	17.64 C	5.11	3.90	0.130		
		9.75	1.8	15.4	17.67 C	5.21	3.86	0.130		
		10	1.8	13.27	17.64 C	5.26	3.86	0.134		
		11	2.0	12.21	17.68 C	5.29	3.86	0.129		
		12	2.2	10.13	17.69 C	5.35	3.89	0.127		
		13.25	2.4	10.98	17.66 C	5.37	3.89	0.129		
		14	2.6	9.78	17.66 C	5.37	3.90	0.130		
	Apr-10	1	0.2	87	17.83	4.70	2.72	0.136		
		2.5	0.4	53.8	17.89	4.95	3.90	0.133		
		3.25	0.5	38.1	17.92	5.18	4.37	0.133		
		4.25	0.7	25.2	17.95	5.27	4.42	0.134		
		5.25	0.8	19.2	17.92	5.33	4.40	0.133		
		7	1.1	17.8	17.98	5.36	4.40	0.133		
		8	1.3	12.3	17.94	5.43	4.40	0.132		
		8.5	1.3	10.82	18.03	5.48	4.40	0.132		
		9.5	1.5	9.75	17.96	5.51	4.43	0.132		
		10.25	1.6	8.39	17.99	5.54	4.39	0.132		
		11.5	1.8	7.35	18.02	5.55	4.40	0.132		
	Oct-10	1.25	0.2	17.6	17.63	5.85	3.07	0.140		
		4.75	0.8	35.3	17.76	5.88	5.08	0.135		
		6.5	1.1	15.1	17.87	5.88	5.28	0.136		
		7.5	1.3	13.3	17.91	5.89	5.37	0.138		
		8	1.3	12.3	17.97	5.89	5.40	0.139		
		8.5	1.4	9.64	17.97	5.89	5.44	0.139		
	Apr-11 <sup>a</sup>	3.5	0.6	399	17.65	5.74	5.69	0.136		
		8.5	1.5	252	17.77	5.25	5.92	0.135		
		11	1.9	59.6	17.78	5.36	5.95	0.134		
		15	2.6	40.5	17.86	5.46	5.96	0.135		
		17	3.0	27.3	17.85	5.43	5.97	0.135		
		20	3.5	21.8	17.88	5.45	5.92	0.137		
		23	4.0	13.7	17.95	5.44	5.95	0.136		
		25	4.4	14.4	17.99	5.41	5.83	0.135		
		27.5	4.8	11.8	17.98	5.37	5.92	0.136		
		28.5	5.0	13.1	17.99	5.38	5.93	0.137		
		29.5	5.1	9.44	17.97	5.33	5.94	0.137		
	Oct-11				Not sampled due to access restrictions					
	Apr-12	1.5	0.3	168	17.4	5.08	1.62	0.152		
		2	0.4	144	17.52	5.32	3.34	0.137		
		3	0.6	96	17.58	5.47	3.64	0.134		

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		4	0.8	98.7	17.63	5.54	3.76	0.134
		5	1.0	113	17.65	5.58	3.82	0.133
		6	1.2	76.5	17.66	5.59	3.86	0.132
		7	1.4	56.9	17.69	5.59	3.84	0.132
		8	1.6	49.8	17.71	5.62	3.86	0.132
		9	1.8	48.7	17.69	5.59	3.87	0.131
		10	2.0	24.2	17.77	5.63	3.89	0.130
		11	2.2	19.5	17.75	5.6	3.88	0.134
		12	2.3	8.9	17.79	5.66	3.89	0.131
		13	2.5	9.68	17.79	5.59	3.86	0.131
		14	2.7	6.88	17.85	5.67	3.91	0.131
		15	2.9	4.59	17.8	5.66	3.93	0.132
		16	3.1	3.56	17.86	5.65	3.91	0.132
	Oct-12	0.75	0.2	340	18.17	6.12	2.16	0.17
		1.5	0.3	104	18.15	5.89	4.26	0.141
		3	0.6	57	18.13	5.86	4.83	0.137
		5	1.1	31.9	18.22	5.85	5.01	0.137
		6.5	1.4	34.6	18.22	5.86	5.12	0.136
		7.5	1.6	32.9	18.31	5.87	5.17	0.135
		8.5	1.8	30.2	18.31	5.9	5.19	0.135
		9.5	2.0	9.5	18.29	5.91	5.21	0.135
		10.5	2.2	11.7	18.23	5.9	5.22	0.136
		11.5	2.4	6.52	18.23	5.89	5.2	0.135
		12.5	2.6	7.01	18.21	5.88	5.22	0.135
		13.5	2.9	6.79	18.26	5.86	5.25	0.135
		14.5	3.1	6.96	18.26	5.86	5.24	0.135
MW-14	May-02	3	2.6	999	22.9 C	6.50	3.82	0.539
		6	5.1	747	23.7 C	6.39	3.68	0.565
		9	7.7	234	23.8 C	6.38	3.56	0.578
	Sep-03 <sup>b</sup>	2 <sup>d</sup>	1.7	657	20.3 C	6.64	4.84	0.291
		4 <sup>d</sup>	3.4	449	21.0 C	6.67	7.49	0.221
		5 <sup>d</sup>	4.3	299	22.0 C	6.86	8.90	0.229
	May-04	0.5	1.2	8	21.61 C	6.14	6.79	0.185
	Jul-06	0.25	0.2	85.2	21.77 C	6.58	7.59	0.013
		0.5	0.4	303	20.08 C	6.50	3.80	0.134
		1.5	5.7	200	20.53 C	6.66	3.18	0.137
		1.75	7.0	156b	20.11 C	6.54	3.20	0.141
	Apr-07	not sampled due to insufficient water in the well						
	Oct-07	dry						
	Apr-08	dry						
	Oct-08	dry						
	Apr-09	dry						
	Oct-09	dry						
	Apr-10	0.5	0.9	730	18.49	6.4	2.27	0.156
		1.25	2.4	1059	18.76	6.25	2.15	0.117
		1.75	3.3	956	18.85	6.1	2.05	0.11
		2.25	4.2	813	18.54	6.02	2.04	0.113
	Oct-10	0	0.0	984	18.40	5.58	5.70	0.112
		0.7	1.5	254	18.22	5.42	5.92	0.097
		1.35	2.9	58.7	18.91	5.51	4.29	0.098
		2.15	4.6	49.8	19.63	5.52	4.14	0.097
		2.25	4.8	46.0	19.66	5.52	4.11	0.097
		2.35	5.0	46.5	19.71	5.53	4.04	0.098
	Apr-11	0.2	1.0	460	22.84	5.95	7.30	0.163
		0.4	2.0	510	21.05	5.96	6.49	0.121
		0.5	2.5	515	20.43	6.06	6.29	0.121
	Oct-11	not sampled due to insufficient water in the well						
	Oct-12	Not sampled due to insufficient water						
MW-14b	Jan-08	22	5.6	128	20.52 C	10.76	4.68	4.19
		24	6.2	140	20.52 C	10.74	4.4	4.18
		28	7.2	22	20.52 C	10.71	3.89	4.19
		29	7.4	13.5	20.52 C	10.71	3.84	4.2
		30	7.7	6.1	20.51 C	10.71	3.85	4.2
	Apr-08a	0	0.0	20.6	20.3 C	8.19	4.92	0.2
		0.3	0.1	13.7	19.51 C	8.32	2.35	0.204
		0.6	0.1	12.8	19.41 C	8.27	2.36	0.205
		1	0.2	11.5	19.57 C	8.25	2.4	0.204
		1.25	0.3	7.28	19.65 C	8.25	2.47	0.203
	Oct-08	0.05	0.0	28.9	19.78 C	8.47	3.32	0.244
		0.2	0.0	24.3	19.82 C	8.3	2.03	0.225
		0.3	0.1	19.5	19.95 C	8.15	1.9	0.219
		0.35	0.1	14.4	20.49 C	8.02	1.43	0.211
		0.5	0.1	9.23	20.77 C	7.51	1.34	0.203
		0.7	0.2	5.75	20.78 C	7.46	1.38	0.202
	Apr-09	0	0.0	36.52	17.44 C	10.33	2.17	0.413
		0.1	0.0	12.8	17.37 C	10.33	1.83	0.409
		0.45	0.1	7.68	18.51 C	10.34	0.83	0.390
		0.7	0.2	7.34	18.64 C	10.28	0.53	0.389

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
MW-14b		0.85	0.2	5.61	18.45 C	10.28	0.50	0.389
		0.95	0.2	5.21	18.23 C	10.28	0.54	0.389
		1.05	0.2	4.82	17.89 C	10.27	0.63	0.389
		1.1	0.2	3.62	18.09 C	10.27	0.69	0.389
		1.15	0.3	3.6	18.08 C	10.28	0.68	0.390
		1.15	0.3	3.18	17.79 C	10.28	0.70	0.390
	Oct-09	0.25	0.0		18.65 C	9.15	0.93	0.254
		0.5	0.1		19.13 C	9.34	0.85	0.249
		0.75	0.1	20.08	19.51 C	9.25	0.86	0.244
		1	0.1		19.73 C	9.19	0.90	0.239
		1.25	0.1	7.1	19.71 C	9.21	0.80	0.239
	Apr-10	0.2	0.0	42.9	21.85	7.38	1.03	0.234
		0.4	0.1	39	20.47	7.28	0.48	0.228
		0.6	0.1	22.7	19.98	7.12	0.40	0.224
		0.8	0.2	17.1	20.22	7.06	0.39	0.222
		1	0.2	13.5	20.21	7.02	0.40	0.221
		1.15	0.2	8.95	20.29	6.96	0.39	0.221
		1.3	0.2	7.56	20.28	6.93	0.39	0.221
		1.45	0.2	7.41	20.28	6.99	0.43	0.221
	Oct-10	0	0.0	31.6	20.91	6.84	8.86	0.200
		0.25	0.0	25.3	20.23	6.76	1.86	0.197
		0.4	0.1	15.2	20.08	6.69	1.24	0.191
		0.55	0.1	8.20	20.08	6.66	1.05	0.188
		0.7	0.1	7.17	20.08	6.69	0.96	0.189
	Apr-11 <sup>a</sup>	0.25	0.1	31.6	20.35	7.35	7.72	0.246
		0.65	0.1	30.9	20.22	6.77	2.79	0.237
		0.95	0.2	25.9	20.54	6.96	2.15	0.225
		1.25	0.3	13.6	20.45	7.16	2.20	0.216
		1.55	0.3	9.53	20.26	7.91	2.19	0.214
		1.85	0.4	30.4	20.26	8.41	2.24	0.208
		2.15	0.4	13.8	20.41	8.35	2.19	0.214
		2.3	0.5	8.56	20.36	8.40	2.21	0.212
		2.45	0.5	9.21	20.44	8.40	2.23	0.212
	Oct-11	0.25	0.1	60.9	19.23	7.65	0.93	0.238
		0.5	0.1	32.7	19.82	7.40	1.05	0.221
		1	0.2	5.83	20.13	7.26	0.67	0.218
		2.25	0.5	5.30	20.11	7.21	0.86	0.220
		3	0.6	4.14	20.38	7.35	1.20	0.218
		3.75	0.8	NA	20.49	7.24	1.01	0.212
		3.75	0.8	18.1	19.20	7.00	1.27	0.218
		4.75	1.0	13.3	20.10	6.97	3.24	0.204
		5.75	1.2	24.8	19.57	6.63	6.68	0.188
		7.5	1.6	28.9	19.52	6.65	7.14	0.189
		8.75	1.9	9.76	19.60	6.97	2.32	0.234
		10.5	2.2	8.15	19.86	7.31	1.40	0.246
		11	2.3	7.18	20.34	7.36	1.50	0.245
		11.5	2.4	6.10	20.67	7.46	1.25	0.248
		12	2.6	6.45	20.73	7.50	1.31	0.247
		12.5	2.7	3.18	20.70	7.48	1.40	0.246
	Apr-12	0.75	0.2	114	20.02	7.97	0.44	0.250
	1.75	0.4	44.4	20.73	7.95	0.46	0.230	
	2.75	0.7	15	20.36	9.35	2.14	0.187	
	3.75	0.9	11.6	20.70	8.95	3.01	0.178	
	4.75	1.2	16	20.72	9.28	2.82	0.179	
	5	1.3	6.85	20.20	7.73	1.18	0.200	
	5.75	1.4	5.19	20.43	7.58	0.61	0.229	
	6	1.5	3.24	20.42	7.70	0.50	0.234	
	6.5	1.6	32.4	20.15	7.76	0.50	0.242	
	7	1.8	19	21.35	8.08	0.35	0.247	
	8.5	2.1	101.5	21.13	8.08	0.35	0.247	
	9	2.3	87.5	21.39	8.36	0.22	0.246	
	9.5	2.4	100.9	22.03	8.38	0.18	0.248	
	9.75	2.4	79.9	21.20	8.33	0.94	0.244	
Oct-12	0.13	0.0	--	19.38	8.97	5.85	0.236	
	0.79	0.2	12.7	19.30	8.21	1.33	0.234	
	1.59	0.4	14.8	19.29	8.14	0.60	0.230	
	2.64	0.7	4.84	19.31	9.16	1.01	0.212	
	3.70	1.0	2.87	19.30	9.57	2.62	0.210	
	4.29	1.1	3.13	19.25	9.66	3.32	0.211	
	4.82	1.2	2.8	19.37	9.60	3.94	0.210	
	5.35	1.4	2.68	19.41	9.31	3.45	0.207	
	5.75	1.5	2.67	19.68	8.80	4.69	0.209	
	6.01	1.5	3.37	19.78	8.33	1.58	0.216	
	6.27	1.6	--	19.80	7.97	4.34	0.220	
	6.67	1.7	2.31	20.09	7.85	3.69	0.225	
	6.99	1.8	2.56	20.14	7.93	3.60	0.231	
	7.30	1.9	--	20.33	7.98	2.53	0.233	
	7.59	2.0	--	20.32	8.00	1.64	0.236	
	7.73	2.0	5.57	20.52	8.02	1.58	0.236	

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		7.86	2.0	--	20.64	8.05	1.71	0.237
	13-Apr	0.00	0.00	10.50	16.41	5.20	6.62	0.239
		0.30	0.08	7.81	17.66	8.38	1.58	0.214
		1.50	0.39	9.10	18.61	8.31	3.34	0.218
		2.00	0.51	8.96	18.61	8.17	3.99	0.206
		2.50	0.64	9.14	18.60	8.46	4.61	0.172
		2.80	0.72	6.00	18.63	8.76	5.22	0.150
		3.00	0.77	5.05	18.65	8.76	5.17	1.490
		3.50	0.90	5.00	18.64	8.60	4.98	0.152
		4.00	1.03	5.96	18.66	8.62	4.90	0.153
MW-15	May-02 through Oct-12					dry		
MW-16	May-02	3	2.3	999	23.1 C	6.89	7.64	0.119
		6	4.6	999	22.6 C	6.27	7.84	0.112
		9	6.9	999	22.9 C	6.21	7.27	0.102
	Sept-03 through Oct-12					dry		
MW-17	Sep-03	15	10	> 999	24.1 C	6.41	10.48	0.104
	(no sample)	25	16.7	> 999				
	Sep-03	2	1.3	293	22.1 C	6.37	9.17	0.103
		4	2.7	153	22.1 C	6.30	8.57	0.100
		6	4.0	40.1	25.9 C	6.26	8.18	0.101
		7	4.7	8.9	26.3 C	6.24	8.23	0.101
	May-04	0.1	0.1	65.4	22.03 C	6.02	8.62	0.094
		0.5	0.4	31.4	23.41 C	5.69	7.05	0.094
		0.75	0.7	16.3	24.76 C	5.59	6.70	0.092
		1	0.9	10.6	26.2 C	5.61	6.57	0.093
		1.2	1.1	8.9	26.47 C	5.62	6.03	0.093
		1.5	1.3	7.3	26.25 C	5.68	6.46	0.093
	Jul-06	0.8	0.5	258	21.13 C	5.99	0.57	0.071
		3	2.0	822	21.15 C	6.01	0.70	0.072
		4	2.7	31	23.34 C	6.30	1.22	0.076
		4.5	3.0	10	22.91 C	6.24	1.19	0.077
	Apr-07	0.4	0.8	134.2	20.46 C	6.19	3.79	0.141
		0.8	1.5	92.1	20.49 C	6.12	3.79	0.141
		1.2	2.3	44.8	20.53 C	6.15	3.99	0.141
		1.5	2.9	19.8	20.60 C	6.13	4.15	0.141
		6.4	12.3	58.4	20.59 C	6.12	4.16	0.141
		10.2	19.6	52.3	19.37 C	6.24	4.08	0.181
		12.5	24.0	8.5	19.39 C	6.23	4.05	0.181
	Oct-07 <sup>a</sup>	0.2	1.0	above range	19.02 C	5.30	5.93	0.127
		0.4	2.0	972	19.12 C	5.67	8.06	0.070
		0.6	3.0	1354	19.1 C	5.61	7.39	0.107
		0.8	4.0	1446	18.7 C	5.72	7.18	0.079
		1	5.0	1287	18.42 C	5.66	8.14	0.062
	Apr-08 <sup>a</sup>	0	0.0	293	18.46 C	5.86	4.22	0.167
		0.05	0.1	255	18.46 C	5.94	4.08	0.143
		0.1	0.2	233	18.26 C	5.94	4.25	0.139
		0.14	0.3	196	18.11 C	5.93	4.59	0.136
		0.18	0.4	144	18.1 C	5.93	4.68	0.135
		0.22	0.5	86.6	18.09 C	5.94	4.83	0.135
		0.26	0.6	88.5	18.12 C	5.94	5.16	0.132
		0.3	0.7	83.5	18.17 C	5.94	5.24	0.131
		0.34	0.8	85.2	18.15 C	5.94	5.16	0.130
		0.38	0.9	81.5	17.98 C	5.91	5.25	0.128
		0.425	1.0	75.3	18.01 C	5.91	5.59	0.127
		0.475	1.1	85.3	17.94 C	5.94	5.58	0.127
		0.525	1.3	80.3	17.9 C	5.95	5.54	0.127
		0.575	1.4	79.2	17.73 C	5.89	5.71	0.125
		0.633	1.5	65.8	17.67 C	5.89	5.38	0.125
		0.7	1.7	55.8	17.72 C	5.90	5.65	0.126
		0.76	1.8	74.2	17.85 C	5.93	5.48	0.125
		0.9	2.1	78.8	17.96 C	5.93	5.59	0.125
		1	2.4	68.1	18.03 C	5.92	5.37	0.125
		1.06	2.5	74.2	17.91 C	5.93	5.43	0.124
	1.133	2.7	73.5	17.69 C	5.91	5.47	0.125	
	1.2	2.9	72.1	17.63 C	5.90	5.62	0.125	
	1.23	2.9	68.8	17.6 C	5.92	5.27	0.124	
	1.26	3.0	69.2	17.56 C	5.91	5.61	0.125	
	1.3	3.1	83.6	17.5 C	5.90	5.52	0.125	
Oct-08	Used bailer, not enough water for water quality or to collect sample.							
Apr-09 <sup>a</sup>	0	0.0	232	18.52 C	6.05	6.78	0.132	
	0.15	0.2	121	18.58 C	6.02	9.22	0.129	
	0.35	0.4	72.2	18.58 C	5.95	9.02	0.125	
	0.45	0.5	54.1	18.60 C	5.91	8.82	0.120	
	0.65	0.7	36.6	18.64 C	5.90	8.71	0.117	
	0.85	1.0	34.2	18.60 C	5.89	8.62	0.117	
	1.1	1.3	43.6	18.55 C	6.04	8.55	0.116	
	1.2	1.4	45.2	18.48 C	5.93	8.44	0.117	
	1.3	1.5	39.8	18.60 C	5.63	8.41	0.119	

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-17		1.45	1.6	41.9	18.69 C	5.98	8.39	0.118	
		1.85	2.1	40.3	18.75 C	6.06	8.44	0.118	
		2	2.3	41.3	18.74 C	5.84	8.35	0.119	
		2.25	2.6	43.5	18.72 C	5.77	8.27	0.118	
		2.35	2.7	42.7	18.71 C	5.76	8.30	0.118	
		2.5	2.8	47.9	18.71 C	5.76	8.33	0.119	
		2.65	3.0	44.2	18.72 C	5.77	8.32	0.119	
		Oct-09 <sup>a</sup>	0.5	0.3	102	19.1 C	5.00	7.29	0.125
			0.9	0.6	140	18.59 C	5.66	7.16	0.125
			1	0.7	602	18.68 C	5.80	7.70	0.125
			1.3	0.9	390	19.2 C	5.75	7.50	0.124
			1.8	1.2	284	19.22 C	5.74	7.42	0.123
			2.1	1.4	283	19.18 C	5.73	7.37	0.124
			2.25	1.5	212	19.19 C	5.73	7.34	0.124
			2.45	1.6	122	19.24 C	5.72	7.35	0.125
			2.8	1.9	124	19.31 C	5.72	7.33	0.124
			3.1	2.1	80.3	19.46 C	5.70	7.39	0.124
			3.75	2.5	124	19.48 C	5.69	7.40	0.124
			4.25	2.8	65.6	19.48 C	5.69	7.41	0.124
			5.1	3.4	93.1	19.48 C	5.70	7.36	0.125
			5.6	3.7	78.4	19.49 C	5.69	7.33	0.125
			6.2	4.1	62.5	19.57 C	5.71	7.31	0.125
			6.6	4.4	58.4	19.63 C	5.72	7.31	0.126
			6.95	4.6	57.2	19.63 C	5.71	7.26	0.126
			7.2	4.8	67.7	19.77 C	5.73	7.24	0.126
			7.5	5.0	74.9	19.85 C	5.76	7.27	0.126
		Apr-10 <sup>a</sup>	0.2	0.1	1249	21.21	5.76	3.68	0.131
			0.35	0.2	612	20.38	5.52	3.24	0.130
			0.5	0.3	424	19.84	5.48	3.44	0.128
			0.7	0.5	324	19.76	5.46	3.47	0.128
			0.9	0.6	246	19.64	5.46	3.49	0.128
			1.25	0.9	198	19.52	5.43	3.50	0.127
			1.75	1.2	167	19.44	5.40	3.48	0.128
			2.25	1.5	-	19.51	5.43	3.26	0.128
			2.75	1.9	137	19.55	5.45	3.48	0.129
			3.25	2.2	115	19.38	5.43	3.52	0.129
			3.75	2.6	89.7	19.36	5.42	3.53	0.128
			4	2.7	79.2	19.36	5.42	3.51	0.129
			4.25	2.9	79.5	19.34	5.42	3.52	0.129
			4.5	3.1	77.8	19.37	5.42	3.52	0.130
		Oct-10	0	0.0	ADL	21.21	6.25	5.85	0.143
			2.15	2.1	175	20.24	5.25	5.80	0.134
			4.65	4.6	63.9	19.72	5.51	5.85	0.134
			4.9	4.9	98.7	19.7	5.51	5.82	0.134
			5.15	5.1	87.4	19.7	5.52	5.83	0.133
		Apr-11 <sup>a</sup>	0.25	0.2	702	19.44	5.53	7.30	0.140
			0.525	0.5	380	19.21	4.99	6.39	0.128
			0.775	0.7	230	19.17	5.55	6.22	0.127
			1.025	0.9	126	19.15	5.65	6.28	0.127
			1.275	1.1	89.7	19.15	5.76	6.29	0.128
			1.525	1.3	76.8	19.13	5.77	6.30	0.129
			1.775	1.5	67.4	19.05	5.78	6.52	0.129
			2.025	1.8	53.5	19.05	5.78	6.49	0.129
			2.275	2.0	51.1	19.07	5.80	6.56	0.130
			2.525	2.2	42.6	19.17	5.82	6.55	0.130
			2.775	2.4	42.4	19.28	5.80	6.55	0.131
			3.025	2.6	29.4	19.4	5.80	6.57	0.130
			3.6	3.1	31.3	19.35	5.82	6.69	0.128
			4.2	3.7	25.7	19.46	5.80	6.58	0.129
			4.8	4.2	29.7	19.55	5.83	6.66	0.131
			5.4	4.7	29.1	19.61	5.82	6.70	0.130
			5.7	5.0	33.5	19.53	5.82	6.70	0.131
			6	5.2	29.7	19.58	5.83	6.71	0.131
		Oct-11	0.2	0.5	>1000	19.00	6.11	9.35	0.134
			0.4	1.0	589	19.08	6.17	9.66	0.135
			0.5	1.2	853	19.22	6.18	9.92	0.133
			0.6	1.4	573	19.24	6.16	10.02	0.134
			0.7	1.7	316	19.35	6.17	10.50	0.133
			0.8	1.9	224	19.15	6.15	10.40	0.132
			0.9	2.1	165	19.33	6.15	10.41	0.133
			1	2.4	112	19.21	6.15	10.64	0.132
			1.1	2.6	89.9	19.20	6.11	10.55	0.131
			1.2	2.9	76.6	19.09	6.10	10.54	0.130
			1.3	3.1	72.1	18.88	6.09	10.67	0.132
		Apr-12	0.1	0.1	>1000	19.31	5.02	6.4	0.149
			0.15	0.2	242	19.34	5.04	5.95	0.141
			0.2	0.3	138	19.37	5.27	6.16	0.139
			0.33	0.5	76.3	19.29	5.46	6.14	0.136

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		0.4	0.6	60.4	19.27	5.51	6.27	0.135
		0.5	0.7	45.8	19.34	5.6	6.24	0.135
		0.6	0.9	35.4	19.34	5.66	6.24	0.134
		0.7	1.0	43.7	19.35	5.68	6.21	0.134
		0.8	1.2	41.4	19.36	5.69	6.23	0.135
		0.9	1.3	40.1	19.40	5.71	6.24	0.133
		1	1.4	44.2	19.39	5.75	6.25	0.135
		1.1	1.6	56.1	19.42	5.79	6.25	0.133
		1.2	1.7	51.3	19.38	5.89	6.28	0.133
		1.3	1.9	51.2	19.47	5.78	6.22	0.134
		1.4	2.0	51.5	19.48	5.84	6.29	0.133
		1.5	2.2	53.3	19.55	5.88	6.22	0.134
		1.6	2.3	50.2	19.60	5.88	6.18	0.133
		1.7	2.5	51.6	19.55	5.91	6.25	0.133
		1.8	2.6	52.8	19.61	5.91	6.21	0.133
		1.9	2.7	51.1	19.62	5.9	6.23	0.133
		2	2.9	51.6	19.58	5.91	6.28	0.135
		2.1	3.0	52.4	19.54	5.9	6.25	0.134
	Oct-12							
	Apr-13	0	0.00	550	20.00	5.38		
		0.1	0.14	225	19.63	5.64		
		0.5	0.72	65	19.79	5.86		
		1.0	1.45	29.1	19.02	5.83		
		2.0	2.89	30.3	20.00	5.85		
		2.5	3.61	27.5	20.15	5.84		
		2.6	3.76	20.7	20.00	5.82		
		2.7	3.90	15.5	20.02	5.75		
		2.8	4.05	19	20.01	5.73		
		2.9	4.19	22.3	19.97	5.73		
MW-18	Jul-06	2.5	1.7	>999	30.38 C	8.69	1.80	0.522
		5	3.3	> 999	26.21 C	8.58	1.67	0.436
		7.5	5.0	814	26.18 C	8.61	1.64	0.431
		10	6.7	628	26.19 C	8.60	1.65	0.434
		12.5	8.3	405	26.22 C	8.61	1.63	0.430
		15	10.0	153	26.21 C	8.62	1.62	0.432
		25	22.1	62.1	26.21 C	8.63	1.60	0.431
	Apr-07	5	1.0	4.43	20.62 C	7.59	0.57	0.877
		10	2.1	9.6	21.02 C	7.90	1.03	1.212
		15	3.1	9.4	21.08 C	7.85	0.96	1.201
	Oct-07	1.5	0.3	24	20.65 C	7.72	0.84	0.885
		2	0.4	20	20.86 C	7.67	0.79	0.851
		2.5	0.5	17	20.74 C	7.67	0.71	0.861
		3	0.6	13.1	21.18 C	7.67	0.73	0.840
		4	0.8	10.2	20.73 C	7.68	0.69	0.836
		5	1.0	9	21.29 C	7.67	0.80	0.832
	Apr-08 <sup>a</sup>	0.5	0.1	164	22.49 C	7.88	0.58	1.092
		1.5	0.3	71.8	22.43 C	7.95	0.46	1.048
		2.5	0.5	28.2	24.31 C	7.95	0.32	0.935
		3.5	0.7	101	23.36 C	7.93	0.39	0.878
		4.5	0.9	50.1	23.42 C	7.95	0.40	0.873
		5.25	1.0	16.3	24.03 C	7.95	0.35	0.860
		5.75	1.1	21.7	25.04 C	7.95	0.51	0.856
		5.95	1.2	16.8	24.47 C	7.92	0.50	0.837
		6	1.2	12.6	25.2 C	7.94	0.56	0.841
		6.1	1.2	9.1	25.57 C	7.95	0.57	0.842
	Oct-08	0.5	0.1	131	20.81 C	8.68	0.74	0.992
		1.5	0.3	50.3	21.08 C	8.53	0.66	0.844
		2	0.4	46.1	21.19 C	8.33	0.96	0.841
		2.25	0.4	42.9	21.04 C	8.38	0.62	0.854
		3	0.6	26.7	21.56 C	8.39	0.63	0.852
		3.25	0.6	26.1	21.63 C	8.32	0.69	0.830
		3.5	0.7	19.5	21.34 C	8.27	0.76	0.826
		4	0.8	30.3	21.55 C	8.25	0.79	0.819
		4.5	0.9	26.3	22.06 C	7.96	0.98	0.685
		4.75	0.9	15.4	22.30 C	7.87	1.17	0.625
		5	1.0	11.4	22.13 C	7.94	1.14	0.641
		5.25	1.0	16.1	21.81 C	8.02	1.05	0.663
		5.5	1.1	15.7	21.43 C	8.01	1.08	0.664
	Oct-09	5.75	1.1	15.4	21.24 C	7.98	1.09	0.665
		6	1.2	14.2	21.05 C	7.93	1.08	0.669
		6.25	1.2	11.8	20.9 C	7.91	1.02	0.675
		6.5	1.3	11	20.64 C	7.88	1.06	0.677
		6.75	1.3	9.68	21.44 C	7.94	0.95	0.706
	Apr-09 <sup>a</sup>	0.1	0.0	196	19.83 C	7.53	1.68	0.842
		0.3	0.1	81.9	20.09 C	7.49	1.33	0.843
		0.5	0.2	36.2	20.36 C	7.45	1.90	0.798
		0.65	0.2	29.6	20.47 C	7.44	1.98	0.781
		0.75	0.3	25.2	20.27 C	7.44	2.35	0.761
		0.9	0.3	17.3	20.46 C	7.44	2.68	0.720

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		1.3	0.5	29.2	20.47 C	7.45	3.16	0.673
		1.7	0.6	145	20.82 C	7.49	2.84	0.707
		2.3	0.9	128	20.96 C	7.59	1.76	0.850
		2.7	1.0	46.7	22.27 C	7.55	2.47	0.718
		3.3	1.3	52.6	21.71 C	7.47	2.30	0.735
		3.9	1.5	48.8	22.06 C	7.48	1.68	0.766
		4.6	1.8	32.6	21.65 C	7.48	1.87	0.755
		5.1	1.9	33.9	20.89 C	7.49	1.85	0.770
		5.3	2.0	32.5	21.07 C	7.50	1.76	0.797
		5.5	2.1	39.7	21.02 C	7.53	1.04	0.813
		5.6	2.1	18.2	20.87 C	7.54	1.34	0.813
		5.7	2.2	12.4	20.67 C	7.54	1.48	0.813
		5.8	2.2	9.44	21.22 C	7.54	1.19	0.821
MW-19	Jan-08	0.5	0.1	999	14.36 C	9.50	0.01	1.420
		2.5	0.6	827	18.74 C	8.94	0.01	1.430
		4	1.0	704	18.68 C	7.03	0.01	1.480
		6	1.5	221	18.65 C	7.04	0.03	1.460
		9	2.3	18.75	18.65 C	7.05	0.02	1.460
		14	3.6	8.01	18.65 C	7.05	0.02	1.450
	Apr-08	0	0.0	186	22.8 C	6.12	1.40	0.755
		0.25	0.1	126	21.73 C	6.08	1.11	0.747
		0.3	0.2	73.3	21.69 C	6.09	0.81	0.735
		0.4	0.2	54.3	21.65 C	6.11	0.63	0.726
		0.6	0.3	58.1	21.44 C	6.12	0.51	0.711
		1	0.5	32.5	21.27 C	6.06	0.38	0.680
		1.25	0.6	16.8	21.17 C	6.00	0.33	0.584
		1.7	0.9	10.7	21.09 C	6.05	0.25	0.477
		2	1.0	7.4	21.22 C	6.07	0.18	0.425
	Oct-08	0.15	0.1	180	19.32 C	6.96	1.33	0.771
		0.4	0.2	122	19.76 C	6.96	0.80	0.768
		0.8	0.5	55.2	19.96 C	6.89	0.70	0.765
		1.15	0.7	34.6	20.03 C	6.80	0.65	0.766
		1.5	0.9	12.4	20.18 C	6.84	0.60	0.766
		1.9	1.2	6.58	20.09 C	6.73	0.64	0.765
	Apr-09	0	0.0	27.1	21.05 C	4.85	2.15	0.241
		0.05	0.0	18.3	21.27 C	4.72	4.26	0.241
		0.15	0.1	5.36	21.07 C	4.68	2.40	0.240
		0.25	0.1	4.06	21.26 C	4.64	2.75	0.235
		0.4	0.2	3.79	21.35 C	4.63	3.79	0.231
		0.5	0.3	3.21	21.29 C	4.67	3.21	0.225
		0.65	0.3	2.46	21.31 C	4.68	2.46	0.218
		0.75	0.4	2.31	21.14 C	4.70	2.31	0.214
		0.9	0.5	1.97	21.17 C	4.71	1.97	0.211
		1.05	0.5	1.51	21.16 C	4.75	1.51	0.210
		1.2	0.6	1.46	20.96 C	4.75	1.46	0.207
		1.3	0.7	1.45	21.08 C	4.75	1.45	0.204
		1.35	0.7	1.4	21.18 C	4.75	1.40	0.203
		1.4	0.7	1.39	21.2 C	4.76	1.39	0.201
		1.45	0.8	1.4	21.13 C	4.72	1.40	0.199
MW-19	Oct-09	0.25	0.1	32.3	20.58 C	5.23	1.15	0.217
		0.75	0.4	18.4	20.66 C	5.11	0.97	0.197
		1.2	0.6	9.48	20.69 C	5.14	0.98	0.191
		1.4	0.7	5.52	20.68 C	5.24	0.99	0.195
		2.75	1.4	4.21	20.67 C	5.40	0.92	0.207
		3.1	1.6	3.85	20.65 C	5.47	0.88	0.212
		3.25	1.7	5.24	20.63 C	5.48	0.86	0.217
		3.5	1.8	4.96	20.55 C	5.52	0.79	0.222
		3.9	2.0	6.62	20.47 C	5.57	0.74	0.226
		4.25	2.2	5.98	20.53 C	5.58	0.69	0.227
	Apr-10	0.2	0.1	60.3	20.66	5.48	0.61	0.193
		0.4	0.2	47.7	20.74	5.53	0.47	0.193
		0.7	0.4	19	20.76	5.56	0.61	0.190
		1	0.5	12.7	20.78	5.59	0.57	0.193
		1.35	0.7	8.45	20.78	5.61	0.51	0.196
		1.7	0.9	7.9	20.83	5.63	0.44	0.201
		2.1	1.1	4.57	20.8	5.63	0.40	0.202
		2.8	1.5	4.71	20.85	5.66	0.38	0.205
		3.2	1.7	3.24	20.8	5.67	0.37	0.207
		3.8	2.0	3.4	20.85	5.69	0.37	0.210
		4.1	2.2	2.42	20.85	5.71	0.37	0.210
		4.7	2.5	2.1	20.79	5.71	0.37	0.209
	Oct-10	0	0.0	52.7	23.00	6.34	2.31	0.274
		1.85	1.0	4.88	21.17	6.03	0.52	0.298
		5.05	2.7	1.79	21.03	6.14	0.43	0.332
		5.55	3.0	2.20	21.00	6.16	0.43	0.340
		6.05	3.2	2.23	20.97	6.18	0.42	0.344
	Apr-11	0.25	0.1	109	21.02	5.41	1.01	0.188
		0.75	0.4	66.9	20.88	5.24	0.83	0.178
		1.25	0.6	35.9	20.81	5.23	0.85	0.167

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm	
MW-19		1.75	0.9	20.2	20.77	5.65	1.15	0.173	
		2.25	1.2	12.2	20.76	5.78	1.47	0.179	
		2.75	1.4	8.29	20.84	5.84	1.67	0.178	
		3.25	1.7	6.22	20.77	5.84	1.76	0.175	
		3.75	1.9	5.3	20.85	5.84	1.73	0.174	
		4.25	2.2	5.36	20.86	5.83	1.57	0.168	
		4.75	2.4	5.2	20.86	5.83	1.62	0.167	
		5.25	2.7	4.88	20.88	5.84	1.53	0.165	
		5.75	2.9	4.03	20.83	5.81	1.40	0.164	
		6.25	3.2	3.67	20.92	5.82	1.40	0.163	
		Oct-11 <sup>a</sup>	0.15	0.1	58.90	20.87	6.45	0.98	0.609
			0.5	0.3	25.70	20.71	6.44	1.11	0.605
			1	0.5	12.1	20.74	6.41	1.36	0.562
			1.5	0.8	6.75	20.75	6.39	1.26	0.540
			2	1.1	3.97	20.79	6.38	1.23	0.508
			2.5	1.4	2.66	20.74	6.37	1.30	0.478
			3	1.6	2.47	20.85	6.36	1.40	0.458
			3.5	1.9	2.15	20.78	6.35	1.51	0.451
			4	2.2	1.76	20.79	6.35	1.66	0.449
			4.5	2.5	1.57	20.86	6.36	1.82	0.450
			5	2.7	1.96	20.86	6.36	2.00	0.447
			5.25	2.9	2.15	20.83	6.36	2.13	0.446
			5.5	3.0	1.86	20.75	6.36	2.26	0.446
		Apr-12	0.25	0.1	28	22.01	5.73	0.69	0.238
			0.3	0.2	27.3	22.19	5.83	0.62	0.234
			0.5	0.3	23.5	22.31	5.91	0.55	0.228
			0.75	0.4	22.8	21.83	5.67	0.5	0.215
			1	0.5	21.1	21.64	5.63	0.48	0.218
			1.3	0.7	13.5	21.70	5.81	0.46	0.22
			1.5	0.8	12.1	21.53	5.73	0.45	0.219
			1.75	1.0	7.98	21.50	5.75	0.42	0.221
			2	1.1	6.87	21.47	5.78	0.4	0.225
			2.25	1.2	6.25	21.41	5.87	0.37	0.227
			2.5	1.4	5.89	21.33	5.73	0.33	0.228
			3	1.6	6.31	21.28	5.85	0.31	0.23
			3.25	1.8	6.78	21.15	5.83	0.28	0.229
			3.5	1.9	6.96	21.09	5.84	0.28	0.231
			3.75	2.0	6.41	21.14	5.84	0.26	0.231
			4	2.2	6.12	21.16	5.83	0.24	0.23
			4.25	2.3	6.32	21.29	5.92	0.24	0.231
			4.5	2.4	5.72	21.30	5.97	0.22	0.232
			4.75	2.6	5.12	21.18	5.85	0.22	0.235
			5	2.7	5.56	21.06	5.87	0.21	0.235
			5.25	2.9	6.02	21.03	5.88	0.21	0.236
			5.5	3.0	6.1	20.98	5.87	0.2	0.236
		Oct-12	0.13	0.1	-	22.81	6.57	1.44	0.556
			1.25	0.7	80.1	22.46	6.13	0.38	0.582
			2.5	1.4	-	22.15	5.73	0.29	0.581
			3.75	2.1	-	22.18	6.01	0.28	0.576
			5	2.8	31.4	22.20	6.1	0.25	0.570
			6.25	3.5	-	22.20	6.11	0.23	0.550
			7.5	4.2	17	22.12	6.05	0.41	0.503
		8.75	4.9	-	22.10	6.07	0.25	0.469	
		10	5.6	5.98	22.10	6.05	0.23	0.450	
		11.25	6.3	-	21.99	6.06	0.2	0.436	
		12.5	7.0	2.84	22.07	6.02	0.19	0.426	
		13.75	7.7	-	21.99	6.06	0.17	0.420	
		15	8.4	1.82	21.99	6.08	0.18	0.415	
		16.25	9.1	-	22.00	6.06	0.17	0.413	
		17.5	9.8	1.52	21.95	6.1	0.17	0.412	
		18.75	10.5	-	21.92	6.05	0.18	0.414	
		20	11.2	1.02	21.95	6.08	0.16	0.411	
		21.25	11.9	0.98	21.93	6.06	0.17	0.409	
	Apr-13	0.00	0.00	116	20.46	5.55	4.07	0.190	
		0.50	0.28	20.10	21.03	5.82	3.30	0.159	
		1.00	0.56	7.76	21.05	5.93	3.40	0.157	
		1.50	0.84	7.49	21.10	5.95	3.67	0.155	
		2.00	1.12	6.76	20.98	5.92	3.99	0.152	
		3.50	1.95	7.00	21.13	5.99	3.79	0.160	
		5.00	2.79	6.02	21.16	5.99	3.87	0.161	
		6.50	3.63	6.35	21.17	5.98	4.01	0.157	
MW-20	Apr-13	1.50	0.84	94.10	16.41	5.09	3.85	0.172	
		2.50	1.39	50.30	16.44	5.05	3.90	0.163	
		3.50	1.95	33.10	16.55	5.05	4.01	0.160	
		4.50	2.51	23.70	16.53	5.09	4.07	0.159	
		5.50	3.07	16.70	16.55	5.09	4.09	0.158	
		5.60	3.12	10.48	16.58	5.10	4.11	0.156	
		5.11	2.85	9.02	16.59	5.11	4.09	0.157	
	Oct-13	0.10	0.06	86.00	16.50	7.35	0.59	0.387	

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees C	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		2.50	1.39	52.00	16.65	5.82	6.63	0.062
		4.00	2.23	9.78	16.65	5.71	7.07	0.053
		5.00	2.79	8.12	16.67	5.66	7.23	0.050
		5.50	3.07	6.26	16.67	5.64	7.33	0.048
		6.50	3.63	6.31	16.67	5.64	7.39	0.048
MW-A	Sep-06 <sup>d</sup>	2	1.5	380	23.98 C	7.59	2.78	0.927
		3	2.3	120	20.38 C	7.84	2.72	0.925
		5	3.8	68	20.36 C	7.97	4.61	0.901
		6	4.6	34	20.33 C	7.98	4.66	0.908
		>6	well dry					
MW-B	Jul-06	19.8	13.2	114	21.94 C	5.91	9.00	0.049
		20.2	13.5	44.7	21.57 C	5.83	8.43	0.048
		21	14.0	38.7	21.76 C	6.05	7.70	0.051
		21.8	14.5	30	22.97 C	6.24	6.60	0.057
		22	14.7	18	23.90 C	6.24	6.51	0.057
		22.2	14.8	9.1	24.16 C	6.24	6.43	0.057
MW-C	Jul-06	1	0.67	39.6	21.76 C	6.73	3.71	0.286
		2	1.3	34.8	20.81 C	6.62	2.36	0.183
		3	2.0	40.4	20.12 C	6.63	2.37	0.253
		3.5	2.3	33.7	20.51 C	6.61	1.95	0.259
		4	2.7	42	19.99 C	6.61	2.36	0.257
		4.5	3.0	31.6	20.30 C	6.61	2.51	0.253
		5	4.4	30.4	19.97 C	6.61	2.47	0.256
MW-D	Jan-08	2.5	1.6	967	21.49 C	6.72	5.28	1.280
		3.5	2.3	658	21.24 C	6.79	5.62	2.020
		4.5	2.9	104	21.27 C	6.74	5.63	2.180
		4.8	3.1	68	21.33 C	6.75	5.64	2.010
		5.5	3.6	44	21.34 C	6.75	5.64	2.080
OW-72	Apr-07	5	0.5	163	18.02 C	6.07	0.40	0.355
		15	1.5	59.9	18.11 C	6.04	0.24	0.390
		25	2.5	56.7	19.26 C	6.02	0.58	0.980
		28	2.8	22.6	18.91 C	5.99	0.61	0.405
		29	2.9	24.2	18.70 C	6.06	0.80	0.408
		29.5	3.0	16.2	19.16 C	6.02	0.44	0.408
		30	3.0	11.9	19.32 C	6.05	0.43	0.407
		30.5	3.1	9.65	18.76 C	6.05	0.44	0.406
	Oct-07	0.5	0.1	153	18.15 C	6.06	1.01	0.374
		2	0.2	131	19.08 C	5.99	0.42	0.378
		2.4	0.3	83	19.32 C	5.99	0.39	0.380
		3	0.3	49	19.59 C	5.99	0.42	0.384
		3.2	0.4	47	19.68 C	5.99	0.43	0.384
		4	0.4	31	19.66 C	5.99	0.35	0.386
		4.5	0.5	20	19.79 C	5.98	0.27	0.385
		5	0.6	17.4	19.43 C	6.00	0.24	0.386
		5.8	0.6	14.4	19.24 C	5.99	0.24	0.389
		6.5	0.7	11.4	19.83 C	5.99	0.22	0.387
		7.3	0.8	8	19.62 C	6.00	0.21	0.390
	Apr-08	0.5	0.1	384	19.21 C	6.68	2.10	0.183
		1	0.1	231	18.79 C	6.48	1.54	0.183
		1.5	0.2	125	19.54 C	6.40	1.21	0.184
		2	0.2	67.2	19.16 C	6.33	0.77	0.215
		3	0.3	42.3	19.29 C	6.17	0.74	0.238
		4	0.4	50.4	19.35 C	6.12	0.68	0.267
		5	0.5	32.4	19.38 C	6.06	0.53	0.299
		6	0.6	21.1	19.29 C	6.05	0.44	0.322
		7	0.7	15.8	19.22 C	5.97	0.42	0.335
		7.5	0.8	13.3	19.37 C	5.95	0.37	0.342
		8	0.8	7.24	19.26 C	5.94	0.51	0.350
	Oct-08	1.5	0.2	457	18.3 C	7.45	1.61	0.444
		3	0.3	242	18.56 C	7.35	1.56	0.401
		5	0.6	119	18.44 C	7.25	1.21	0.404
		7	0.8	138	18.47 C	7.20	0.98	0.404
		9	1.0	50.5	18.46 C	7.11	0.78	0.408
		11	1.2	46.8	18.41 C	7.06	0.68	0.412
		13	1.4	44.9	18.37 C	6.97	0.62	0.412
		15	1.7	32.4	18.35 C	6.93	0.59	0.413
		17	1.9	31.8	18.36 C	6.90	0.58	0.415
		18	2.0	41.8	18.39 C	6.86	0.54	0.417
		19	2.1	18.3	18.55 C	6.85	0.51	0.418
		20	2.2	15.1	18.49 C	6.78	0.50	0.418
		21	2.3	13.8	18.45 C	6.74	0.48	0.422
		22	2.4	10.4	18.45 C	6.68	0.47	0.423
		23	2.5	8.79	18.46 C	6.68	0.46	0.424
	Apr-09	0.25	0.0	146	17.92	6.39	5.65	0.132
		0.5	0.1	161	18.07 C	6.35	5.02	0.135
		0.75	0.1	221	18.49 C	6.36	4.44	0.136
		1.5	0.2	150	18.67 C	6.34	3.75	0.139
		2	0.2	60.1	19.03 C	6.34	2.81	0.150

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
OW-72		2.5	0.3	41.1	18.86 C	6.29	2.29	0.169
		3.25	0.3	23.6	18.74 C	6.22	1.70	0.198
		4	0.4	17.9	18.72 C	6.16	1.20	0.233
		5	0.5	15.8	18.84 C	6.12	0.94	0.260
		6	0.6	10.8	18.89 C	6.10	0.78	0.283
		7	0.7	7.03	18.96 C	6.07	0.75	0.302
		7.75	0.8	19.8	18.91 C	6.06	0.88	0.318
		8.5	0.9	18.6	18.97 C	6.04	0.75	0.328
		9.25	1.0	8.03	18.92 C	6.04	0.67	0.334
	Oct-09	0.5	0.1	252	18.69 C	7.95	3.12	0.145
		1	0.1	240	18.4 C	7.04	2.40	0.148
		1.75	0.2	361	18.46 C	6.64	1.72	0.173
		2.5	0.3	162	18.42 C	6.32	1.14	0.218
		3.25	0.3	65.3	18.46 C	6.16	0.89	0.261
		4	0.4	38.5	18.51 C	6.10	0.78	0.283
		5	0.5	33.7	18.57 C	6.11	0.72	0.292
		5.75	0.6	25.3	18.53 C	6.12	0.62	0.307
		6.5	0.7	15.3	18.58 C	6.13	0.47	0.335
		7.25	0.8	11.9	18.55 C	6.14	0.42	0.336
		8	0.8	10.25	18.54 C	6.19	0.46	0.343
		8.75	0.9	41.3	18.53 C	6.19	0.43	0.342
		10	1.0	14.8	18.53 C	6.22	0.41	0.343
		10.75	1.1	10.49	18.53 C	6.27	0.37	0.357
		11.5	1.2	8.62	18.55 C	6.31	0.35	0.362
		12.25	1.3	7.19	18.57 C	6.34	0.33	0.369
	Apr-10 <sup>a</sup>	0.75	0.1	246	18	6.20	0.96	0.106
		2	0.2	182	19.13	6.43	0.44	0.107
		3.25	0.3	71.6	19.36	6.28	0.35	0.163
		4.5	0.4	49.8	19.41	6.18	0.40	0.318
		6	0.6	32.4	19.38	6.16	0.41	0.364
		7.25	0.7	34.4	19.44	6.12	0.40	0.370
		8.5	0.8	16.9	19.46	6.11	0.69	0.394
		9.5	0.9	243	19.55	6.09	0.55	0.390
		11.5	1.1	16.2	19.51	6.06	0.76	0.396
		12.75	1.3	13.8	19.59	6.07	0.78	0.358
		14.25	1.4	4.12	19.25	6.03	0.89	0.407
		16	1.6	12.9	19.2	6.03	1.12	0.416
		16.75	1.7	6.59	19.35	6.02	1.12	0.418
		17.5	1.7	8.71	19.48	6.02	1.09	0.419
	Oct-10	0.75	0.1	149	18.76	6.02	0.21	0.501
		2	0.2	180	19.23	6.04	0.51	0.490
		6.5	0.7	23.9	18.87	6.02	0.59	0.462
		10.25	1.0	13.3	18.82	5.99	0.73	0.454
		11.5	1.2	12.6	18.80	5.98	0.77	0.453
		12.75	1.3	9.44	18.84	5.98	0.79	0.452
	Apr/11 <sup>a</sup>	1	0.1	84.9	18.30	5.81	3.33	0.465
		2.5	0.3	70.5	18.85	5.83	3.24	0.459
		3.75	0.4	67.1	19.10	5.83	2.92	0.441
		5.5	0.6	291	19.26	5.83	2.78	0.438
		6.75	0.7	119	19.23	5.82	4.29	0.432
		7.75	0.8	38.7	19.30	5.81	5.27	0.434
		10	1.1	19.9	19.39	5.81	5.51	0.434
		12	1.3	9.54	19.42	5.82	4.66	0.437
		13.5	1.5	6.75	19.47	5.81	4.58	0.436
		14	1.5	5.65	19.51	5.81	4.45	0.436
		14.75	1.6	4.32	19.62	5.82	4.23	0.436
	Oct-11	1	0.1	49.6	18.04	5.64	0.82	0.470
		2	0.2	40.5	18.66	5.98	0.64	0.469
		3	0.3	30.5	18.79	6.01	0.49	0.459
		4	0.4	24.1	18.80	5.96	0.36	0.444
		5	0.5	19.4	18.78	5.98	0.30	0.432
		6	0.7	16.4	18.70	5.96	0.25	0.424
		7.5	0.8	16.1	18.77	6.02	0.24	0.418
		9	1.0	15.3	18.80	6.01	0.22	0.419
		10.5	1.2	12.5	18.83	5.99	0.21	0.422
		12	1.3	9.73	18.75	5.99	0.19	0.423
		13.5	1.5	8.65	18.77	5.96	0.18	0.422
		15	1.6	8.71	18.79	5.97	0.18	0.422
		16.5	1.8	7.81	18.82	5.97	0.17	0.417
		18	2.0	6.95	18.79	5.95	0.16	0.417
		19.5	2.1	6.18	18.77	5.95	0.15	0.417
		21	2.3	5.23	18.84	5.99	0.14	0.419
	Oct-11	22.5	2.5	4.06	18.77	5.98	0.13	0.420
		24	2.6	4.19	18.63	5.96	0.13	0.422
		25.5	2.8	5.30	18.73	5.99	0.13	0.421
		27	3.0	5.09	18.69	5.95	0.12	0.419
		28.5	3.1	4.44	18.71	5.95	0.11	0.422
	Apr-12	2.5	0.3	54.3	18.83	4.82	0.49	0.429
		4	0.4	53.6	18.95	5.61	0.36	0.383

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		5	0.5	40.6	19.01	5.83	0.32	0.359
		6	0.7	22.6	19.02	5.83	0.27	0.379
		7.5	0.8	16.6	19.02	5.83	0.22	0.390
		9	1.0	13.2	19.02	5.83	0.19	0.395
		10	1.1	8.25	19.05	5.84	0.17	0.400
		11	1.2	5.67	19.04	5.85	0.16	0.402
		12	1.3	3.93	19.05	5.82	0.15	0.404
		13	1.4	2.76	19.06	5.83	0.14	0.406
		14	1.5	2.65	19.08	5.86	0.14	0.407
		15.5	1.7	2.29	19.12	5.83	0.13	0.407
		16.5	1.8	2.15	19.13	5.84	0.13	0.408
		17.5	1.9	2.1	18.99	5.79	0.13	0.408
		18.75	2.0	2.04	18.92	5.81	0.12	0.408
		20	2.2	2.02	19.25	5.84	0.12	0.409
		21	2.3	2.12	18.90	5.79	0.12	0.408
		22.5	2.4	2.15	18.96	5.81	0.12	0.409
		23.5	2.5	2.1	19.00	5.84	0.12	0.41
		24.5	2.7	2.05	19.06	5.78	0.11	0.41
		25.5	2.8	2.03	19.25	5.84	0.11	0.411
		26.5	2.9	2.07	19.14	5.83	0.11	0.411
		28	3.0	1.97	19.27	5.87	0.11	0.411
	Oct-12	1	0.1	44.6	20.80	5.86	0.56	0.415
		3.5	0.4	31.6	21.44	5.92	0.41	0.394
		6	0.7	19.6	21.12	5.94	0.35	0.39
		8	0.9	7.42	21.34	5.96	0.23	0.395
		10	1.1	3.26	21.23	5.95	0.2	0.398
		12	1.4	2.04	21.46	5.97	0.21	0.399
		14	1.6	1.53	21.23	5.99	0.2	0.399
		16	1.8	1.47	21.31	6.02	0.2	0.403
		18	2.1	1.49	21.39	6.04	0.15	0.404
		20	2.3	1.51	21.25	6.04	0.17	0.404
		22	2.5	1.38	21.24	6.00	0.17	0.405
		24	2.7	1.3	21.31	6.01	0.14	0.404
		25	2.9	1.36	21.51	5.99	0.15	0.404
		26	3.0	1.42	21.16	6.00	0.12	0.405
	Apr-13	2.50	0.29	69.10	18.98	5.80	0.32	0.319
		5.50	0.63	32.60	19.04	5.77	0.22	0.327
		8.00	0.91	13.20	19.04	5.78	0.17	0.355
		10.50	1.20	7.64	19.15	5.81	0.14	0.367
		12.50	1.43	6.78	19.12	5.82	0.13	0.376
		16.00	1.83	2.92	19.31	5.82	0.11	0.384
		18.00	2.06	2.70	19.27	5.83	0.10	0.387
		21.00	2.40	2.65	19.53	5.85	0.10	0.389
		23.00	2.63	2.01	19.37	5.83	0.09	0.391
		26.00	2.97	2.03	19.55	5.84	0.08	0.393
		28.00	3.20	1.75	19.68	5.85	0.08	0.393
OW-72	Oct-13	2.00	0.23	28.00	19.05	6.22	0.09	245.000
		11.00	1.26	11.00	19.48	6.15	0.06	369.000
		17.00	1.94	10.00	19.76	6.12	0.04	403.000
		20.00	2.29	1.30	19.39	6.13	0.06	376.000
		25.00	2.86	0.83	19.48	6.11	0.03	383.000
		32.00	3.66	0.17	19.39	6.11	0.02	394.000
		35.00	4.00	0.00	19.35	6.10	0.02	396.000
		37.00	4.23	0.00	19.30	6.10	0.01	394.000
		40.00	4.57	0.00	19.30	6.10	0.01	396.000
OW-74A	Apr-07	4	0.4	604	17.34 C	5.52	1.16	0.221
		6	0.6	126	17.27 C	5.50	0.54	0.221
		10	1.0	70.5	17.14 C	5.49	0.44	0.223
		16	1.5	37.4	17.06 C	5.47	0.38	0.224
		24	2.3	15.2	17.10 C	5.53	0.63	0.224
		32	3.0	7.63	17.17 C	5.47	0.48	0.225
	Oct-07 <sup>a</sup>	0.4	0.1	1030	17.64 C	5.82	0.87	0.192
		2.1	0.3	154	17.42 C	5.60	0.34	0.220
		4	0.5	173	17.43 C	5.58	0.30	0.222
		5.5	0.7	96.4	17.47 C	5.58	0.27	0.223
		7.8	1.0	128	17.35 C	5.56	0.24	0.222
		10	1.3	96	17.29 C	5.56	0.22	0.223
		12.2	1.6	93	17.33 C	5.57	0.22	0.223
		14.7	1.9	49.5	17.22 C	5.56	0.20	0.223
		16.2	2.1	25	17.41 C	5.58	0.41	0.223
		18	2.3	10.3	17.27 C	5.56	0.27	0.223
		20.5	2.6	23.4	17.38 C	5.55	0.21	0.223
		22.2	2.8	15.5	17.55 C	5.58	0.22	0.223
		24.5	3.1	16.1	17.28 C	5.56	0.20	0.223
		26.3	3.3	12.6	17.43 C	5.56	0.21	0.223
		27.1	3.4	12.2	17.63 C	5.57	0.21	0.223
		28	3.6	10.9	17.34 C	5.55	0.20	0.223
		28.8	3.7	9.3	17.35 C	5.54	0.20	0.223
	Apr-08	1.5	0.2	478	17.33 C	5.47	1.25	0.225

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		3.5	0.4	160	17.39 C	5.42	0.66	0.217
		5	0.6	37.1	17.36 C	5.37	0.48	0.223
		7	0.9	30.3	17.39 C	5.35	0.40	0.225
		8.5	1.1	23.1	17.54 C	5.35	0.36	0.227
		10	1.3	20.7	17.53 C	5.33	0.33	0.227
		11	1.4	24.8	17.69 C	5.34	0.31	0.227
		11.5	1.5	27.5	17.82 C	5.39	0.50	0.228
		12.5	1.6	18.6	17.71 C	5.33	0.31	0.227
		13.5	1.7	18.2	17.61 C	5.32	0.29	0.227
		15	1.9	34.3	17.4 C	5.30	0.28	0.227
		16	2.0	19.1	17.44 C	5.32	0.26	0.227
		16.5	2.1	9.56	17.44 C	5.30	0.40	0.227
	Oct-08	0.5	0.1	334	16.75 C	6.98	1.30	0.236
		1	0.1	321	16.90 C	6.52	1.83	0.230
		2.5	0.3	165	16.87 C	6.38	1.55	0.221
		4	0.5	35.8	16.88 C	6.17	1.19	0.224
		5.5	0.7	19.3	16.92 C	6.13	1.00	0.229
		7	0.9	11.3	16.90 C	6.05	0.89	0.232
		8.5	1.1	8.44	16.90 C	6.04	0.85	0.232
	Apr-09 <sup>a</sup>	1.5	0.1	256	16.9 C	6.02	7.53	0.078
		5	0.5	114	16.96 C	5.68	4.21	0.158
		7.5	0.7	89.7	16.84 C	5.63	2.81	0.185
		9	0.9	226	16.59 C	5.63	2.17	0.194
		11.25	1.1	180	16.8 C	5.63	2.08	0.194
		12.5	1.2	33.6	16.75 C	5.61	2.66	0.196
		13	1.3	19.8	16.74 C	5.59	1.87	0.205
		13.5	1.3	20.9	16.78 C	5.59	1.69	0.206
		14.25	1.4	17.4	16.53 C	5.60	1.59	0.207
		14.75	1.4	15.2	16.21 C	5.57	1.54	0.208
		15.25	1.5	12.9	16.12 C	5.58	1.56	0.209
		15.75	1.5	13.8	16.14 C	5.59	1.80	0.209
		16.25	1.6	16.3	16.16 C	5.59	1.83	0.209
		16.5	1.6	32.3	16.11 C	5.59	2.14	0.209
		17	1.7	15	17.07 C	5.54	1.40	0.210
		17.5	1.7	7.82	17.16 C	5.56	1.24	0.210
	Oct-09	1.25	0.2	163.2	17.02 C	5.33	3.13	0.159
		2.5	0.3	51	16.98 C	5.17	3.53	0.135
		3.75	0.5	20.3	16.94 C	5.00	2.43	0.176
		4.75	0.6	12.06	16.95 C	4.99	2.08	0.185
		5.25	0.7	9.74	16.95 C	5.00	1.92	0.189
		7	0.9	8.14	16.94 C	5.00	1.76	0.190
	Apr-10	1	0.1	95.5	16.95	5.37	0.88	0.194
		2.5	0.3	53.1	17	5.42	1.37	0.184
		3.5	0.4	31.7	17.01	5.44	0.87	0.208
		4.75	0.6	20.6	17.02	5.45	0.70	0.217
		6	0.7	12.3	17.02	5.45	0.61	0.215
		7.5	0.9	11.3	17.03	5.45	0.50	0.221
		9	1.1	9.63	17.02	5.45	0.46	0.222
	Oct-10	0.25	0.0	58.6	17.35	5.83	1.52	0.152
		1.25	0.1	36.5	17.45	5.61	0.64	0.245
		2	0.2	19.5	17.53	5.57	0.55	0.226
		3	0.3	9.72	17.39	5.60	0.48	0.231
		4	0.4	9.63	17.42	5.61	0.47	0.236
	Apr-11	2.5	0.2	134	16.99	5.64	2.64	0.239
		4	0.4	42.4	17.05	5.70	2.54	0.229
		5	0.5	22.5	17.07	5.69	2.72	0.246
		7	0.7	21.5	17.06	5.68	2.53	0.249
		9	0.9	17.4	17.07	5.68	2.63	0.249
		10	0.9	11.5	17.09	5.67	2.73	0.247
		11.5	1.1	6.94	17.09	5.66	2.73	0.247
		12.5	1.2	7.80	17.08	5.67	2.77	0.249
		13.5	1.3	6.99	17.08	5.66	2.79	0.248
OW-74A	Oct-11	3.5	0.5	217	16.97	4.99	0.97	0.230
		7	0.9	153	16.98	5.18	0.71	0.238
		10.5	1.4	68.1	16.99	5.23	0.53	0.237
		14	1.9	48.9	16.96	5.25	0.43	0.236
		17.5	2.4	34.6	16.97	5.28	0.39	0.238
		21	2.8	24.5	16.96	5.26	0.37	0.237
		24.5	3.3	11.7	16.95	5.27	0.35	0.237
	Apr-12	1.5	0.2	134	16.94	5.57	0.79	0.225
		3	0.4	67	17.13	5.55	0.65	0.22
		4	0.5	30.3	17.12	5.54	0.56	0.225
		5	0.7	19.2	17.20	5.54	0.42	0.227
		6	0.8	10.9	17.25	5.53	0.37	0.229
		7	0.9	8.39	17.29	5.53	0.34	0.232
		8.5	1.1	7.31	17.27	5.52	0.31	0.233
		10	1.3	7.04	17.30	5.51	0.30	0.233
		11	1.4	7.6	17.31	5.51	0.29	0.234
		12.5	1.6	7.75	17.33	5.51	0.29	0.233

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm
		14	1.8	7.72	17.34	5.50	0.28	0.233
		15	2.0	7.34	17.37	5.50	0.28	0.234
		16	2.1	4.87	17.37	5.50	0.27	0.234
		17.5	2.3	4.43	17.39	5.50	0.27	0.234
		19	2.5	4.52	17.40	5.50	0.27	0.234
		20	2.6	4.42	17.41	5.49	0.27	0.234
		21	2.8	4.4	17.42	5.49	0.27	0.234
		23	3.0	4.37	17.42	5.49	0.27	0.234
	Oct-12	1	0.1	128	16.84	5.26	0.98	0.236
		2	0.3	49.2	17.07	5.44	0.86	0.222
		4	0.6	15.1	17.20	5.49	0.81	0.225
		5	0.7	10.93	17.14	5.43	0.74	0.231
		6	0.8	8.54	17.25	5.48	0.61	0.232
		7	1.0	8.59	17.19	5.50	0.52	0.234
		8	1.1	8.47	17.20	5.52	0.50	0.236
		9	1.3	8.2	17.21	5.50	0.53	0.237
		10	1.4	8.15	17.22	5.51	0.53	0.238
		11	1.6	8.12	17.29	5.52	0.45	0.237
		12	1.7	8.11	17.26	5.50	0.50	0.239
	Oct-12	13	1.8	6.96	17.33	5.52	0.49	0.238
		14	2.0	5.74	17.33	5.52	0.49	0.238
		15	2.1	5.59	17.39	5.51	0.46	0.237
		16	2.3	5.47	17.49	5.54	0.48	0.237
		17	2.4	5.52	17.40	5.53	0.44	0.238
		18	2.5	4.08	17.52	5.53	0.42	0.237
		19	2.7	3.98	17.57	5.50	0.48	0.237
		20	2.8	3.8	17.63	5.52	0.42	0.235
		21	3.0	2.85	17.67	5.53	0.41	0.239
		22	3.1	2.15	17.81	5.51	0.40	0.238
	Apr-13	20	0.3	41.8	17.24	5.13	1.35	0.197
		4.5	0.6	19.7	17.40	5.21	0.63	0.217
		6.0	0.8	9.18	17.26	5.36	0.59	0.220
		9.0	1.3	7.46	17.38	5.37	0.46	0.220
		11	1.6	7.14	17.39	5.42	0.49	0.221
		16	2.3	4.72	17.30	5.48	0.46	0.221
		21	3.0	4.13	17.29	5.55	0.44	0.221
		22.5	3.2	2.03	17.33	5.50	0.44	0.220
		24	3.4	1.79	17.32	5.51	0.44	0.221
	Oct-13	3	0.4	41	16.31	5.85	3.18	1.15
		11	1.6	64	17.48	5.72	0.50	227
		20	2.8	11	19.88	5.70	0.10	239
		27	3.8	9.89	19.66	5.70	0.13	245
		31	4.4	8.70	19.52	5.69	0.14	245
		35	4.9	6.13	19.78	5.69	0.15	245
IW-4	Oct-08	0.1	0.2	> 1000	18.44 C	7.65	4.78	1.474
		0.2	0.5	> 1000	15.88 C	7.70	4.47	1.876
		0.4	0.9	> 1000	17.57 C	7.41	7.03	2.251
	Apr-09 <sup>a</sup>	0	0.0		17.13 C	6.95	2.21	1.938
		0.05	0.1		16.53 C	6.95	2.16	0.928
		0.1	0.1		16.42 C	6.94	2.01	1.925
		0.15	0.2		16.22 C	6.95	1.97	1.923
		0.2	0.2		16.05 C	6.94	1.98	1.921
		0.2	0.2		15.91 C	6.93	1.77	1.919
		0.2	0.2		16.09 C	6.93	1.83	1.916
		0.25	0.3	88.8	16.13 C	6.93	1.75	1.910
		0.25	0.3	83.9	16.17 C	6.92	1.65	1.907
		0.3	0.4	78.3	16.16 C	6.92	1.52	1.906
		0.7	0.8	47.1	16.6 C	6.94	1.83	1.867
		0.74	0.9	43.6	16.84 C	6.94	1.65	1.866
		0.79	0.9	42.3	16.99 C	6.93	1.49	1.863
		0.83	1.0	39.2	17.32 C	6.92	1.28	1.857
		0.87	1.0	37.6	17.86 C	6.92	1.15	1.850
		0.92	1.1	31.6	18.55 C	6.92	0.99	1.844
		0.96	1.1	28.7	19.69 C	6.94	0.87	1.843
		1.1	1.3	28.9	20.71 C	6.93	0.86	1.838
		1.15	1.4	26.1	21.3 C	6.94	0.80	1.835
		1.2	1.4	23.6	21.67 C	6.93	0.66	1.831
		1.24	1.5	18.1	21.87 C	6.93	0.68	1.823
		1.28	1.5	16.7	22.07 C	6.92	0.64	1.816
		1.32	1.6	16.6	22.28 C	6.92	0.65	1.808
		1.36	1.6	14	22.4 C	6.92	0.59	1.802
		1.41	1.7	13.9	22.46 C	6.91	0.60	1.790
		1.46	1.7	12.4	22.63 C	6.91	0.54	1.788
		1.6	1.9	12.2	22.91 C	6.91	0.52	1.784
		1.65	1.9	11.2	23.22 C	6.92	0.48	1.774
		1.7	2.0	10.7	23.47 C	6.92	0.46	1.780
		1.72	2.0	10.1	23.46 C	6.92	0.47	1.772
		1.74	2.0	9.7	23.42 C	6.92	0.47	1.773
	Oct-09	0.2	0.2	57.3	18.94 C	6.67	1.81	1.311

**Groundwater Sampling Field Data**  
**Former Olympic Manufacturing Site, Smyrna, Georgia**

Monitoring Well	Date	Volume (gallons)	Well Volume	Turbidity (NTU)	Temp., degrees	pH	Dissolved Oxygen, mg/L	Conductivity, mS/cm			
IW-4		0.5	0.4	27.3	18.85 C	6.51	1.11	1.220			
		0.8	0.7	20.2	19.09 C	6.50	0.99	1.217			
		1	0.8	14.4	19.14 C	6.49	0.88	1.220			
		1.15	1.0	11.1	19.14 C	6.49	0.79	1.221			
		1.3	1.1	10.8	19.19 C	6.49	0.68	1.225			
		1.35	1.1	9.1	19.21 C	6.48	0.65	1.225			
	Oct-11		0.1	0.4	>1000	21.37	6.77	9.42	1.056		
			0.13	0.5	>1000	21.46	6.76	9.90	1.051		
			0.14	0.5	>1000	21.08	6.75	10.08	1.044		
			0.16	0.6	>1000	21.00	6.74	10.33	1.036		
			0.19	0.7	579	21.14	6.74	10.71	1.025		
			0.23	0.8	650	21.40	6.75	12.17	1.021		
			0.25	0.9	>1000	21.62	6.73	12.66	1.051		
			0.27	1.0	>1000	21.90	6.72	12.69	1.002		
			0.29	1.0	590	22.04	6.70	13.01	0.988		
			0.3	1.1	650	22.17	6.69	14.18	0.976		
			0.31	1.1	350	22.23	6.67	14.62	0.963		
			0.32	1.1	250	22.28	6.68	14.79	0.957		
	Nov-11		0.05	0.2	>1000	16.86	6.80	2.97	1.084		
			0.1	0.5	>1000	17.32	6.86	2.56	1.031		
			0.2	0.9	730	17.28	6.75	1.40	0.991		
	Apr-12		0.15	0.4	>1000	18.88	6.05	3.14	0.996		
			0.25	0.7	>1000	18.47	6.45	3.03	0.891		
			0.3	0.8	>1000	18.29	6.56	2.46	0.894		
			0.32	0.9	>1000	18.39	6.60	1.81	0.888		
			0.4	1.1	>1000	18.47	6.90	2.88	0.932		
			0.42	1.2	>1000	18.46	6.81	2.77	0.900		
			0.46	1.3	>1000	18.63	6.84	2.46	0.905		
			0.48	1.3	>1000	18.60	6.98	3.41	0.919		
			0.5	1.4	>1000	18.78	6.89	2.84	0.895		
			0.53	1.5	>1000	18.74	6.89	3.18	0.884		
			0.56	1.6	>1000	18.89	6.84	2.70	0.872		
			0.58	1.6	>1000	18.94	6.90	2.95	0.878		
			0.63	1.8	>1000	19.12	6.87	2.99	0.879		
			0.65	1.8	>1000	19.01	7.02	3.73	0.902		
			0.69	1.9	>1000	19.11	6.85	2.86	0.864		
			0.72	2.0	>1000	20.14	6.94	3.62	0.857		
			0.75	2.1	860	19.44	6.91	3.53	0.860		
			0.85	2.4	875	20.16	6.85	3.18	0.859		
			1.1	3.1	860	21.53	6.90	3.52	0.908		
	Oct-12				Not sampled due to insufficient water						
	Apr-13		0.00	0.00	180.00	15.89	5.76	8.41	1.663		
			0.50	1.39	95.00	16.76	6.37	0.98	1.601		
			1.00	2.78	60.10	17.78	6.40	0.39	1.503		
			1.40	3.89	44.20	17.86	6.42	0.27	1.385		
			1.60	4.44	27.50	16.42	6.32	0.23	1.344		
			1.80	5.00	24.80	16.77	6.39	0.21	1.307		
			2.00	5.56	21.80	16.84	6.40	0.19	1.267		
			2.20	6.11	19.00	16.88	6.40	0.17	1.233		
			2.40	6.67	15.10	16.87	6.41	0.16	1.203		
		2.60	7.22	12.70	17.02	6.40	0.15	1.179			
		2.70	7.50	9.48	17.20	6.41	0.14	1.173			
		2.80	7.78	9.19	17.25	6.41	0.13	1.167			
		2.90	8.06	8.02	17.35	6.41	0.14	1.162			

<sup>a</sup> Water quality parameters were measured every five minutes. Where purging extended over an long period, data is shown at 10 minute intervals in this table until the last three measurements.

<sup>b</sup> At least five well volumes were removed in efforts to get the turbidity < 10 NTU prior to sampling.

<sup>c</sup> Water was visually clear.

<sup>d</sup> Purged well dry.

## **Appendix D: Laboratory Reports and Data Validation Forms (*on CD Rom*)**

---

# Brown AND Caldwell : LABORATORY DATA VERIFICATION FORM

## 1. PROJECT INFORMATION

Today's Date: 11-20-13

Project Number: 140054 Project Name/Client: Hill Shire Farms  
Project Manager: T. Reifenberger Sampled By: \_\_\_\_\_  
Laboratory: AES Order No.: 1310045

## 2. SAMPLE INFORMATION

Purpose of sampling: Semiannual SamplingTotal number of samples: 5 Groundwater: 3  Soil: \_\_\_\_\_  Soil Gas: \_\_\_\_\_  Trip Blank: 1 Surface water: \_\_\_\_\_  Sediment: \_\_\_\_\_  Other: \_\_\_\_\_  Field Blank: \_\_\_\_\_ Drinking water: \_\_\_\_\_  Air: \_\_\_\_\_  Other: \_\_\_\_\_  Equip Blank: 1Analyses requested: VOC, methane, TOC, Ferrous iron, nitrate/sulfate, manganeseMethod detection limits (MDLs) or reporting limits (RLs) requested: NADuplicates: MW-30 is dup of MW-8

## 3. DATA VERIFICATION

Check yes or no. Refer to applicable Data Verification Guidelines to determine appropriate action.

 Yes  No  NA Was the Chain of Custody intact?

If no: Notes: \_\_\_\_\_

 Yes  No  NA Were custody seals intact on samples bottles and/or coolers as necessary?

If no: Notes: \_\_\_\_\_

 Yes  No  NA Were cooler temperatures within the acceptable range of 0-6°C?If no: Notes: 3.4°C Yes  No  NA Were samples physically and chemically preserved properly (i.e. no bubbles in VOC vials)?

If no: Notes: \_\_\_\_\_

 Yes  No  NA Was the case narrative of the analytical report free of any quality issues, discrepancies, etc.?If no: Notes: ① See comments Yes  No  NA Were all samples labeled, analyzed, and reported correctly? (no samples held, no wrong analyses, etc.)

If no: If within holding time, call lab immediately. Notes: \_\_\_\_\_

 Yes  No  NA Were all samples analyzed within holding time?

If no: Notes: \_\_\_\_\_

 Yes  No  NA Were appropriate analytes reported?

If no: Notes: \_\_\_\_\_

 Yes  No  NA Were soil and/or sediment concentrations reported appropriately? (DW vs WW)

If no: Call lab immediately to verify. Notes: \_\_\_\_\_

 Yes  No  NA If analyzed for the following parameters, was the following true for all analytes? Yes  No  NA Total metals  $\geq$  Dissolved metals Yes  No  NA TKN > Organic nitrogen Yes  No  NA TKN > Ammonia (NH<sub>3</sub>) Yes  No  NA COD > TOC Yes  No  NA COD > BOD

If no: Report to project manager and contact lab's QA/QC manager if needed. Notes: \_\_\_\_\_

 Yes  No  NA Were method detection limits (MDL), reporting limits (RLs), and/or dilution factors appropriate?

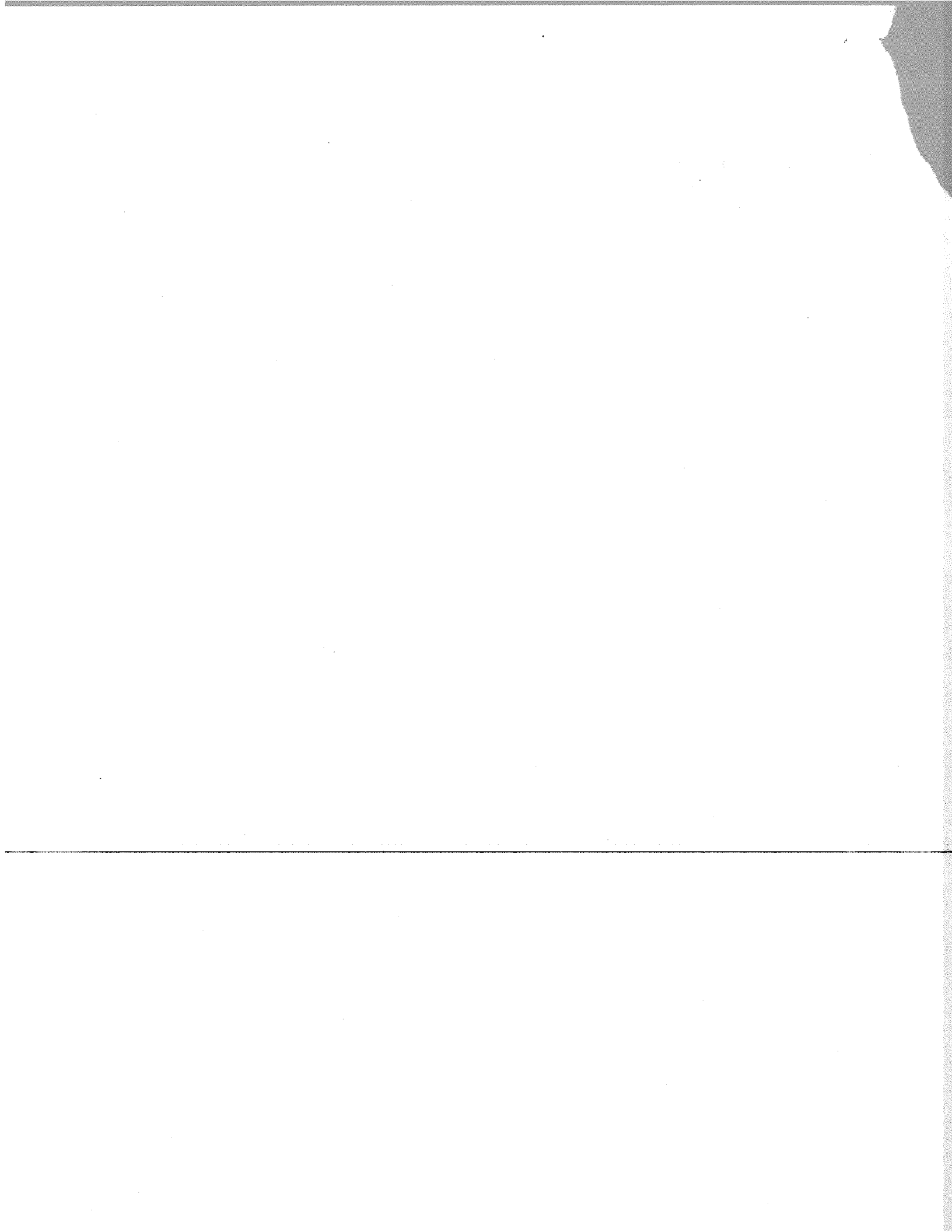
If no: Report to project manager and contact lab if needed. Notes: \_\_\_\_\_

 Yes  No  NA Were surrogate % recoveries within the acceptable range of  $LCL \leq x \leq UCL$ ?

If no: Notes: \_\_\_\_\_

 Yes  No  NA Were target analytes detected in any field, equipment, and/or laboratory blanks?

If yes: Notes: \_\_\_\_\_



**Brown AND Caldwell** : LABORATORY DATA VERIFICATION FORM

Yes  No  NA Were any target analytes detected below practical quantitation limits (PQLs)?

If yes: Notes: \_\_\_\_\_

Yes  No  NA Were any sample duplicates collected?

If yes: Notes: ③ See comments

Yes  No  NA Were any laboratory duplicates reported for project samples?

If yes: Notes: \_\_\_\_\_

Yes  No  NA Were any matrix spikes reported for project samples?

If yes: Notes: ② See comments

Yes  No  NA Were any laboratory control samples reported?

If yes: Notes: \_\_\_\_\_

Yes  No  NA Were calibration standards reported?

If yes: Notes: \_\_\_\_\_

**4. COMMENTS & SUMMARY OF ACTIONS TAKEN** (Attach additional pages if necessary)

① A trip blank was in the cooler but not on the COC. Lab proceeded with analysis.

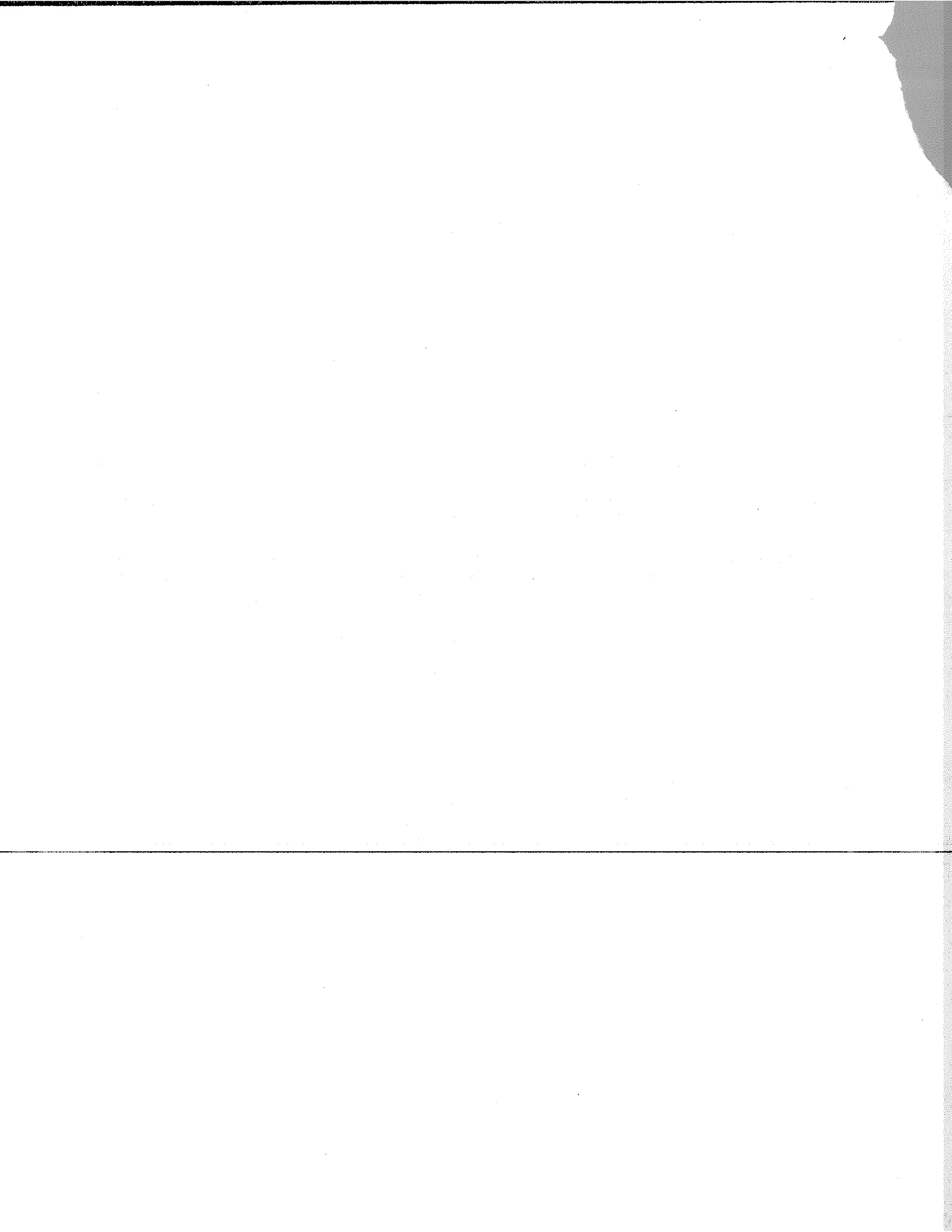
Due to sample matrix, sample -001E had to be diluted prior to analysis resulting in elevated reporting limits.

② Matrix spike and matrix spike duplicate for sample MW-4a had recoveries below the acceptable range. <sup>Ferrous iron</sup> Action Required - Qualify the non-detect result as undetected with an estimated limit of detection (US).

③ See attached sheet for a detailed duplicate comparison.

DE Jones

Signature of Data Verifier





**LABORATORY DATA VERIFICATION**  
Sample Duplicate Comparison

**PROJECT INFORMATION**

Project Number: 141054      Project Name: Hill Shire Farms      Task/Purpose of Sampling: Semiannual GW Monitoring  
 Project Manager: T. Reifemberger      Client: Hill Shire Farms  
 Laboratory: AES      Data Report: 1310045

**DUPLICATE INFORMATION**

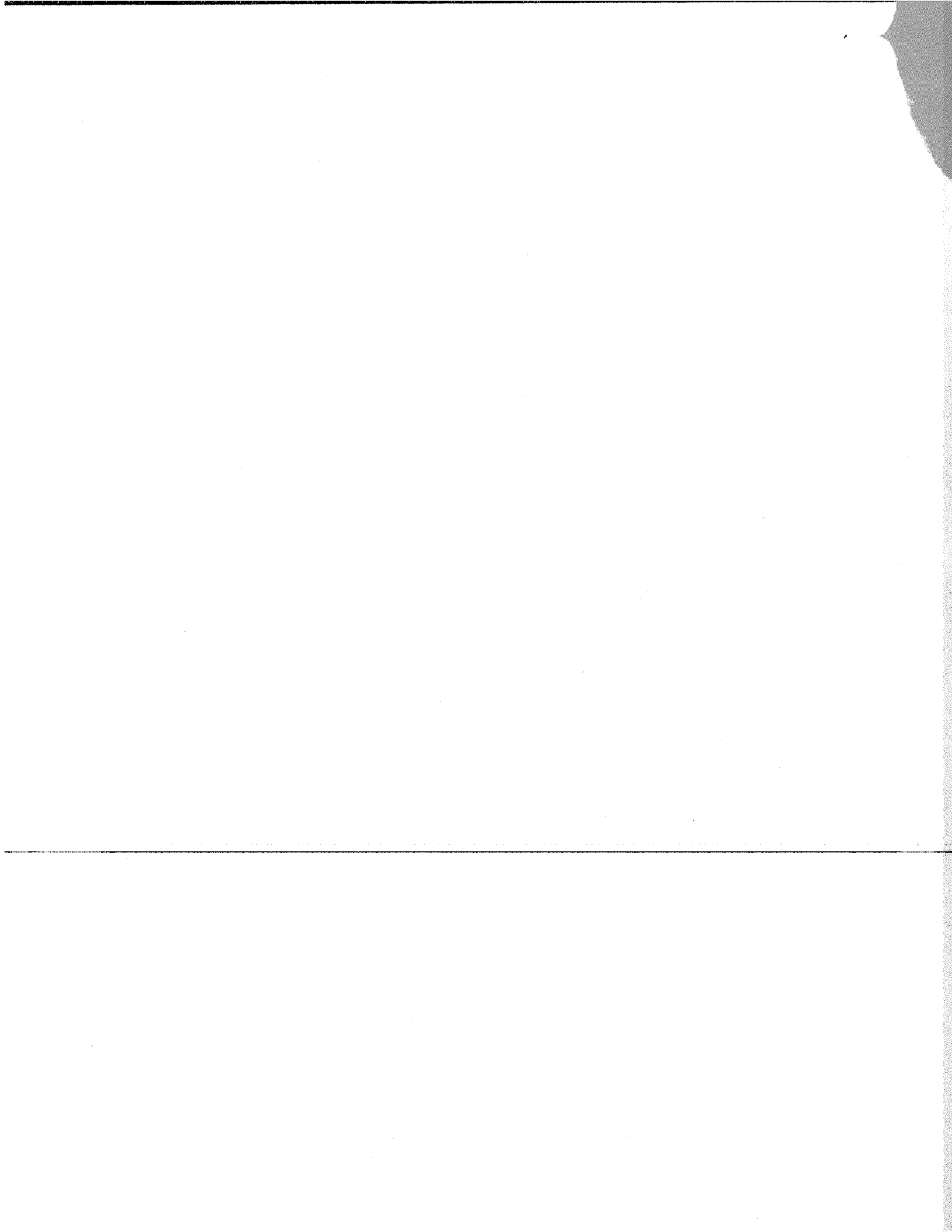
Parent Sample ID: 13303-MW-8      Date/Time: 103013 1320      Matrix: Groundwater  
 Duplicate Sample ID: 13303-MW-30      Date/Time: 103013      Matrix: Groundwater

Analytes (Units)	Analytical Results*		Relative Percent Difference (RPD) Comparison		Reporting Limit (RL) Comparison (If Needed)			Actions Required
	13303-MW-8	13303-MW-30	RPD	Inorg: RPD > 20%? Org: RPD > 30%?	13303-MW-8 RL	13303-MW-30 RL	2x RL	
1,1-Dichloroethane (ug/L)	22	23	4%	NO				No further action required.
1,2-Dichlorobenzene (ug/L)	23	23	0%	NO				No further action required.
1,3-Dichlorobenzene (ug/L)	6.8	6.9	1%	NO				No further action required.
1,4-Dichlorobenzene (ug/L)	5.6	5.3	6%	NO				No further action required.
cis-1,2-Dichloroethene (ug/L)	2400	2600	8%	NO				No further action required.
Tetrachloroethene (ug/L)	18	17	6%	NO				No further action required.
trans-1,2-Dichloroethene (ug/L)	15	15	0%	NO				No further action required.
Trichloroethene (ug/L)	17	16	6%	NO				No further action required.
Vinyl Chloride (ug/L)	2.1	2	5%	NO				No further action required.
Manganese (mg/L)	11.1	11.2	1%	NO				No further action required.

\* Results in red text and italics were below reporting limits. Values are reporting limits for comparison purposes only.

**Relative Percent Difference (RPD)** is a quantitative indicator of quality assurance and quality control (QA/QC) for repeated measurements (i.e. duplicates) where the outcome is expected to be the same. It is calculated using the following equation:

$$RPD = \left| \frac{x_1 - x_2}{(x_1 + x_2) / 2} \right| \times 100$$





ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 06, 2013

TRISH REIFENBERGER P.E.  
BROWN AND CALDWELL  
990 Hammond Drive  
Atlanta GA 30328

TEL: (770) 673-3630  
FAX: (770) 396-9495

RE: Hill Shire Farms

Dear TRISH REIFENBERGER P.E.:

Order No: 1310045

Analytical Environmental Services, Inc. received 5 samples on 10/30/2013 2:55:00 PM for the analyses presented in following report.

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

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

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

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

Tara Esbeck  
Project Manager



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

3785 Presidential Parkway, Atlanta GA 30340-3704

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

CHAIN OF CUSTODY

Work Order: 1314071

Date: 10/28/13 Page of

COMPANY:		ADDRESS:		ANALYSIS REQUESTED		REMARKS		No # of Containers	
BC		990 Hammond Dr, suite 400 Atlanta, GA 30328		VOC Benzene TOC Formic Acid Nitrate Nitrite Ammonia		Visit our website <a href="http://www.aesatlanta.com">www.aesatlanta.com</a> to check on the status of your results, place bottle orders, etc.			
PHONE:		SIGNATURE:		PRESERVATION (See codes)		REMARKS			
770 394-2997				Matrix (See codes)					
SAMPLED BY:		DATE		TIME		SAMPLE ID			
Juan Nunez		10/30/13		1115		13303-MW-4A		7	
		10/30/13		1145		13303-EB		2	
		10/30/13		1320		13303-MW-8		8	
		10/30/13		1200		13303-MW-3D		3	
#	DATE	TIME	Grab	Composite	Matrix				
1	10/30/13	1115	X		GW				
2	10/30/13	1145	X		GW				
3	10/30/13	1320	X		GW				
4	10/30/13	1200	X		GW				
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME	PROJECT INFORMATION		RECEIPT			
	10/30/13 1348	N.C.	10.30.13 1.48 pm	Hillshire farm PROJECT #: 111116.4 SITE ADDRESS: Smyrna GA		Total # of Containers 20			
				SEND REPORT TO: Trish Reifensberger INVOICE TO: Treitenberger-Chromat.com (IF DIFFERENT FROM ABOVE)		Turnaround Time Request: Standard 5 Business Days 2 Business Day Rush Next Business Day Rush Same Day Rush (auth req.) Other: 00000			
SPECIAL INSTRUCTIONS/COMMENTS:				QUOTE #:		STATE PROGRAM (if any):			
				SHIPMENT METHOD		E-mail? Y/N, Fax? Y/N			
				OUT / / VIA:		DATA PACKAGE: I II III IV			
				IN / / VIA:					
				CLIENT FedEx UPS MAIL COURIER					
				GREYHOUND OTHER:					

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

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify) WW = Waste Water  
 PRESERVATIVE CODES: H+1 = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice SM+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

**Client:** BROWN AND CALDWELL  
**Project:** Hill Shire Farms  
**Lab ID:** 1310045

**Case Narrative**

Sample Receiving Nonconformance:

A Trip Blank was provided but not listed on the Chain of Custody. Trip blank analyzed at no cost to the client.

Ion Chromatography Analysis by Method 9056:

Due to sample matrix, sample 1310045-001E required a dilution during preparation and/or analysis resulting in elevated reporting limits.

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13303-MW-4A
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/30/2013 11:15:00 AM
<b>Lab ID:</b> 1310045-001	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Total Organic Carbon (TOC) SW9060A</b>								
Organic Carbon, Total	32.5	1.00		mg/L	R255057	1	11/01/2013 13:22	GR
<b>TCL VOLATILE ORGANICS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
1,1-Dichloroethane	6.8	5.0		ug/L	183075	1	10/31/2013 12:51	AK
1,1-Dichloroethene	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
1,2-Dibromoethane	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
1,2-Dichlorobenzene	350	50		ug/L	183075	10	11/01/2013 15:50	AK
1,2-Dichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
1,2-Dichloropropane	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
1,3-Dichlorobenzene	160	5.0		ug/L	183075	1	10/31/2013 12:51	AK
1,4-Dichlorobenzene	81	5.0		ug/L	183075	1	10/31/2013 12:51	AK
2-Butanone	BRL	50		ug/L	183075	1	10/31/2013 12:51	AK
2-Hexanone	BRL	10		ug/L	183075	1	10/31/2013 12:51	AK
4-Methyl-2-pentanone	BRL	10		ug/L	183075	1	10/31/2013 12:51	AK
Acetone	BRL	50		ug/L	183075	1	10/31/2013 12:51	AK
Benzene	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Bromodichloromethane	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Bromoform	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Bromomethane	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Carbon disulfide	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Carbon tetrachloride	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Chlorobenzene	5.6	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Chloroethane	BRL	10		ug/L	183075	1	10/31/2013 12:51	AK
Chloroform	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Chloromethane	BRL	10		ug/L	183075	1	10/31/2013 12:51	AK
cis-1,2-Dichloroethene	7400	500		ug/L	183075	100	11/01/2013 14:26	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Cyclohexane	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Dibromochloromethane	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Dichlorodifluoromethane	BRL	10		ug/L	183075	1	10/31/2013 12:51	AK
Ethylbenzene	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Freon-113	BRL	10		ug/L	183075	1	10/31/2013 12:51	AK
Isopropylbenzene	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
m,p-Xylene	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Methyl acetate	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK

**Qualifiers:**

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13303-MW-4A
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/30/2013 11:15:00 AM ✓
<b>Lab ID:</b> 1310045-001	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
Methylcyclohexane	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Methylene chloride	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
o-Xylene	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Styrene	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Tetrachloroethene	18	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Toluene	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
trans-1,2-Dichloroethene	48	5.0		ug/L	183075	1	10/31/2013 12:51	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Trichloroethene	37	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Trichlorofluoromethane	BRL	5.0		ug/L	183075	1	10/31/2013 12:51	AK
Vinyl chloride	3.6	2.0		ug/L	183075	1	10/31/2013 12:51	AK
Surr: 4-Bromofluorobenzene	80.3	66.2-120		%REC	183075	100	11/01/2013 14:26	AK
Surr: 4-Bromofluorobenzene	81.8	66.2-120		%REC	183075	10	11/01/2013 15:50	AK
Surr: 4-Bromofluorobenzene	89.3	66.2-120		%REC	183075	1	10/31/2013 12:51	AK
Surr: Dibromofluoromethane	109	79.5-121		%REC	183075	10	11/01/2013 15:50	AK
Surr: Dibromofluoromethane	109	79.5-121		%REC	183075	100	11/01/2013 14:26	AK
Surr: Dibromofluoromethane	117	79.5-121		%REC	183075	1	10/31/2013 12:51	AK
Surr: Toluene-d8	95.6	77-117		%REC	183075	10	11/01/2013 15:50	AK
Surr: Toluene-d8	99.9	77-117		%REC	183075	100	11/01/2013 14:26	AK
Surr: Toluene-d8	100	77-117		%REC	183075	1	10/31/2013 12:51	AK
<b>ION SCAN SW9056A</b>								
Nitrate	BRL	1.2		mg/L	R255099	5	10/30/2013 19:16	GR
Sulfate	110	5.0		mg/L	R255099	5	10/30/2013 19:16	GR
<b>GC Analysis of Gaseous Samples SOP-RSK 175</b>		<b>(RSK175)</b>						
Methane	77	4		ug/L	182982	1	10/31/2013 09:29	SH
<b>Ferrous Iron SM3500-Fe-B</b>								
Iron, as Ferrous (Fe+2)	BRL	0.100	US	mg/L	R254976	1	10/31/2013 10:55	AB

**Qualifiers:**

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

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13303-EB
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/30/2013 11:45:00 AM
<b>Lab ID:</b> 1310045-002	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
1,1,1-Trichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
1,1-Dichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
1,1-Dichloroethene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
1,2-Dibromoethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
1,2-Dichlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
1,2-Dichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
1,2-Dichloropropane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
1,4-Dichlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
2-Butanone	BRL	50		ug/L	183075	1	10/31/2013 13:19	AK
2-Hexanone	BRL	10		ug/L	183075	1	10/31/2013 13:19	AK
4-Methyl-2-pentanone	BRL	10		ug/L	183075	1	10/31/2013 13:19	AK
Acetone	BRL	50		ug/L	183075	1	10/31/2013 13:19	AK
Benzene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Bromodichloromethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Bromoform	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Bromomethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Carbon disulfide	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Carbon tetrachloride	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Chlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Chloroethane	BRL	10		ug/L	183075	1	10/31/2013 13:19	AK
Chloroform	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Chloromethane	BRL	10		ug/L	183075	1	10/31/2013 13:19	AK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Cyclohexane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Dibromochloromethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Dichlorodifluoromethane	BRL	10		ug/L	183075	1	10/31/2013 13:19	AK
Ethylbenzene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Freon-113	BRL	10		ug/L	183075	1	10/31/2013 13:19	AK
Isopropylbenzene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
m,p-Xylene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Methyl acetate	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Methylcyclohexane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Methylene chloride	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
o-Xylene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK

**Qualifiers:**

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

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13303-EB ✓
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/30/2013 11:45:00 AM
<b>Lab ID:</b> 1310045-002	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
Styrene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Tetrachloroethene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Toluene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Trichloroethene	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Trichlorofluoromethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:19	AK
Vinyl chloride	BRL	2.0		ug/L	183075	1	10/31/2013 13:19	AK
Surr: 4-Bromofluorobenzene	77	66.2-120		%REC	183075	1	10/31/2013 13:19	AK
Surr: Dibromofluoromethane	108	79.5-121		%REC	183075	1	10/31/2013 13:19	AK
Surr: Toluene-d8	97.7	77-117		%REC	183075	1	10/31/2013 13:19	AK

**Qualifiers:**

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

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13303-MW-8
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/30/2013 1:20:00 PM
<b>Lab ID:</b> 1310045-003	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Total Organic Carbon (TOC) SW9060A</b>								
Organic Carbon, Total	15.6	1.00		mg/L	R255057	1	11/01/2013 13:48	GR
<b>TCL VOLATILE ORGANICS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
1,1-Dichloroethane	22	5.0		ug/L	183075	1	10/31/2013 13:47	AK
1,1-Dichloroethene	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
1,2-Dibromoethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
1,2-Dichlorobenzene	23	5.0		ug/L	183075	1	10/31/2013 13:47	AK
1,2-Dichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
1,2-Dichloropropane	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
1,3-Dichlorobenzene	6.8	5.0		ug/L	183075	1	10/31/2013 13:47	AK
1,4-Dichlorobenzene	5.6	5.0		ug/L	183075	1	10/31/2013 13:47	AK
2-Butanone	BRL	50		ug/L	183075	1	10/31/2013 13:47	AK
2-Hexanone	BRL	10		ug/L	183075	1	10/31/2013 13:47	AK
4-Methyl-2-pentanone	BRL	10		ug/L	183075	1	10/31/2013 13:47	AK
Acetone	BRL	50		ug/L	183075	1	10/31/2013 13:47	AK
Benzene	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Bromodichloromethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Bromoform	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Bromomethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Carbon disulfide	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Carbon tetrachloride	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Chlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Chloroethane	BRL	10		ug/L	183075	1	10/31/2013 13:47	AK
Chloroform	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Chloromethane	BRL	10		ug/L	183075	1	10/31/2013 13:47	AK
cis-1,2-Dichloroethene	2400	100		ug/L	183075	20	11/01/2013 14:54	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Cyclohexane	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Dibromochloromethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Dichlorodifluoromethane	BRL	10		ug/L	183075	1	10/31/2013 13:47	AK
Ethylbenzene	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Freon-113	BRL	10		ug/L	183075	1	10/31/2013 13:47	AK
Isopropylbenzene	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
m,p-Xylene	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Methyl acetate	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK

**Qualifiers:**

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

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13303-MW-8
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/30/2013 1:20:00 PM ✓
<b>Lab ID:</b> 1310045-003	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
Methylcyclohexane	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Methylene chloride	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
o-Xylene	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Styrene	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Tetrachloroethene	18	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Toluene	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
trans-1,2-Dichloroethene	15	5.0		ug/L	183075	1	10/31/2013 13:47	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Trichloroethene	17	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Trichlorofluoromethane	BRL	5.0		ug/L	183075	1	10/31/2013 13:47	AK
Vinyl chloride	2.1	2.0		ug/L	183075	1	10/31/2013 13:47	AK
Surr: 4-Bromofluorobenzene	79	66.2-120		%REC	183075	1	10/31/2013 13:47	AK
Surr: 4-Bromofluorobenzene	77.9	66.2-120		%REC	183075	20	11/01/2013 14:54	AK
Surr: Dibromofluoromethane	105	79.5-121		%REC	183075	20	11/01/2013 14:54	AK
Surr: Dibromofluoromethane	109	79.5-121		%REC	183075	1	10/31/2013 13:47	AK
Surr: Toluene-d8	94	77-117		%REC	183075	1	10/31/2013 13:47	AK
Surr: Toluene-d8	98.7	77-117		%REC	183075	20	11/01/2013 14:54	AK
<b>ION SCAN SW9056A</b>								
Nitrate	BRL	0.25		mg/L	R255099	1	10/30/2013 17:33	GR
Sulfate	65	1.0		mg/L	R255099	1	10/30/2013 17:33	GR
<b>GC Analysis of Gaseous Samples SOP-RSK 175</b>		<b>(RSK175)</b>						
Methane	21	4		ug/L	182982	1	10/31/2013 09:43	SH
<b>Ferrous Iron SM3500-Fe-B</b>								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R254976	1	10/31/2013 10:55	AB
<b>METALS, TOTAL SW6010C</b>		<b>(SW3010A)</b>						
Manganese	11.1	0.0150		mg/L	183033	1	11/04/2013 18:05	JL

**Qualifiers:**

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

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

Analytical Environmental Services, Inc

Date: 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13303-MW-30
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/30/2013 12:00:00 PM
<b>Lab ID:</b> 1310045-004	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
1,1,1-Trichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
1,1-Dichloroethane	23	5.0		ug/L	183075	1	10/31/2013 14:15	AK
1,1-Dichloroethene	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
1,2-Dibromoethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
1,2-Dichlorobenzene	23	5.0		ug/L	183075	1	10/31/2013 14:15	AK
1,2-Dichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
1,2-Dichloropropane	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
1,3-Dichlorobenzene	6.9	5.0		ug/L	183075	1	10/31/2013 14:15	AK
1,4-Dichlorobenzene	5.3	5.0		ug/L	183075	1	10/31/2013 14:15	AK
2-Butanone	BRL	50		ug/L	183075	1	10/31/2013 14:15	AK
2-Hexanone	BRL	10		ug/L	183075	1	10/31/2013 14:15	AK
4-Methyl-2-pentanone	BRL	10		ug/L	183075	1	10/31/2013 14:15	AK
Acetone	BRL	50		ug/L	183075	1	10/31/2013 14:15	AK
Benzene	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Bromodichloromethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Bromoform	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Bromomethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Carbon disulfide	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Carbon tetrachloride	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Chlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Chloroethane	BRL	10		ug/L	183075	1	10/31/2013 14:15	AK
Chloroform	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Chloromethane	BRL	10		ug/L	183075	1	10/31/2013 14:15	AK
cis-1,2-Dichloroethene	2600	100		ug/L	183075	20	11/01/2013 15:22	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Cyclohexane	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Dibromochloromethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Dichlorodifluoromethane	BRL	10		ug/L	183075	1	10/31/2013 14:15	AK
Ethylbenzene	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Freon-113	BRL	10		ug/L	183075	1	10/31/2013 14:15	AK
Isopropylbenzene	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
m,p-Xylene	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Methyl acetate	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Methylcyclohexane	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Methylene chloride	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
o-Xylene	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13303-MW-30
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/30/2013 12:00:00 PM ✓
<b>Lab ID:</b> 1310045-004	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
Styrene	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Tetrachloroethene	17	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Toluene	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
trans-1,2-Dichloroethene	15	5.0		ug/L	183075	1	10/31/2013 14:15	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Trichloroethene	16	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Trichlorofluoromethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:15	AK
Vinyl chloride	2.0	2.0		ug/L	183075	1	10/31/2013 14:15	AK
Surr: 4-Bromofluorobenzene	80.1	66.2-120		%REC	183075	1	10/31/2013 14:15	AK
Surr: 4-Bromofluorobenzene	79.7	66.2-120		%REC	183075	20	11/01/2013 15:22	AK
Surr: Dibromofluoromethane	105	79.5-121		%REC	183075	20	11/01/2013 15:22	AK
Surr: Dibromofluoromethane	119	79.5-121		%REC	183075	1	10/31/2013 14:15	AK
Surr: Toluene-d8	103	77-117		%REC	183075	1	10/31/2013 14:15	AK
Surr: Toluene-d8	98	77-117		%REC	183075	20	11/01/2013 15:22	AK
<b>METALS, TOTAL SW6010C</b>		<b>(SW3010A)</b>						
Manganese	11.2	0.0150		mg/L	183033	1	11/04/2013 18:40	JL

**Qualifiers:**

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

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

Analytical Environmental Services, Inc

Date: 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> TRIP BLANK
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/30/2013
<b>Lab ID:</b> 1310045-005	<b>Matrix:</b> Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>					<b>(SW5030B)</b>			
1,1,1-Trichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
1,1-Dichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
1,1-Dichloroethene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
1,2-Dibromoethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
1,2-Dichlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
1,2-Dichloroethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
1,2-Dichloropropane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
1,4-Dichlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
2-Butanone	BRL	50		ug/L	183075	1	10/31/2013 14:43	AK
2-Hexanone	BRL	10		ug/L	183075	1	10/31/2013 14:43	AK
4-Methyl-2-pentanone	BRL	10		ug/L	183075	1	10/31/2013 14:43	AK
Acetone	BRL	50		ug/L	183075	1	10/31/2013 14:43	AK
Benzene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Bromodichloromethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Bromoform	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Bromomethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Carbon disulfide	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Carbon tetrachloride	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Chlorobenzene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Chloroethane	BRL	10		ug/L	183075	1	10/31/2013 14:43	AK
Chloroform	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Chloromethane	BRL	10		ug/L	183075	1	10/31/2013 14:43	AK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Cyclohexane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Dibromochloromethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Dichlorodifluoromethane	BRL	10		ug/L	183075	1	10/31/2013 14:43	AK
Ethylbenzene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Freon-113	BRL	10		ug/L	183075	1	10/31/2013 14:43	AK
Isopropylbenzene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
m,p-Xylene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Methyl acetate	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Methylcyclohexane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Methylene chloride	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
o-Xylene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK

**Qualifiers:**

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

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> TRIP BLANK
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/30/2013
<b>Lab ID:</b> 1310045-005	<b>Matrix:</b> Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
Styrene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Tetrachloroethene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Toluene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Trichloroethene	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Trichlorofluoromethane	BRL	5.0		ug/L	183075	1	10/31/2013 14:43	AK
Vinyl chloride	BRL	2.0		ug/L	183075	1	10/31/2013 14:43	AK
Surr: 4-Bromofluorobenzene	75.9	66.2-120		%REC	183075	1	10/31/2013 14:43	AK
Surr: Dibromofluoromethane	111	79.5-121		%REC	183075	1	10/31/2013 14:43	AK
Surr: Toluene-d8	102	77-117		%REC	183075	1	10/31/2013 14:43	AK

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Brown & Caldwell

Work Order Number 131045

Checklist completed by [Signature] 10.30.17  
Signature Date

Carrier name: FedEx  UPS  Courier  Client  US Mail  Other

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

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

Custody seals intact on sample bottles? Yes  No  Not Present

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

Cooler #1 3.4 Cooler #2 \_\_\_\_\_ Cooler #3 \_\_\_\_\_ Cooler #4 \_\_\_\_\_ Cooler#5 \_\_\_\_\_ Cooler #6 \_\_\_\_\_

Chain of custody present? Yes  No

Chain of custody signed when relinquished and received? Yes  No

Chain of custody agrees with sample labels? Yes  No

Samples in proper container/bottle? Yes  No

Sample containers intact? Yes  No

Sufficient sample volume for indicated test? Yes  No

All samples received within holding time? Yes  No

Was TAT marked on the COC? Yes  No

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

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

Water - pH acceptable upon receipt? Yes  No  Not Applicable

Adjusted? \_\_\_\_\_ Checked by [Signature]

Sample Condition: Good  Other(Explain) \_\_\_\_\_

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

See Case Narrative for resolution of the Non-Conformance.

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

Client: BROWN AND CALDWELL  
 Project: Hill Shire Farms  
 Lab Order: 1310045

**Dates Report**

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1310045-001A	13303-MW-4A	10/30/2013 11:15:00AM	Groundwater	TCL VOLATILE ORGANICS		10/31/2013	10/31/2013
1310045-001A	13303-MW-4A	10/30/2013 11:15:00AM	Groundwater	TCL VOLATILE ORGANICS		10/31/2013	11/01/2013
1310045-001B	13303-MW-4A	10/30/2013 11:15:00AM	Groundwater	GC Analysis of Gaseous Samples		10/31/2013	10/31/2013
1310045-001C	13303-MW-4A	10/30/2013 11:15:00AM	Groundwater	Total Organic Carbon (TOC)			11/01/2013
1310045-001D	13303-MW-4A	10/30/2013 11:15:00AM	Groundwater	Ferrous Iron			10/31/2013
1310045-001E	13303-MW-4A	10/30/2013 11:15:00AM	Groundwater	ION SCAN			10/30/2013
1310045-002A	13303-EB	10/30/2013 11:45:00AM	Groundwater	TCL VOLATILE ORGANICS	10/31/2013	10/31/2013	10/31/2013
1310045-003A	13303-MW-8	10/30/2013 1:20:00PM	Groundwater	TCL VOLATILE ORGANICS	10/31/2013	10/31/2013	10/31/2013
1310045-003A	13303-MW-8	10/30/2013 1:20:00PM	Groundwater	TCL VOLATILE ORGANICS	10/31/2013	10/31/2013	11/01/2013
1310045-003B	13303-MW-8	10/30/2013 1:20:00PM	Groundwater	GC Analysis of Gaseous Samples	10/31/2013	10/31/2013	10/31/2013
1310045-003C	13303-MW-8	10/30/2013 1:20:00PM	Groundwater	Total Organic Carbon (TOC)			11/01/2013
1310045-003D	13303-MW-8	10/30/2013 1:20:00PM	Groundwater	Ferrous Iron			10/31/2013
1310045-003E	13303-MW-8	10/30/2013 1:20:00PM	Groundwater	ION SCAN			10/30/2013
1310045-003F	13303-MW-8	10/30/2013 1:20:00PM	Groundwater	TOTAL METALS BY ICP	11/01/2013	11/01/2013	11/04/2013
1310045-004A	13303-MW-30	10/30/2013 12:00:00PM	Groundwater	TCL VOLATILE ORGANICS	10/31/2013	10/31/2013	10/31/2013
1310045-004A	13303-MW-30	10/30/2013 12:00:00PM	Groundwater	TCL VOLATILE ORGANICS	10/31/2013	10/31/2013	11/01/2013
1310045-004B	13303-MW-30	10/30/2013 12:00:00PM	Groundwater	TOTAL METALS BY ICP	11/01/2013	11/01/2013	11/04/2013
1310045-005A	TRIP BLANK	10/30/2013 12:00:00AM	Aqueous	TCL VOLATILE ORGANICS	10/31/2013	10/31/2013	10/31/2013

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310045

**BatchID:** 182982

Sample ID: MB-182982	Client ID:	Units: ug/L	Prep Date: 10/29/2013	Run No: 254865
Sample Type: MBLK	TestCode: GC Analysis of Gaseous Samples	BatchID: 182982	Analysis Date: 10/30/2013	Seq No: 5351676
Analyte	Result	%REC	SPK Ref Val	%RPD
Methane	✓ BRL	4	RPD Limit	RPD Limit Qual

Sample ID: LCS-182982	Client ID:	Units: ug/L	Prep Date: 10/29/2013	Run No: 254865
Sample Type: LCS	TestCode: GC Analysis of Gaseous Samples	BatchID: 182982	Analysis Date: 10/30/2013	Seq No: 5351678
Analyte	Result	%REC	SPK Ref Val	%RPD
Methane	138.0	✓ 69.0	4	115

Sample ID: LCSD-182982	Client ID:	Units: ug/L	Prep Date: 10/29/2013	Run No: 254865
Sample Type: LCSD	TestCode: GC Analysis of Gaseous Samples	BatchID: 182982	Analysis Date: 10/30/2013	Seq No: 5351680
Analyte	Result	%REC	SPK Ref Val	%RPD
Methane	134.7	✓ 67.4	4	115

Sample ID: 1310L09-002CMS	Client ID:	Units: ug/L	Prep Date: 10/29/2013	Run No: 254865
Sample Type: MS	TestCode: GC Analysis of Gaseous Samples	BatchID: 182982	Analysis Date: 10/30/2013	Seq No: 5351704
Analyte	Result	%REC	SPK Ref Val	%RPD
Methane	127.5	✓ 63.8	4	115

Sample ID: 1310L09-002CMSD	Client ID:	Units: ug/L	Prep Date: 10/29/2013	Run No: 254865
Sample Type: MSD	TestCode: GC Analysis of Gaseous Samples	BatchID: 182982	Analysis Date: 10/30/2013	Seq No: 5351707
Analyte	Result	%REC	SPK Ref Val	%RPD
Methane	135.1	✓ 67.6	4	115

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310045

**Batch ID:** 183033

Sample ID:	Client ID:	Prep Date:	Run No:
Sample Type:	Test Code:	Analysis Date:	Seq No:
Analyte	Result	SPK value	SPK Ref Val
		%REC	%RPD
		Low Limit	High Limit
		High Limit	RPD Ref Val
		RPD Limit	RPD Limit
		SW6010C	Qual
Manganese	✓ BRL	0.0150	
Sample ID: LCS-183033	Client ID:	11/01/2013	Run No: 255133
Sample Type: LCS	Test Code:	11/04/2013	Seq No: 5357784
Analyte	Result	SPK value	SPK Ref Val
		%REC	%RPD
		Low Limit	High Limit
		High Limit	RPD Ref Val
		RPD Limit	RPD Limit
		SW6010C	Qual
Manganese	1.040	1.000	120
		✓ 104	
Sample ID: 1310M99-001AMS	Client ID: 13-9236	11/01/2013	Run No: 255133
Sample Type: MS	Test Code:	11/04/2013	Seq No: 5357786
Analyte	Result	SPK value	SPK Ref Val
		%REC	%RPD
		Low Limit	High Limit
		High Limit	RPD Ref Val
		RPD Limit	RPD Limit
		SW6010C	Qual
Manganese	0.9923	1.000	125
		✓ 98.0	
Sample ID: 1310M99-001AMSD	Client ID: 13-9236	11/01/2013	Run No: 255133
Sample Type: MSD	Test Code:	11/04/2013	Seq No: 5357792
Analyte	Result	SPK value	SPK Ref Val
		%REC	%RPD
		Low Limit	High Limit
		High Limit	RPD Ref Val
		RPD Limit	RPD Limit
		SW6010C	Qual
Manganese	0.9864	1.000	125
		✓ 97.4	
		0.01276	0.9923
			0.602
			20

Sample ID:	Client ID:	Prep Date:	Run No:
Sample Type:	Test Code:	Analysis Date:	Seq No:
Analyte	Result	SPK value	SPK Ref Val
		%REC	%RPD
		Low Limit	High Limit
		High Limit	RPD Ref Val
		RPD Limit	RPD Limit
		SW6010C	Qual
Manganese	0.9864	1.000	125
		✓ 97.4	
		0.01276	0.9923
			0.602
			20

**Qualifiers:** > Greater than Result value  
 BRL Below reporting limit  
 J Estimated value detected below Reporting Limit  
 Rpt Lim Reporting Limit

< Less than Result value  
 E Estimated (value above quantitation range)  
 N Analyte not NELAC certified  
 S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank  
 H Holding times for preparation or analysis exceeded  
 R RPD outside limits due to matrix

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310045

**BatchID:** 183075

Sample ID: MB-183075	Client ID:	Units: ug/L	Prep Date: 10/31/2013	Run No: 254904							
Sample Type: MBLK	Test Code: TCL VOLATILE ORGANICS SW8260B	BatchID: 183075	Analysis Date: 10/31/2013	Seq No: 5353708							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310045

**ANALYTICAL QC SUMMARY REPORT**

BatchID: 183075

Sample ID: MB-183075	Client ID:	Units: ug/L	Prep Date: 10/31/2013	Run No: 254904					
Sample Type: MBLK	TestCode: TCL VOLATILE ORGANICS SW8260B	BatchID: 183075	Analysis Date: 10/31/2013	Seq No: 5353708					
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	39.96	0	50.00		79.9	66.2	120				
Surr: Dibromofluoromethane	51.87	0	50.00		104	79.5	121				
Surr: Toluene-d8	47.20	0	50.00		94.4	77	117				

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310045

**BatchID:** 183075

Sample ID:	LCS-183075	Client ID:		Units:	ug/L	Prep Date:	10/31/2013	Run No:	254904		
Sample Type:	LCS	Test Code:	TCL VOLATILE ORGANICS SW8260B	BatchID:	183075	Analysis Date:	10/31/2013	Seq No:	5353709		
Analyte	Result	RPT Limit	SPK value	SPK RefVal	%REC	Low Limit	High Limit	RPD RefVal	%RPD	RPD Limit	Qual
1,1-Dichloroethene	57.12	5.0	50.00		114	63.1	140				
Benzene	51.23	5.0	50.00		102	74.2	129				
Chlorobenzene	54.09	5.0	50.00		108	70	129				
Toluene	51.53	5.0	50.00		103	74.2	129				
Trichloroethene	58.57	5.0	50.00		117	71.2	135				
Surr: 4-Bromofluorobenzene	49.76	0	50.00		99.5	66.2	120				
Surr: Dibromofluoromethane	55.88	0	50.00		112	79.5	121				
Surr: Toluene-d8	50.54	0	50.00		101	77	117				

Sample ID:	1310N83-001AMS	Client ID:		Units:	ug/L	Prep Date:	10/31/2013	Run No:	254904		
Sample Type:	MS	Test Code:	TCL VOLATILE ORGANICS SW8260B	BatchID:	183075	Analysis Date:	10/31/2013	Seq No:	5353715		
Analyte	Result	RPT Limit	SPK value	SPK RefVal	%REC	Low Limit	High Limit	RPD RefVal	%RPD	RPD Limit	Qual
1,1-Dichloroethene	638.6	50	500.0		128	60.2	159				
Benzene	512.9	50	500.0		103	70.2	138				
Chlorobenzene	535.4	50	500.0		107	70.1	133				
Toluene	530.6	50	500.0		106	70	139				
Trichloroethene	583.9	50	500.0		117	70.1	144				
Surr: 4-Bromofluorobenzene	507.1	0	500.0		101	66.2	120				
Surr: Dibromofluoromethane	571.2	0	500.0		114	79.5	121				
Surr: Toluene-d8	524.6	0	500.0		105	77	117				

Sample ID:	1310N83-001AMSD	Client ID:		Units:	ug/L	Prep Date:	10/31/2013	Run No:	254904		
Sample Type:	MSD	Test Code:	TCL VOLATILE ORGANICS SW8260B	BatchID:	183075	Analysis Date:	10/31/2013	Seq No:	5353717		
Analyte	Result	RPT Limit	SPK value	SPK RefVal	%REC	Low Limit	High Limit	RPD RefVal	%RPD	RPD Limit	Qual
1,1-Dichloroethene	654.1	50	500.0		131	60.2	159	638.6	2.40	19.2	
Benzene	566.0	50	500.0		113	70.2	138	512.9	9.84	20	

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310045

**BatchID:** 183075

Sample ID: 1310N83-001AMSD	Client ID:	Units: ug/L	Prep Date: 10/31/2013	Run No: 254904							
Sample Type: MSD	Test Code: TCL VOLATILE ORGANICS SW8260B	BatchID: 183075	Analysis Date: 10/31/2013	Seq No: 5353717							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Chlorobenzene	607.7	50	500.0	535.4	122	70.1	133	535.4	12.6	20	
Toluene	585.4	50	500.0	530.6	117	70	139	530.6	9.82	20	
Trichloroethene	639.3	50	500.0	583.9	✓128	70.1	144	583.9	✓9.06	20	
Surr: 4-Bromofluorobenzene	504.5	0	500.0	507.1	101	66.2	120	507.1	0	0	
Surr: Dibromofluoromethane	562.0	0	500.0	571.2	112	79.5	121	571.2	0	0	
Surr: Toluene-d8	508.5	0	500.0	524.6	102	77	117	524.6	0	0	

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310045

**BatchID:** R254976

Sample ID: MB-R254976	Client ID:	Units: mg/L	Prep Date:	Run No: 254976
Sample Type: MBLK	Test Code: Ferrous Iron	BatchID: R254976	Analysis Date: 10/31/2013	Seq No: 5354253
Analyte	Result	Low Limit	High Limit	RPD Ref Val
Iron, as Ferrous (Fe+2)	0.100	%REC	%RPD	RPD Limit Qual
		SPK value	SPK Ref Val	
		SPK Limit	SPK Ref Val	
		SM3500-Fe-B		

Sample ID: LCS-R254976	Client ID:	Units: mg/L	Prep Date:	Run No: 254976
Sample Type: LCS	Test Code: Ferrous Iron	BatchID: R254976	Analysis Date: 10/31/2013	Seq No: 5354254
Analyte	Result	Low Limit	High Limit	RPD Ref Val
Iron, as Ferrous (Fe+2)	0.5062	%REC	%RPD	RPD Limit Qual
		SPK value	SPK Ref Val	
		SPK Limit	SPK Ref Val	
		SM3500-Fe-B		

Sample ID: 1310045-001DMS	Client ID: 13303-MW-4A	Units: mg/L	Prep Date:	Run No: 254976
Sample Type: MS	Test Code: Ferrous Iron	BatchID: R254976	Analysis Date: 10/31/2013	Seq No: 5354257
Analyte	Result	Low Limit	High Limit	RPD Ref Val
Iron, as Ferrous (Fe+2)	0.2789	%REC	%RPD	RPD Limit Qual
		SPK value	SPK Ref Val	
		SPK Limit	SPK Ref Val	
		SM3500-Fe-B		

Sample ID: 1310045-001DMSD	Client ID: 13303-MW-4A	Units: mg/L	Prep Date:	Run No: 254976
Sample Type: MSD	Test Code: Ferrous Iron	BatchID: R254976	Analysis Date: 10/31/2013	Seq No: 5354259
Analyte	Result	Low Limit	High Limit	RPD Ref Val
Iron, as Ferrous (Fe+2)	0.2731	%REC	%RPD	RPD Limit Qual
		SPK value	SPK Ref Val	
		SPK Limit	SPK Ref Val	
		SM3500-Fe-B		

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310045

**BatchID:** R255057

Sample ID: MB-R255057	Client ID:	Units: mg/L	Prep Date:	Run No: 255057
Sample Type: MBLK	Test Code: Total Organic Carbon (TOC)	BatchID: R255057	Analysis Date: 11/01/2013	Seq No: 5356074
Analyte	Result	%REC	Low Limit	High Limit
Organic Carbon, Total	25.26	101	90	110
	✓ BRL			

Sample ID: LCS-R255057	Client ID:	Units: mg/L	Prep Date:	Run No: 255057
Sample Type: LCS	Test Code: Total Organic Carbon (TOC)	BatchID: R255057	Analysis Date: 11/01/2013	Seq No: 5356073
Analyte	Result	%REC	Low Limit	High Limit
Organic Carbon, Total	25.26	103	80	120

Sample ID: 1310M92-001GMS	Client ID:	Units: mg/L	Prep Date:	Run No: 255057
Sample Type: MS	Test Code: Total Organic Carbon (TOC)	BatchID: R255057	Analysis Date: 11/01/2013	Seq No: 5356089
Analyte	Result	%REC	Low Limit	High Limit
Organic Carbon, Total	28.40	103	80	120

Sample ID: 1310M92-001GMSD	Client ID:	Units: mg/L	Prep Date:	Run No: 255057
Sample Type: MSD	Test Code: Total Organic Carbon (TOC)	BatchID: R255057	Analysis Date: 11/01/2013	Seq No: 5356091
Analyte	Result	%REC	Low Limit	High Limit
Organic Carbon, Total	28.45	103	80	120

Sample ID: 1310M92-001GMSD	Client ID:	Units: mg/L	Prep Date:	Run No: 255057
Sample Type: MSD	Test Code: Total Organic Carbon (TOC)	BatchID: R255057	Analysis Date: 11/01/2013	Seq No: 5356091
Analyte	Result	%REC	Low Limit	High Limit
Organic Carbon, Total	28.45	103	80	120

**Qualifiers:** > Greater than Result value  
 BRL Below reporting limit  
 J Estimated value detected below Reporting Limit  
 Rpt.Lim Reporting Limit

< Less than Result value  
 E Estimated (value above quantitation range)  
 N Analyte not NELAC certified  
 S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank  
 H Holding times for preparation or analysis exceeded  
 R RPD outside limits due to matrix

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310045

**BatchID:** R255099

Sample ID: MB-R255099	Client ID:	Units: mg/L	Prep Date:	Run No: 255099
Sample Type: MBLK	TestCode: ION SCAN	BatchID: R255099	Analysis Date: 10/30/2013	Seq No: 5356789
Analyte	Result	%REC	Low Limit	High Limit
	RPT Limit	SPK value	SPK Ref Val	%RPD
Nitrate	0.25	5.000		RPD Limit
Sulfate	1.0	25.00		Qual

Sample ID: LCS-R255099	Client ID:	Units: mg/L	Prep Date:	Run No: 255099
Sample Type: LCS	TestCode: ION SCAN	BatchID: R255099	Analysis Date: 10/30/2013	Seq No: 5356788
Analyte	Result	%REC	Low Limit	High Limit
	RPT Limit	SPK value	SPK Ref Val	%RPD
Nitrate	0.25	5.000		RPD Limit
Sulfate	1.0	25.00		Qual

Sample ID: 1310N60-007EMS	Client ID:	Units: mg/L	Prep Date:	Run No: 255099
Sample Type: MS	TestCode: ION SCAN	BatchID: R255099	Analysis Date: 10/30/2013	Seq No: 5356796
Analyte	Result	%REC	Low Limit	High Limit
	RPT Limit	SPK value	SPK Ref Val	%RPD
Nitrate	0.25	5.000	0.1559	RPD Limit
Sulfate	1.0	25.00	2.739	Qual

Sample ID: 1310N60-007EMSD	Client ID:	Units: mg/L	Prep Date:	Run No: 255099
Sample Type: MSD	TestCode: ION SCAN	BatchID: R255099	Analysis Date: 10/30/2013	Seq No: 5356802
Analyte	Result	%REC	Low Limit	High Limit
	RPT Limit	SPK value	SPK Ref Val	%RPD
Nitrate	0.25	5.000	0.1559	RPD Limit
Sulfate	1.0	25.00	2.739	Qual

Sample ID: 1310N60-007EMSD	Client ID:	Units: mg/L	Prep Date:	Run No: 255099
Sample Type: MSD	TestCode: ION SCAN	BatchID: R255099	Analysis Date: 10/30/2013	Seq No: 5356802
Analyte	Result	%REC	Low Limit	High Limit
	RPT Limit	SPK value	SPK Ref Val	%RPD
Nitrate	0.25	5.000	0.1559	RPD Limit
Sulfate	1.0	25.00	2.739	Qual

**Qualifiers:** > Greater than Result value  
 BRL Below reporting limit  
 J Estimated value detected below Reporting Limit

< Less than Result value  
 E Estimated (value above quantitation range)  
 N Analyte not NELAC certified  
 S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank  
 H Holding times for preparation or analysis exceeded  
 R RPD outside limits due to matrix

# Brown AND Caldwell : LABORATORY DATA VERIFICATION FORM

## 1. PROJECT INFORMATION

Today's Date: 11-20-13

Project Number: 141054 Project Name/Client: Hillshire Farms  
Project Manager: T. Reifenberger Sampled By: \_\_\_\_\_  
Laboratory: AES Order No.: 1310N60

## 2. SAMPLE INFORMATION

Purpose of sampling: Semiannual Sampling  
Total number of samples: 11  
 Groundwater: 8  Soil: \_\_\_\_\_  Soil Gas: \_\_\_\_\_  Trip Blank: 1  
 Surface water: \_\_\_\_\_  Sediment: \_\_\_\_\_  Other: \_\_\_\_\_  Field Blank: \_\_\_\_\_  
 Drinking water: \_\_\_\_\_  Air: \_\_\_\_\_  Other: \_\_\_\_\_  Equip Blank: 2  
Analyses requested: VOCs, methane, TOC, Ferrous Iron, Nitrate/sulfate  
Method detection limits (MDLs) or reporting limits (RLs) requested: NA  
Duplicates: None

## 3. DATA VERIFICATION

Check yes or no. Refer to applicable Data Verification Guidelines to determine appropriate action.

Yes  No  NA Was the Chain of Custody intact?

If no: Notes: \_\_\_\_\_

Yes  No  NA Were custody seals intact on samples bottles and/or coolers as necessary?

If no: Notes: \_\_\_\_\_

Yes  No  NA Were cooler temperatures within the acceptable range of 0-6°C?

If no: Notes: 3.5°C

Yes  No  NA Were samples physically and chemically preserved properly (i.e. no bubbles in VOC vials)?

If no: Notes: \_\_\_\_\_

Yes  No  NA Was the case narrative of the analytical report free of any quality issues, discrepancies, etc.?

If no: Notes: Trip blank included but not on COC - No further action required

Yes  No  NA Were all samples labeled, analyzed, and reported correctly? (no samples held, no wrong analyses, etc.)

If no: If within holding time, call lab immediately. Notes: \_\_\_\_\_

Yes  No  NA Were all samples analyzed within holding time?

If no: Notes: \_\_\_\_\_

Yes  No  NA Were appropriate analytes reported?

If no: Notes: \_\_\_\_\_

Yes  No  NA Were soil and/or sediment concentrations reported appropriately? (DW vs WW)

If no: Call lab immediately to verify. Notes: \_\_\_\_\_

Yes  No  NA If analyzed for the following parameters, was the following true for all analytes?

Yes  No  NA Total metals  $\geq$  Dissolved metals

Yes  No  NA TKN > Organic nitrogen

Yes  No  NA TKN > Ammonia (NH<sub>3</sub>)

Yes  No  NA COD > TOC

Yes  No  NA COD > BOD

If no: Report to project manager and contact lab's QA/QC manager if needed. Notes: \_\_\_\_\_

Yes  No  NA Were method detection limits (MDL), reporting limits (RLs), and/or dilution factors appropriate?

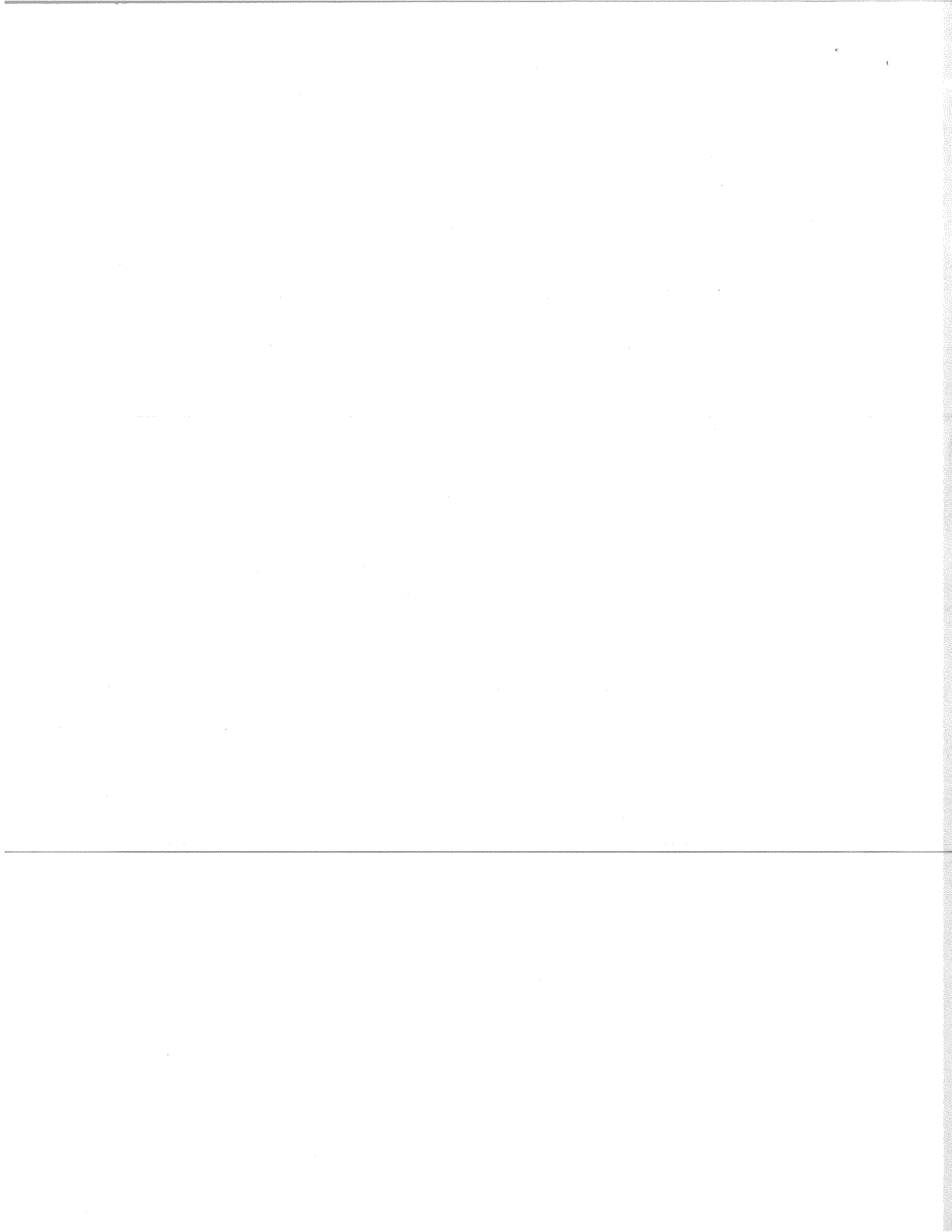
If no: Report to project manager and contact lab if needed. Notes: \_\_\_\_\_

Yes  No  NA Were surrogate % recoveries within the acceptable range of LCL  $\leq$  x  $\leq$  UCL?

If no: Notes: \_\_\_\_\_

Yes  No  NA Were target analytes detected in any field, equipment, and/or laboratory blanks?

If yes: Notes: \_\_\_\_\_



Yes  No  NA Were any target analytes detected below practical quantitation limits (PQLs)?

If yes: Notes: \_\_\_\_\_

Yes  No  NA Were any sample duplicates collected?

If yes: Notes: \_\_\_\_\_

Yes  No  NA Were any laboratory duplicates reported for project samples?

If yes: Notes: \_\_\_\_\_

Yes  No  NA Were any matrix spikes reported for project samples?

If yes: Notes: No issues to report

Yes  No  NA Were any laboratory control samples reported?

If yes: Notes: No issues to report

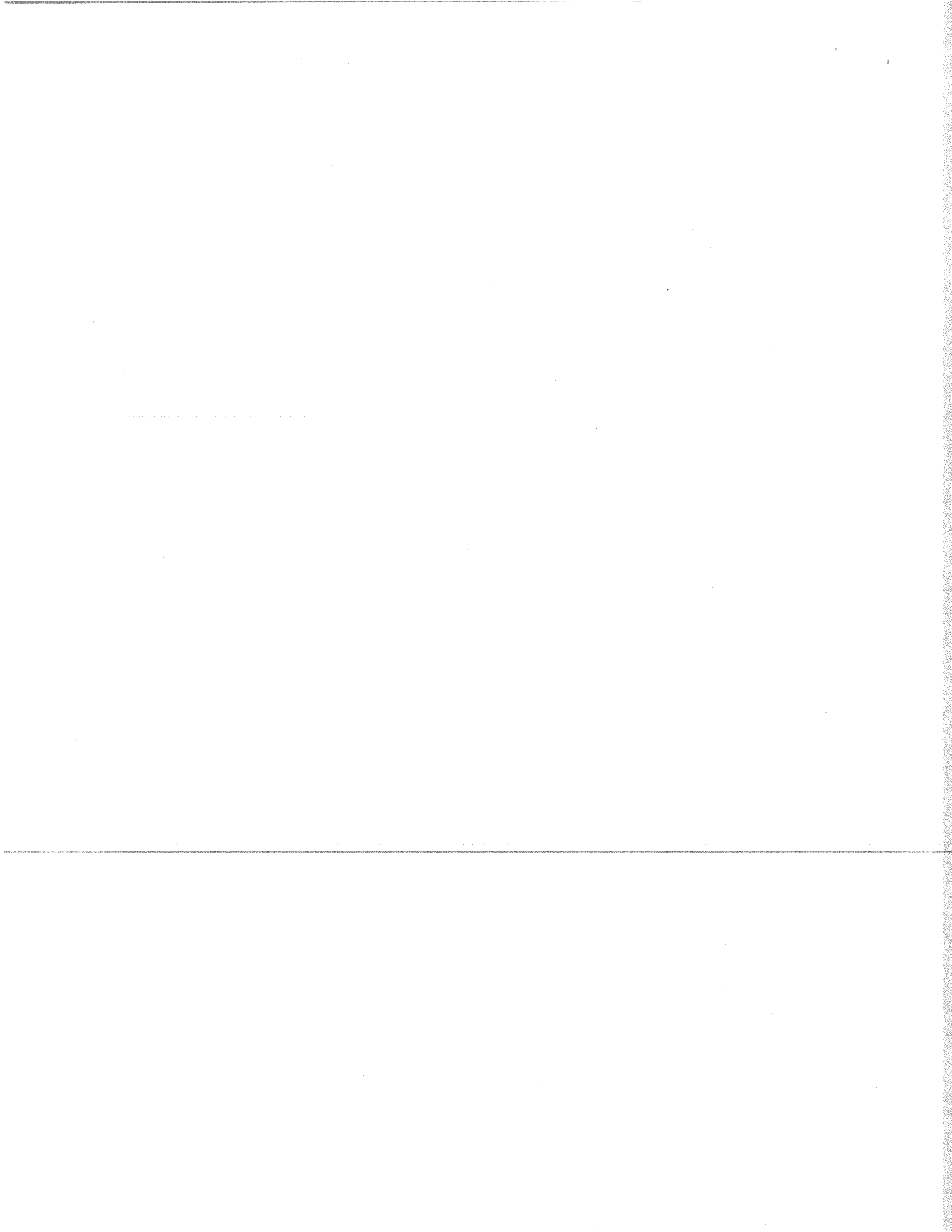
Yes  No  NA Were calibration standards reported?

If yes: Notes: \_\_\_\_\_

**4. COMMENTS & SUMMARY OF ACTIONS TAKEN** (Attach additional pages if necessary)

No Actions Required

Signature of Data Verifier





ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 06, 2013

TRISH REIFENBERGER P.E.  
BROWN AND CALDWELL  
990 Hammond Drive  
Atlanta GA 30328

TEL: (770) 673-3630  
FAX: (770) 396-9495

RE: Hill Shire Farms

Dear TRISH REIFENBERGER P.E.:

Order No: 1310N60

Analytical Environmental Services, Inc. received 11 samples on 10/29/2013 4:55:00 PM for the analyses presented in following report.

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

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

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

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

Tara Esbeck  
Project Manager

COMPANY	ADDRESS:		PHONE:	FAX:	SIGNATURE:	SAMPLED	PRESERVATION (See codes)			ANALYSIS REQUESTED	REMARKS	No # of Containers
	1	2					3	4	5			
Brown and Caldwell	990 Hammond Dr, Suit 406 Atlanta, GA 30328		(770) 394-2997		<i>[Signature]</i>					Visit our website <a href="http://www.aesatlanta.com">www.aesatlanta.com</a> to check on the status of your results, place bottle orders, etc.		
SAMPLED BY:	Juan Nunez, George Skal9											
#	SAMPLE ID	DATE	TIME	Grab	Composite	Matrix (See codes)	MT	HT	IT			
1	13301 - MW - 11	10/28/13	1400	X		GW	X					2
2	13301 - MW - 20	10/28/13	1105	X		GW	X					2
3	13301 - MW - 2	10/28/13	1425	X		GW	X					2
4	13301 - EB	10/28/13	1500	X		GW	X					2
5	13302 - MW - 11b	10/29/13	1020	X		GW	X					2
6	13302 - OW - 74a	10/29/13	1025	X		GW	X	X				2
7	13302 - MW - 6	10/29/13	0835	X		GW	X	X				7
8	13302 - MW - 12	10/29/13	1410	X		GW	X	X				7
9	13302 - OW - 72a	10/29/13	1410	X		GW	X	X				2
10	13302 - EB	10/29/13	1330	X		GW	X	X				2
11												
12												
13												
14												
RELINQUISHED BY:	DATE/TIME		RECEIVED BY:	DATE/TIME		PROJECT INFORMATION						
<i>[Signature]</i>	10/29/13 16:20		N.C.	10-29-13 4:20 pm		PROJECT NAME: Hillshire farms						
N.C.	10-29-13 4:55 pm			10/29/13 4:55		PROJECT #: 141054						
						SITE ADDRESS: Smyrna, GA						
SPECIAL INSTRUCTIONS/COMMENTS:						SEND REPORT TO: <i>Tish Reifenger</i>						
OUT						INVOICE TO: <i>Tish Reifenger @ browncauld.com</i>						
IN						(IF DIFFERENT FROM ABOVE)						
						STATE PROGRAM (if any):						
						E-mail? Y/N; Fax? Y/N						
						DATA PACKAGE: I II III IV						
						TURNAROUND TIME REQUEST						
						Standard 5 Business Days						
						2 Business Day Rush						
						Next Business Day Rush						
						Same Day Rush (auth req.)						
						Other						
						Total # of Containers: 30						
						QUOTE #:						

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

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

White Copy - Original: Yellow Copy - Client

**Client:** BROWN AND CALDWELL  
**Project:** Hill Shire Farms  
**Lab ID:** 1310N60

**Case Narrative**

Sample Receiving Nonconformance:

A Trip Blank was provided but not listed on the Chain of Custody. Trip blank analyzed at no cost to the client.

Analytical Environmental Services, Inc

Date: 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13301-MW-11
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/28/2013 2:00:00 PM
<b>Lab ID:</b> 1310N60-001	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>					<b>(SW5030B)</b>			
1,1,1-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
1,1-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
1,1-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
1,2-Dibromoethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
1,2-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
1,2-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
1,2-Dichloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
1,4-Dichlorobenzene	5.9	5.0		ug/L	182977	1	10/30/2013 10:18	AK
2-Butanone	BRL	50		ug/L	182977	1	10/30/2013 10:18	AK
2-Hexanone	BRL	10		ug/L	182977	1	10/30/2013 10:18	AK
4-Methyl-2-pentanone	BRL	10		ug/L	182977	1	10/30/2013 10:18	AK
Acetone	BRL	50		ug/L	182977	1	10/30/2013 10:18	AK
Benzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Bromodichloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Bromoform	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Bromomethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Carbon disulfide	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Carbon tetrachloride	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Chlorobenzene	37	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Chloroethane	BRL	10		ug/L	182977	1	10/30/2013 10:18	AK
Chloroform	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Chloromethane	BRL	10		ug/L	182977	1	10/30/2013 10:18	AK
cis-1,2-Dichloroethene	45	5.0		ug/L	182977	1	10/30/2013 10:18	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Cyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Dibromochloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Dichlorodifluoromethane	BRL	10		ug/L	182977	1	10/30/2013 10:18	AK
Ethylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Freon-113	BRL	10		ug/L	182977	1	10/30/2013 10:18	AK
Isopropylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
m,p-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Methyl acetate	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Methylcyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Methylene chloride	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
o-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13301-MW-11
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/28/2013 2:00:00 PM ✓
<b>Lab ID:</b> 1310N60-001	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
Styrene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Tetrachloroethene	5.7	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Toluene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Trichloroethene	10	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Trichlorofluoromethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:18	AK
Vinyl chloride	BRL	2.0		ug/L	182977	1	10/30/2013 10:18	AK
Surr: 4-Bromofluorobenzene	82.3	66.2-120		%REC	182977	1	10/30/2013 10:18	AK
Surr: Dibromofluoromethane	109	79.5-121		%REC	182977	1	10/30/2013 10:18	AK
Surr: Toluene-d8	98.6	77-117		%REC	182977	1	10/30/2013 10:18	AK

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

Analytical Environmental Services, Inc

Date: 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13301-MW-20
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/28/2013 11:05:00 AM
<b>Lab ID:</b> 1310N60-002	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>					<b>(SW5030B)</b>			
1,1,1-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
1,1-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
1,1-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
1,2-Dibromoethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
1,2-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
1,2-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
1,2-Dichloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
1,4-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
2-Butanone	BRL	50		ug/L	182977	1	10/30/2013 10:46	AK
2-Hexanone	BRL	10		ug/L	182977	1	10/30/2013 10:46	AK
4-Methyl-2-pentanone	BRL	10		ug/L	182977	1	10/30/2013 10:46	AK
Acetone	BRL	50		ug/L	182977	1	10/30/2013 10:46	AK
Benzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Bromodichloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Bromoform	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Bromomethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Carbon disulfide	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Carbon tetrachloride	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Chlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Chloroethane	BRL	10		ug/L	182977	1	10/30/2013 10:46	AK
Chloroform	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Chloromethane	BRL	10		ug/L	182977	1	10/30/2013 10:46	AK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Cyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Dibromochloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Dichlorodifluoromethane	BRL	10		ug/L	182977	1	10/30/2013 10:46	AK
Ethylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Freon-113	BRL	10		ug/L	182977	1	10/30/2013 10:46	AK
Isopropylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
m,p-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Methyl acetate	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Methylcyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Methylene chloride	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
o-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13301-MW-20
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/28/2013 11:05:00 AM ✓
<b>Lab ID:</b> 1310N60-002	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
Styrene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Tetrachloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Toluene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Trichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Trichlorofluoromethane	BRL	5.0		ug/L	182977	1	10/30/2013 10:46	AK
Vinyl chloride	BRL	2.0		ug/L	182977	1	10/30/2013 10:46	AK
Surr: 4-Bromofluorobenzene	80.4	66.2-120		%REC	182977	1	10/30/2013 10:46	AK
Surr: Dibromofluoromethane	✓ 112	79.5-121		%REC	182977	1	10/30/2013 10:46	AK
Surr: Toluene-d8	99.7	77-117		%REC	182977	1	10/30/2013 10:46	AK

**Qualifiers:**

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



**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13301-MW-2
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/28/2013 2:25:00 PM
<b>Lab ID:</b> 1310N60-003	<b>Matrix:</b> Groundwater ✓

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
Styrene	BRL	5.0		ug/L	182977	1	10/30/2013 11:14	AK
Tetrachloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 11:14	AK
Toluene	BRL	5.0		ug/L	182977	1	10/30/2013 11:14	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 11:14	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 11:14	AK
Trichloroethene	13	5.0		ug/L	182977	1	10/30/2013 11:14	AK
Trichlorofluoromethane	BRL	5.0		ug/L	182977	1	10/30/2013 11:14	AK
Vinyl chloride	BRL	2.0		ug/L	182977	1	10/30/2013 11:14	AK
Surr: 4-Bromofluorobenzene	78.6	66.2-120		%REC	182977	1	10/30/2013 11:14	AK
Surr: Dibromofluoromethane	✓ 110	79.5-121		%REC	182977	1	10/30/2013 11:14	AK
Surr: Toluene-d8	94.9	77-117		%REC	182977	1	10/30/2013 11:14	AK

**Qualifiers:**

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

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13301-EB
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/28/2013 3:00:00 PM
<b>Lab ID:</b> 1310N60-004	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>			<b>(SW5030B)</b>					
1,1,1-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
1,1-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
1,1-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
1,2-Dibromoethane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
1,2-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
1,2-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
1,2-Dichloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
1,4-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
2-Butanone	BRL	50		ug/L	182977	1	10/30/2013 11:42	AK
2-Hexanone	BRL	10		ug/L	182977	1	10/30/2013 11:42	AK
4-Methyl-2-pentanone	BRL	10		ug/L	182977	1	10/30/2013 11:42	AK
Acetone	BRL	50		ug/L	182977	1	10/30/2013 11:42	AK
Benzene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Bromodichloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Bromoform	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Bromomethane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Carbon disulfide	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Carbon tetrachloride	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Chlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Chloroethane	BRL	10		ug/L	182977	1	10/30/2013 11:42	AK
Chloroform	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Chloromethane	BRL	10		ug/L	182977	1	10/30/2013 11:42	AK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Cyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Dibromochloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Dichlorodifluoromethane	BRL	10		ug/L	182977	1	10/30/2013 11:42	AK
Ethylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Freon-113	BRL	10		ug/L	182977	1	10/30/2013 11:42	AK
Isopropylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
m,p-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Methyl acetate	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Methylcyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Methylene chloride	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
o-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK

**Qualifiers:**

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

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13301-EB ✓
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/28/2013 3:00:00 PM
<b>Lab ID:</b> 1310N60-004	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
Styrene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Tetrachloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Toluene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
trans-1,2-Dichloroethene	✓ BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
trans-1,3-Dichloropropene	✓ BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Trichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Trichlorofluoromethane	BRL	5.0		ug/L	182977	1	10/30/2013 11:42	AK
Vinyl chloride	BRL	2.0		ug/L	182977	1	10/30/2013 11:42	AK
Surr: 4-Bromofluorobenzene	79.1	66.2-120		%REC	182977	1	10/30/2013 11:42	AK
Surr: Dibromofluoromethane	✓ 108	79.5-121		%REC	182977	1	10/30/2013 11:42	AK
Surr: Toluene-d8	96.8	77-117		%REC	182977	1	10/30/2013 11:42	AK

**Qualifiers:**

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

Analytical Environmental Services, Inc

Date: 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13302-MW-4B
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013 10:20:00 AM
<b>Lab ID:</b> 1310N60-005	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>			<b>(SW5030B)</b>					
1,1,1-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
1,1-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
1,1-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
1,2-Dibromoethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
1,2-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
1,2-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
1,2-Dichloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
1,4-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
2-Butanone	BRL	50		ug/L	182977	1	10/30/2013 12:09	AK
2-Hexanone	BRL	10		ug/L	182977	1	10/30/2013 12:09	AK
4-Methyl-2-pentanone	BRL	10		ug/L	182977	1	10/30/2013 12:09	AK
Acetone	BRL	50		ug/L	182977	1	10/30/2013 12:09	AK
Benzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Bromodichloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Bromoform	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Bromomethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Carbon disulfide	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Carbon tetrachloride	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Chlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Chloroethane	BRL	10		ug/L	182977	1	10/30/2013 12:09	AK
Chloroform	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Chloromethane	BRL	10		ug/L	182977	1	10/30/2013 12:09	AK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Cyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Dibromochloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Dichlorodifluoromethane	BRL	10		ug/L	182977	1	10/30/2013 12:09	AK
Ethylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Freon-113	BRL	10		ug/L	182977	1	10/30/2013 12:09	AK
Isopropylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
m,p-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Methyl acetate	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Methylcyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Methylene chloride	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
o-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK

**Qualifiers:**

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13302-MW-4B
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013 10:20:00 AM ✓
<b>Lab ID:</b> 1310N60-005	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>								
					<b>(SW5030B)</b>			
Styrene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Tetrachloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Toluene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Trichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Trichlorofluoromethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:09	AK
Vinyl chloride	BRL	2.0		ug/L	182977	1	10/30/2013 12:09	AK
Surr: 4-Bromofluorobenzene	80.2	66.2-120		%REC	182977	1	10/30/2013 12:09	AK
Surr: Dibromofluoromethane	105	79.5-121 ✓		%REC	182977	1	10/30/2013 12:09	AK
Surr: Toluene-d8	94.3	77-117		%REC	182977	1	10/30/2013 12:09	AK

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13302-OW-74A
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013 10:25:00 AM
<b>Lab ID:</b> 1310N60-006	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>					<b>(SW5030B)</b>			
1,1,1-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
1,1-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
1,1-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
1,2-Dibromoethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
1,2-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
1,2-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
1,2-Dichloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
1,4-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
2-Butanone	BRL	50		ug/L	182977	1	10/30/2013 12:37	AK
2-Hexanone	BRL	10		ug/L	182977	1	10/30/2013 12:37	AK
4-Methyl-2-pentanone	BRL	10		ug/L	182977	1	10/30/2013 12:37	AK
Acetone	BRL	50		ug/L	182977	1	10/30/2013 12:37	AK
Benzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Bromodichloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Bromoform	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Bromomethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Carbon disulfide	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Carbon tetrachloride	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Chlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Chloroethane	BRL	10		ug/L	182977	1	10/30/2013 12:37	AK
Chloroform	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Chloromethane	BRL	10		ug/L	182977	1	10/30/2013 12:37	AK
cis-1,2-Dichloroethene	180	5.0		ug/L	182977	1	10/30/2013 12:37	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Cyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Dibromochloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Dichlorodifluoromethane	BRL	10		ug/L	182977	1	10/30/2013 12:37	AK
Ethylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Freon-113	BRL	10		ug/L	182977	1	10/30/2013 12:37	AK
Isopropylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
m,p-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Methyl acetate	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Methylcyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Methylene chloride	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
o-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK

**Qualifiers:**

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13302-OW-74A
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013 10:25:00 AM ✓
<b>Lab ID:</b> 1310N60-006	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
Styrene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Tetrachloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Toluene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Trichloroethene	13	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Trichlorofluoromethane	BRL	5.0		ug/L	182977	1	10/30/2013 12:37	AK
Vinyl chloride	BRL	2.0		ug/L	182977	1	10/30/2013 12:37	AK
Surr: 4-Bromofluorobenzene	80.1	66.2-120		%REC	182977	1	10/30/2013 12:37	AK
Surr: Dibromofluoromethane	107	✓ 79.5-121		%REC	182977	1	10/30/2013 12:37	AK
Surr: Toluene-d8	96.1	77-117		%REC	182977	1	10/30/2013 12:37	AK

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13302-MW-6
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013 8:35:00 AM
<b>Lab ID:</b> 1310N60-007	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Total Organic Carbon (TOC) SW9060A</b>								
Organic Carbon, Total	3.21	1.00		mg/L	R255057	1	11/01/2013 12:27	GR
<b>TCL VOLATILE ORGANICS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
1,1-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
1,1-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
1,2-Dibromoethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
1,2-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
1,2-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
1,2-Dichloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
1,4-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
2-Butanone	BRL	50		ug/L	182977	1	10/30/2013 13:05	AK
2-Hexanone	BRL	10		ug/L	182977	1	10/30/2013 13:05	AK
4-Methyl-2-pentanone	BRL	10		ug/L	182977	1	10/30/2013 13:05	AK
Acetone	BRL	50		ug/L	182977	1	10/30/2013 13:05	AK
Benzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Bromodichloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Bromoform	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Bromomethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Carbon disulfide	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Carbon tetrachloride	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Chlorobenzene	6.2	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Chloroethane	BRL	10		ug/L	182977	1	10/30/2013 13:05	AK
Chloroform	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Chloromethane	BRL	10		ug/L	182977	1	10/30/2013 13:05	AK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Cyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Dibromochloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Dichlorodifluoromethane	BRL	10		ug/L	182977	1	10/30/2013 13:05	AK
Ethylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Freon-113	BRL	10		ug/L	182977	1	10/30/2013 13:05	AK
Isopropylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
m,p-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Methyl acetate	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK

**Qualifiers:**

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13302-MW-6
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013 8:35:00 AM ✓
<b>Lab ID:</b> 1310N60-007	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
Methylcyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Methylene chloride	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
o-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Styrene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Tetrachloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Toluene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Trichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Trichlorofluoromethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:05	AK
Vinyl chloride	BRL	2.0		ug/L	182977	1	10/30/2013 13:05	AK
Surr: 4-Bromofluorobenzene	81.5	66.2-120		%REC	182977	1	10/30/2013 13:05	AK
Surr: Dibromofluoromethane	106	79.5-121		%REC	182977	1	10/30/2013 13:05	AK
Surr: Toluene-d8	94.8	77-117		%REC	182977	1	10/30/2013 13:05	AK
<b>ION SCAN SW9056A</b>								
Nitrate	BRL	0.25		mg/L	R255099	1	10/30/2013 11:32	GR
Sulfate	2.7	1.0		mg/L	R255099	1	10/30/2013 11:32	GR
<b>GC Analysis of Gaseous Samples SOP-RSK 175</b>		<b>(RSK175)</b>						
Methane	130	4		ug/L	182982	1	10/30/2013 15:18	SH
<b>Ferrous Iron SM3500-Fe-B</b>								
Iron, as Ferrous (Fe+2)	1.06	1.00		mg/L	R254975	10	10/29/2013 17:45	AB

**Qualifiers:**

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

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13302-MW-12
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013 2:10:00 PM
<b>Lab ID:</b> 1310N60-008	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Total Organic Carbon (TOC) SW9060A</b>								
Organic Carbon, Total	5.17	1.00		mg/L	R255057	1	11/01/2013 12:55	GR
<b>TCL VOLATILE ORGANICS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
1,1-Dichloroethane	5.0	5.0		ug/L	182977	1	10/30/2013 13:33	AK
1,1-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
1,2-Dibromoethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
1,2-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
1,2-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
1,2-Dichloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
1,4-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
2-Butanone	BRL	50		ug/L	182977	1	10/30/2013 13:33	AK
2-Hexanone	BRL	10		ug/L	182977	1	10/30/2013 13:33	AK
4-Methyl-2-pentanone	BRL	10		ug/L	182977	1	10/30/2013 13:33	AK
Acetone	BRL	50		ug/L	182977	1	10/30/2013 13:33	AK
Benzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Bromodichloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Bromoform	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Bromomethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Carbon disulfide	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Carbon tetrachloride	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Chlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Chloroethane	BRL	10		ug/L	182977	1	10/30/2013 13:33	AK
Chloroform	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Chloromethane	BRL	10		ug/L	182977	1	10/30/2013 13:33	AK
cis-1,2-Dichloroethene	49	5.0		ug/L	182977	1	10/30/2013 13:33	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Cyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Dibromochloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Dichlorodifluoromethane	BRL	10		ug/L	182977	1	10/30/2013 13:33	AK
Ethylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Freon-113	BRL	10		ug/L	182977	1	10/30/2013 13:33	AK
Isopropylbenzene	10	5.0		ug/L	182977	1	10/30/2013 13:33	AK
m,p-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Methyl acetate	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK

**Qualifiers:**

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13302-MW-12
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013 2:10:00 PM ✓
<b>Lab ID:</b> 1310N60-008	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>					<b>(SW5030B)</b>			
Methylcyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Methylene chloride	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
o-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Styrene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Tetrachloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Toluene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Trichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Trichlorofluoromethane	BRL	5.0		ug/L	182977	1	10/30/2013 13:33	AK
Vinyl chloride	4.0	2.0		ug/L	182977	1	10/30/2013 13:33	AK
Surr: 4-Bromofluorobenzene	95.9	66.2-120		%REC	182977	1	10/30/2013 13:33	AK
Surr: Dibromofluoromethane	✓ 119	79.5-121		%REC	182977	1	10/30/2013 13:33	AK
Surr: Toluene-d8	101	77-117		%REC	182977	1	10/30/2013 13:33	AK
<b>ION SCAN SW9056A</b>								
Nitrate	BRL	0.25		mg/L	R255099	1	10/30/2013 11:47	GR
Sulfate	10	1.0		mg/L	R255099	1	10/30/2013 11:47	GR
<b>GC Analysis of Gaseous Samples SOP-RSK 175</b>					<b>(RSK175)</b>			
Methane	170	4		ug/L	182982	1	10/30/2013 15:24	SH
<b>Ferrous Iron SM3500-Fe-B</b>								
Iron, as Ferrous (Fe+2)	26.4	2.50		mg/L	R254975	25	10/29/2013 17:45	AB

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

Analytical Environmental Services, Inc

Date: 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13302-OW-72A
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013 2:10:00 PM
<b>Lab ID:</b> 1310N60-009	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
1,1,1-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
1,1-Dichloroethane	14	5.0		ug/L	182977	1	10/30/2013 14:28	AK
1,1-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
1,2-Dibromoethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
1,2-Dichlorobenzene	18	5.0		ug/L	182977	1	10/30/2013 14:28	AK
1,2-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
1,2-Dichloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
1,4-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
2-Butanone	BRL	50		ug/L	182977	1	10/30/2013 14:28	AK
2-Hexanone	BRL	10		ug/L	182977	1	10/30/2013 14:28	AK
4-Methyl-2-pentanone	BRL	10		ug/L	182977	1	10/30/2013 14:28	AK
Acetone	BRL	50		ug/L	182977	1	10/30/2013 14:28	AK
Benzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Bromodichloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Bromoform	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Bromomethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Carbon disulfide	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Carbon tetrachloride	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Chlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Chloroethane	BRL	10		ug/L	182977	1	10/30/2013 14:28	AK
Chloroform	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Chloromethane	BRL	10		ug/L	182977	1	10/30/2013 14:28	AK
cis-1,2-Dichloroethene	1800	100		ug/L	182977	20	10/31/2013 10:31	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Cyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Dibromochloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Dichlorodifluoromethane	BRL	10		ug/L	182977	1	10/30/2013 14:28	AK
Ethylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Freon-113	BRL	10		ug/L	182977	1	10/30/2013 14:28	AK
Isopropylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
m,p-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Methyl acetate	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Methylcyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Methylene chloride	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
o-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13302-OW-72A ✓
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013 2:10:00 PM
<b>Lab ID:</b> 1310N60-009	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B (SW5030B)</b>								
Styrene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Tetrachloroethene	15	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Toluene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
trans-1,2-Dichloroethene	10	5.0		ug/L	182977	1	10/30/2013 14:28	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Trichloroethene	49	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Trichlorofluoromethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:28	AK
Vinyl chloride	BRL	2.0		ug/L	182977	1	10/30/2013 14:28	AK
Surr: 4-Bromofluorobenzene	79.4	66.2-120		%REC	182977	1	10/30/2013 14:28	AK
Surr: 4-Bromofluorobenzene	80.6	66.2-120		%REC	182977	20	10/31/2013 10:31	AK
Surr: Dibromofluoromethane ✓	110	79.5-121		%REC	182977	20	10/31/2013 10:31	AK
Surr: Dibromofluoromethane	109	79.5-121		%REC	182977	1	10/30/2013 14:28	AK
Surr: Toluene-d8	96.5	77-117		%REC	182977	1	10/30/2013 14:28	AK
Surr: Toluene-d8	96.3	77-117		%REC	182977	20	10/31/2013 10:31	AK

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13302-EB
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013 1:30:00 PM
<b>Lab ID:</b> 1310N60-010	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
1,1-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
1,1-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
1,2-Dibromoethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
1,2-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
1,2-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
1,2-Dichloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
1,4-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
2-Butanone	BRL	50		ug/L	182977	1	10/30/2013 14:56	AK
2-Hexanone	BRL	10		ug/L	182977	1	10/30/2013 14:56	AK
4-Methyl-2-pentanone	BRL	10		ug/L	182977	1	10/30/2013 14:56	AK
Acetone	BRL	50		ug/L	182977	1	10/30/2013 14:56	AK
Benzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Bromodichloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Bromoform	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Bromomethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Carbon disulfide	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Carbon tetrachloride	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Chlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Chloroethane	BRL	10		ug/L	182977	1	10/30/2013 14:56	AK
Chloroform	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Chloromethane	BRL	10		ug/L	182977	1	10/30/2013 14:56	AK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Cyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Dibromochloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Dichlorodifluoromethane	BRL	10		ug/L	182977	1	10/30/2013 14:56	AK
Ethylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Freon-113	BRL	10		ug/L	182977	1	10/30/2013 14:56	AK
Isopropylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
m,p-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Methyl acetate	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Methylcyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Methylene chloride	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
o-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> 13302-EB ✓
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013 1:30:00 PM
<b>Lab ID:</b> 1310N60-010	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>		<b>(SW5030B)</b>						
Styrene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Tetrachloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Toluene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Trichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Trichlorofluoromethane	BRL	5.0		ug/L	182977	1	10/30/2013 14:56	AK
Vinyl chloride	BRL	2.0		ug/L	182977	1	10/30/2013 14:56	AK
Surr: 4-Bromofluorobenzene	79.5	66.2-120		%REC	182977	1	10/30/2013 14:56	AK
Surr: Dibromofluoromethane	105	79.5-121		%REC	182977	1	10/30/2013 14:56	AK
Surr: Toluene-d8	96.8	77-117		%REC	182977	1	10/30/2013 14:56	AK

**Qualifiers:**

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

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> TRIP BLANK
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013
<b>Lab ID:</b> 1310N60-011	<b>Matrix:</b> Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>			<b>(SW5030B)</b>					
1,1,1-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
1,1-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
1,1-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
1,2-Dibromoethane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
1,2-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
1,2-Dichloroethane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
1,2-Dichloropropane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
1,4-Dichlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
2-Butanone	BRL	50		ug/L	182977	1	10/30/2013 15:24	AK
2-Hexanone	BRL	10		ug/L	182977	1	10/30/2013 15:24	AK
4-Methyl-2-pentanone	BRL	10		ug/L	182977	1	10/30/2013 15:24	AK
Acetone	BRL	50		ug/L	182977	1	10/30/2013 15:24	AK
Benzene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Bromodichloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Bromoform	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Bromomethane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Carbon disulfide	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Carbon tetrachloride	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Chlorobenzene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Chloroethane	BRL	10		ug/L	182977	1	10/30/2013 15:24	AK
Chloroform	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Chloromethane	BRL	10		ug/L	182977	1	10/30/2013 15:24	AK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Cyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Dibromochloromethane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Dichlorodifluoromethane	BRL	10		ug/L	182977	1	10/30/2013 15:24	AK
Ethylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Freon-113	BRL	10		ug/L	182977	1	10/30/2013 15:24	AK
Isopropylbenzene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
m,p-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Methyl acetate	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Methylcyclohexane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Methylene chloride	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
o-Xylene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK

**Qualifiers:**

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

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

**Analytical Environmental Services, Inc**

**Date:** 6-Nov-13

<b>Client:</b> BROWN AND CALDWELL	<b>Client Sample ID:</b> TRIP BLANK
<b>Project Name:</b> Hill Shire Farms	<b>Collection Date:</b> 10/29/2013
<b>Lab ID:</b> 1310N60-011	<b>Matrix:</b> Aqueous ✓

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>TCL VOLATILE ORGANICS SW8260B</b>					<b>(SW5030B)</b>			
Styrene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Tetrachloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Toluene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Trichloroethene	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Trichlorofluoromethane	BRL	5.0		ug/L	182977	1	10/30/2013 15:24	AK
Vinyl chloride	BRL	2.0		ug/L	182977	1	10/30/2013 15:24	AK
Surr: 4-Bromofluorobenzene	77.8	66.2-120		%REC	182977	1	10/30/2013 15:24	AK
Surr: Dibromofluoromethane	102	79.5-121		%REC	182977	1	10/30/2013 15:24	AK
Surr: Toluene-d8	95.4	77-117		%REC	182977	1	10/30/2013 15:24	AK

**Qualifiers:**

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Brown & Caldwell

Work Order Number 1310N60

Checklist completed by [Signature] Date 10/29/13

Carrier name: FedEx  UPS  Courier  Client  US Mail  Other

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

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

Custody seals intact on sample bottles? Yes  No  Not Present

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

Cooler #1 3.5 Cooler #2  Cooler #3  Cooler #4  Cooler #5  Cooler #6

Chain of custody present? Yes  No

Chain of custody signed when relinquished and received? Yes  No

Chain of custody agrees with sample labels? Yes  No

Samples in proper container/bottle? Yes  No

Sample containers intact? Yes  No

Sufficient sample volume for indicated test? Yes  No

All samples received within holding time? Yes  No

Was TAT marked on the COC? Yes  No

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

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

Water - pH acceptable upon receipt? Yes  No  Not Applicable

Adjusted?  Checked by [Signature]

Sample Condition: Good  Other(Explain)

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

See Case Narrative for resolution of the Non-Conformance.

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

Client: BROWN AND CALDWELL  
 Project: Hill Shire Farms  
 Lab Order: 1310N60

**Dates Report**

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1310N60-001A	13301-MW-11	10/28/2013 2:00:00PM	Groundwater	TCL VOLATILE ORGANICS	10/29/2013	10/29/2013	10/30/2013
1310N60-002A	13301-MW-20	10/28/2013 11:05:00AM	Groundwater	TCL VOLATILE ORGANICS	10/29/2013	10/29/2013	10/30/2013
1310N60-003A	13301-MW-2	10/28/2013 2:25:00PM	Groundwater	TCL VOLATILE ORGANICS	10/29/2013	10/29/2013	10/30/2013
1310N60-004A	13301-EB	10/28/2013 3:00:00PM	Groundwater	TCL VOLATILE ORGANICS	10/29/2013	10/29/2013	10/30/2013
1310N60-005A	13302-MW-4B	10/29/2013 10:20:00AM	Groundwater	TCL VOLATILE ORGANICS	10/29/2013	10/29/2013	10/30/2013
1310N60-006A	13302-OW-74A	10/29/2013 10:25:00AM	Groundwater	TCL VOLATILE ORGANICS	10/29/2013	10/29/2013	10/30/2013
1310N60-007A	13302-MW-6	10/29/2013 8:35:00AM	Groundwater	TCL VOLATILE ORGANICS	10/29/2013	10/29/2013	10/30/2013
1310N60-007B	13302-MW-6	10/29/2013 8:35:00AM	Groundwater	GC Analysis of Gaseous Samples	10/29/2013	10/29/2013	10/30/2013
1310N60-007C	13302-MW-6	10/29/2013 8:35:00AM	Groundwater	Total Organic Carbon (TOC)	10/29/2013	10/29/2013	11/01/2013
1310N60-007D	13302-MW-6	10/29/2013 8:35:00AM	Groundwater	Ferrous Iron	10/29/2013	10/29/2013	10/29/2013
1310N60-007E	13302-MW-6	10/29/2013 8:35:00AM	Groundwater	ION SCAN	10/29/2013	10/29/2013	10/30/2013
1310N60-008A	13302-MW-12	10/29/2013 2:10:00PM	Groundwater	TCL VOLATILE ORGANICS	10/29/2013	10/29/2013	10/30/2013
1310N60-008B	13302-MW-12	10/29/2013 2:10:00PM	Groundwater	GC Analysis of Gaseous Samples	10/29/2013	10/29/2013	10/30/2013
1310N60-008C	13302-MW-12	10/29/2013 2:10:00PM	Groundwater	Total Organic Carbon (TOC)	10/29/2013	10/29/2013	11/01/2013
1310N60-008D	13302-MW-12	10/29/2013 2:10:00PM	Groundwater	Ferrous Iron	10/29/2013	10/29/2013	10/29/2013
1310N60-008E	13302-MW-12	10/29/2013 2:10:00PM	Groundwater	ION SCAN	10/29/2013	10/29/2013	10/30/2013
1310N60-009A	13302-OW-72A	10/29/2013 2:10:00PM	Groundwater	TCL VOLATILE ORGANICS	10/29/2013	10/29/2013	10/30/2013
1310N60-009A	13302-OW-72A	10/29/2013 2:10:00PM	Groundwater	TCL VOLATILE ORGANICS	10/29/2013	10/29/2013	10/31/2013
1310N60-010A	13302-EB	10/29/2013 1:30:00PM	Groundwater	TCL VOLATILE ORGANICS	10/29/2013	10/29/2013	10/30/2013
1310N60-011A	TRIP BLANK	10/29/2013 12:00:00AM	Aqueous	TCL VOLATILE ORGANICS	10/29/2013	10/29/2013	10/30/2013

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310N60

**BatchID:** 182977

Sample ID: MB-182977	Client ID:	Units: ug/L	Prep Date: 10/29/2013	Run No: 254742							
Sample Type: MBLK	Test Code: TCL VOLATILE ORGANICS SW8260B	BatchID: 182977	Analysis Date: 10/29/2013	Seq No: 5349721							
Analyte	Result	RPT Limit	SPK value	SPK RefVal	High Limit	RPD RefVal	%REC	Low Limit	%RPD	RPD Limit	Qual

1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310N60

**BatchID:** 182977

Sample ID: MB-182977	Client ID:	Units: ug/L	Prep Date: 10/29/2013	Run No: 254742							
Sample Type: MBLK	Test Code: TCL VOLATILE ORGANICS SW8260B	BatchID: 182977	Analysis Date: 10/29/2013	Seq No: 5349721							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	40.73	0	50.00		81.5	66.2	120				
Surr: Dibromofluoromethane	50.66	0	50.00		101	79.5	121				
Surr: Toluene-d8	45.78	0	50.00		91.6	77	117				

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310N60

**ANALYTICAL QC SUMMARY REPORT**

**BatchID: 182977**

Sample ID:	LCS-182977	Client ID:			Units:	ug/L	Prep Date:	10/29/2013	Run No:	254742	
Sample Type:	LCS	Test Code:	TCL VOLATILE ORGANICS	SW8260B	BatchID:	182977	Analysis Date:	10/29/2013	Seq No:	5349722	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	54.59	5.0	50.00		109	63.1	140				
Benzene	49.39	5.0	50.00		98.8	74.2	129				
Chlorobenzene	54.29	5.0	50.00		109	70	129				
Toluene	51.10	5.0	50.00		102	74.2	129				
Trichloroethene	57.33	5.0	50.00		✓115	71.2	135				
Surr: 4-Bromofluorobenzene	50.09	0	50.00		100	66.2	120				
Surr: Dibromofluoromethane	54.37	0	50.00		109	79.5	121				
Surr: Toluene-d8	49.20	0	50.00		98.4	77	117				

Sample ID:	1310M80-004AMS	Client ID:			Units:	ug/L	Prep Date:	10/29/2013	Run No:	254742	
Sample Type:	MS	Test Code:	TCL VOLATILE ORGANICS	SW8260B	BatchID:	182977	Analysis Date:	10/29/2013	Seq No:	5349724	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	63.26	5.0	50.00		127	60.2	159				
Benzene	54.71	5.0	50.00		109	70.2	138				
Chlorobenzene	59.49	5.0	50.00		119	70.1	133				
Toluene	57.40	5.0	50.00		✓115	70	139				
Trichloroethene	63.82	5.0	50.00		✓128	70.1	144				
Surr: 4-Bromofluorobenzene	50.05	0	50.00		100	66.2	120				
Surr: Dibromofluoromethane	56.28	0	50.00		113	79.5	121				
Surr: Toluene-d8	49.53	0	50.00		99.1	77	117				

Sample ID:	1310M80-004AMSD	Client ID:			Units:	ug/L	Prep Date:	10/29/2013	Run No:	254742	
Sample Type:	MSD	Test Code:	TCL VOLATILE ORGANICS	SW8260B	BatchID:	182977	Analysis Date:	10/29/2013	Seq No:	5349725	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	63.95	5.0	50.00		✓128	60.2	159	63.26	✓1.08	19.2	
Benzene	57.15	5.0	50.00		114	70.2	138	54.71	4.36	20	

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310N60

**BatchID:** 182977

Sample ID: <b>1310M80-004AMSD</b>	Client ID:	Units: <b>ug/L</b>	Prep Date: <b>10/29/2013</b>	Run No: <b>254742</b>							
Sample Type: <b>MSD</b>	Test Code: <b>TCL VOLATILE ORGANICS SW8260B</b>	BatchID: <b>182977</b>	Analysis Date: <b>10/29/2013</b>	Seq No: <b>5349725</b>							
Analyte	Result	RPT Limit	SPK value	SPK RefVal	%REC	Low Limit	High Limit	RPD RefVal	%RPD	RPD Limit	Qual

Chlorobenzene	60.13	5.0	50.00	59.49	120	70.1	133	59.49	1.07	20	
Toluene	57.23	5.0	50.00	57.40	114	70	139	57.40	0.297	20	
Trichloroethene	65.18	5.0	50.00	63.82	130	70.1	144	63.82	2.11	20	
Surr: 4-Bromofluorobenzene	50.09	0	50.00	50.05	100	66.2	120	50.05	0	0	
Surr: Dibromofluoromethane	56.27	0	50.00	56.28	113	79.5	121	56.28	0	0	
Surr: Toluene-d8	49.56	0	50.00	49.53	99.1	77	117	49.53	0	0	

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310N60

**BatchID:** 182982

Sample ID: MB-182982	Client ID:	Units: ug/L	Prep Date: 10/29/2013	Run No: 254865
Sample Type: MBLK	TestCode: GC Analysis of Gaseous Samples	BatchID: 182982	Analysis Date: 10/30/2013	Seq No: 5351676
Analyte	Result	RPT Limit	SPK value	SPK Ref Val
Methane	✓ BRL	4	200.0	138.0
			%REC	High Limit
			✓ 69.0	115
			%RPD	RPD Limit Qual

Sample ID: LCS-182982	Client ID:	Units: ug/L	Prep Date: 10/29/2013	Run No: 254865
Sample Type: LCS	TestCode: GC Analysis of Gaseous Samples	BatchID: 182982	Analysis Date: 10/30/2013	Seq No: 5351678
Analyte	Result	RPT Limit	SPK value	SPK Ref Val
Methane	138.0	4	200.0	138.0
			%REC	High Limit
			✓ 67.4	115
			%RPD	RPD Limit Qual
				20

Sample ID: LCSD-182982	Client ID:	Units: ug/L	Prep Date: 10/29/2013	Run No: 254865
Sample Type: LCSD	TestCode: GC Analysis of Gaseous Samples	BatchID: 182982	Analysis Date: 10/30/2013	Seq No: 5351680
Analyte	Result	RPT Limit	SPK value	SPK Ref Val
Methane	134.7	4	200.0	138.0
			%REC	High Limit
			✓ 67.4	115
			%RPD	RPD Limit Qual
				20

Sample ID: 1310L09-002CMS	Client ID:	Units: ug/L	Prep Date: 10/29/2013	Run No: 254865
Sample Type: MIS	TestCode: GC Analysis of Gaseous Samples	BatchID: 182982	Analysis Date: 10/30/2013	Seq No: 5351704
Analyte	Result	RPT Limit	SPK value	SPK Ref Val
Methane	127.5	4	200.0	127.5
			%REC	High Limit
			✓ 63.8	115
			%RPD	RPD Limit Qual
				20

Sample ID: 1310L09-002CMSD	Client ID:	Units: ug/L	Prep Date: 10/29/2013	Run No: 254865
Sample Type: MSD	TestCode: GC Analysis of Gaseous Samples	BatchID: 182982	Analysis Date: 10/30/2013	Seq No: 5351707
Analyte	Result	RPT Limit	SPK value	SPK Ref Val
Methane	135.1	4	200.0	127.5
			%REC	High Limit
			✓ 67.6	115
			%RPD	RPD Limit Qual
				20

**Qualifiers:** > Greater than Result value  
 BRL Below reporting limit  
 J Estimated value detected below Reporting Limit  
 Rpt Lim Reporting Limit

< Less than Result value  
 E Estimated (value above quantitation range)  
 N Analyte not NELAC certified  
 S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank  
 H Holding times for preparation or analysis exceeded  
 R RPD outside limits due to matrix

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310N60

**BatchID:** R254975

Sample ID: MB-R254975	Client ID:	Units: mg/L	Prep Date:	Run No: 254975
Sample Type: MBLK	Test Code: Ferrrous Iron	BatchID: R254975	Analysis Date: 10/29/2013	Seq No: 5354230
Analyte	Result	%REC	Low Limit	High Limit
Iron, as Ferrrous (Fe+2)	0.100	✓	SPK value	SPK Ref Val
	✓ BRL		RPD Limit	RPD Ref Val
			SM3500-Fe-B	%RPD
			0.100	RPD Limit
			0.100	Qual

Sample ID: LCS-R254975	Client ID:	Units: mg/L	Prep Date:	Run No: 254975
Sample Type: LCS	Test Code: Ferrrous Iron	BatchID: R254975	Analysis Date: 10/29/2013	Seq No: 5354231
Analyte	Result	%REC	Low Limit	High Limit
Iron, as Ferrrous (Fe+2)	0.5062	✓	SPK value	SPK Ref Val
			RPD Limit	RPD Ref Val
			SM3500-Fe-B	%RPD
			0.100	RPD Limit
			0.5000	Qual
			115	

Sample ID: 1310N60-007DMS	Client ID: 13302-MW-6	Units: mg/L	Prep Date:	Run No: 254975
Sample Type: MS	Test Code: Ferrrous Iron	BatchID: R254975	Analysis Date: 10/29/2013	Seq No: 5354234
Analyte	Result	%REC	Low Limit	High Limit
Iron, as Ferrrous (Fe+2)	6.069	✓	SPK value	SPK Ref Val
			RPD Limit	RPD Ref Val
			SM3500-Fe-B	%RPD
			1.00	RPD Limit
			5.000	Qual
			1.062	
			120	

Sample ID: 1310N60-007DMSD	Client ID: 13302-MW-6	Units: mg/L	Prep Date:	Run No: 254975
Sample Type: MSD	Test Code: Ferrrous Iron	BatchID: R254975	Analysis Date: 10/29/2013	Seq No: 5354235
Analyte	Result	%REC	Low Limit	High Limit
Iron, as Ferrrous (Fe+2)	6.098	✓	SPK value	SPK Ref Val
			RPD Limit	RPD Ref Val
			SM3500-Fe-B	%RPD
			1.00	RPD Limit
			5.000	Qual
			1.062	
			120	
			6.069	
			0.477	
			30	

**Qualifiers:** > Greater than Result value  
 BRL Below reporting limit  
 J Estimated value detected below Reporting Limit  
 Rpt Lim Reporting Limit

< Less than Result value  
 E Estimated (value above quantitation range)  
 N Analyte not NELAC certified  
 S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank  
 H Holding times for preparation or analysis exceeded  
 R RPD outside limits due to matrix

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310N60

**BatchID:** R255057

Sample ID: MB-R255057	Client ID:	Units: mg/L	Prep Date:	Run No: 255057
Sample Type: MBLK	Test Code: Total Organic Carbon (TOC)	BatchID: R255057	Analysis Date: 11/01/2013	Seq No: 5356074
Analyte	Result	%REC	SPK Ref Val	%RPD
Organic Carbon, Total	25.26	101	25.00	110

Sample ID: LCS-R255057	Client ID:	Units: mg/L	Prep Date:	Run No: 255057
Sample Type: LCS	Test Code: Total Organic Carbon (TOC)	BatchID: R255057	Analysis Date: 11/01/2013	Seq No: 5356073
Analyte	Result	%REC	SPK Ref Val	%RPD
Organic Carbon, Total	28.40	103	28.40	20

Sample ID: 1310M92-001GMS	Client ID:	Units: mg/L	Prep Date:	Run No: 255057
Sample Type: MS	Test Code: Total Organic Carbon (TOC)	BatchID: R255057	Analysis Date: 11/01/2013	Seq No: 5356089
Analyte	Result	%REC	SPK Ref Val	%RPD
Organic Carbon, Total	28.45	103	28.40	20

Sample ID: 1310M92-001GMSD	Client ID:	Units: mg/L	Prep Date:	Run No: 255057
Sample Type: MSD	Test Code: Total Organic Carbon (TOC)	BatchID: R255057	Analysis Date: 11/01/2013	Seq No: 5356091
Analyte	Result	%REC	SPK Ref Val	%RPD
Organic Carbon, Total	28.45	103	28.40	20

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

**Analytical Environmental Services, Inc**

Date: 6-Nov-13

**ANALYTICAL QC SUMMARY REPORT**

**Client:** BROWN AND CALDWELL  
**Project Name:** Hill Shire Farms  
**Workorder:** 1310N60

**BatchID:** R255099

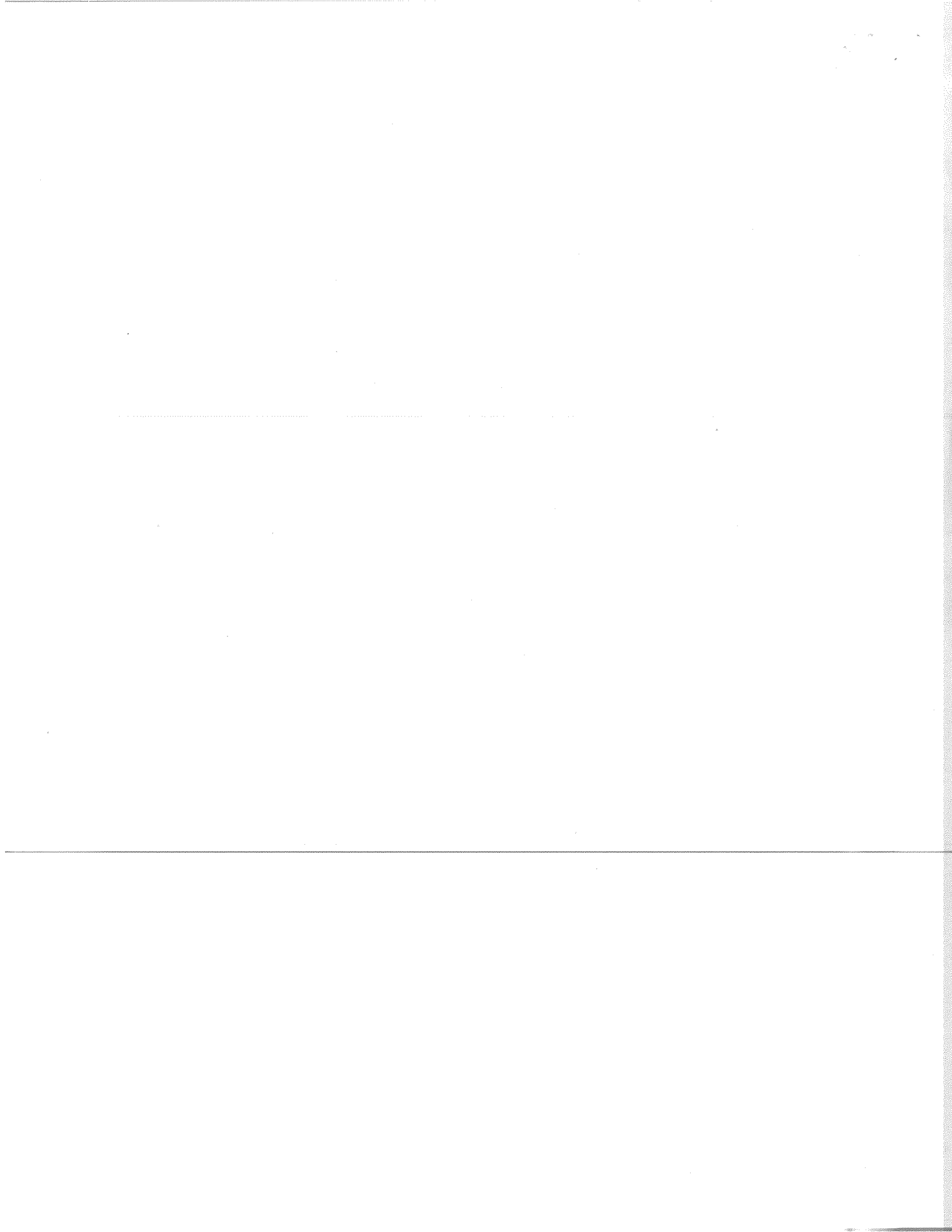
<b>Sample ID:</b> MB-R255099	<b>Client ID:</b>	<b>Units:</b> mg/L	<b>Prep Date:</b>	<b>Run No:</b> 255099
<b>Sample Type:</b> MBLK	<b>TestCode:</b> ION SCAN	<b>BatchID:</b> R255099	<b>Analysis Date:</b> 10/30/2013	<b>Seq No:</b> 5356789
<b>Analyte</b>	<b>Result</b>	<b>%REC</b>	<b>SPK Ref Val</b>	<b>%RPD</b>
Nitrate	✓ BRL			
Sulfate	✓ BRL			
		<b>Low Limit</b>	<b>High Limit</b>	<b>RPD Limit</b>
		0.25	110	Qual
		1.0	110	

<b>Sample ID:</b> LCS-R255099	<b>Client ID:</b>	<b>Units:</b> mg/L	<b>Prep Date:</b>	<b>Run No:</b> 255099
<b>Sample Type:</b> LCS	<b>TestCode:</b> ION SCAN	<b>BatchID:</b> R255099	<b>Analysis Date:</b> 10/30/2013	<b>Seq No:</b> 5356788
<b>Analyte</b>	<b>Result</b>	<b>%REC</b>	<b>SPK Ref Val</b>	<b>%RPD</b>
Nitrate	5.105	✓ 102		
Sulfate	23.60	✓ 94.4		
		<b>Low Limit</b>	<b>High Limit</b>	<b>RPD Limit</b>
		0.25	110	Qual
		1.0	110	

<b>Sample ID:</b> 1310N60-007EMS	<b>Client ID:</b> 13302-MW-6	<b>Units:</b> mg/L	<b>Prep Date:</b>	<b>Run No:</b> 255099
<b>Sample Type:</b> MS	<b>TestCode:</b> ION SCAN	<b>BatchID:</b> R255099	<b>Analysis Date:</b> 10/30/2013	<b>Seq No:</b> 5356796
<b>Analyte</b>	<b>Result</b>	<b>%REC</b>	<b>SPK Ref Val</b>	<b>%RPD</b>
Nitrate	5.485	✓ 107		
Sulfate	27.34	✓ 98.4		
		<b>Low Limit</b>	<b>High Limit</b>	<b>RPD Limit</b>
		0.25	110	Qual
		1.0	110	

<b>Sample ID:</b> 1310N60-007EMSD	<b>Client ID:</b> 13302-MW-6	<b>Units:</b> mg/L	<b>Prep Date:</b>	<b>Run No:</b> 255099
<b>Sample Type:</b> MSD	<b>TestCode:</b> ION SCAN	<b>BatchID:</b> R255099	<b>Analysis Date:</b> 10/30/2013	<b>Seq No:</b> 5356802
<b>Analyte</b>	<b>Result</b>	<b>%REC</b>	<b>SPK Ref Val</b>	<b>%RPD</b>
Nitrate	5.561	✓ 108		
Sulfate	27.68	✓ 99.7		
		<b>Low Limit</b>	<b>High Limit</b>	<b>RPD Limit</b>
		0.25	110	Qual
		1.0	110	
			5.485	1.37
			27.34	1.23

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



## Appendix E: Laboratory Stipulation Letter

---

# AES

Analytical Environmental Services, Inc.,  
3785 Presidential Parkway  
Atlanta, GA 30340

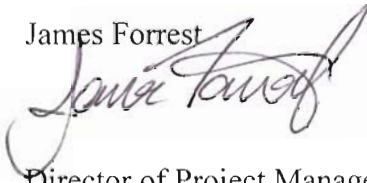
## Stipulation of Approval for Commercial Laboratory

According to Georgia State Law (O.C.G.A. 12-2-9) Commercial Rules for Commercial Laboratory Accreditation, any person submitting data to EPD prepared by a commercial laboratory shall stipulate that the laboratory is approved (Chapter 391-3-26-.05). The following information is provided as requested.

Laboratory	Analytical Environmental Services, Inc. (AES) 3785 Presidential Parkway, NE Atlanta, GA 30340 (770) 457-8177
Accredited By:	State of Florida, Department of Health, Bureau of Laboratories; Accrediting NELAP Authority
Accreditation ID:	E87582
Scope:	Clean Water Act – Extractable Organics, General Chemistry, Metals, Microbiology, Pesticides-Herbicides, PCBs, Volatile Organics  RCRA/CERCLA – Extractable Organics, General Chemistry, Metals, Pesticides-Herbicides, PCBs, Volatile Organics
Effective:	July 1, 2013
Expires:	June 30, 2014

I further certify that the sample(s) for which this data is being submitted has been handled pursuant to the appropriate chain of custody. Any question regarding this stipulation of approval may be directed to AES at 770 457-8177. Thank you for your business and please do not hesitate contacting us if we can be of further assistance.

James Forrest



Director of Project Management  
December 11, 2013