Georgia Environmental Protection Division
Land Protection Branch
Response and Remediation Program
Response Development Units 1 – 3

2 Martin Luther King Jr. Dr. SE
Suite 1054 East Tower
Atlanta, Georgia 30334
Phone: 404-657-8600

Document Submittal Form

Instructions: This form should be completed and included with any document submitted to the Response and Remediation Program, Response Development Units 1 – 3, that is greater than 25 pages in length or that contains paper sizes larger than 11"x17". This includes Release Notifications and documents related to Hazardous Site Inventory and Voluntary Remediation Program sites. Contact Brownfield Unit staff for Brownfield submittal guidelines. Your cooperation helps to ensure that documents are filed correctly, completely, and efficiently.

Name of Document:	8th Semi-Annual Progress Report
Date of Document:	July 26, 2018
Site Name:	Former Loef Company Site (Commercial Metals/Owen Electric Steel)
Site ID Number:	HSI #10376; VRP Site #802705980

Document Submittal Checklist. Please certify that the submittal includes the following by checking each box as appropriate. Items 1 – 3 should be checked / included / certified for each submittal:

☒ 1. One paper copy of the document (double-sided is preferred)

☒ 2. Two compact discs (CDs), each containing an electronic copy of the document as a single, searchable, Portable Document Format (PDF) file. Only one CD is needed for Release Notifications. CDs should be labeled at a minimum with the following: 1) Name of Document, 2) Date of Document, 3) Site Name, and 4) Site Number. Any scanned images should have a resolution of at least 300 dpi and should be in color if applicable.

☒ 3. The electronic copies are complete, virus free, and identical to the paper copy except as described in Item 4 below.

☐ 4. (Optional) To reduce the size of the paper copy, certain voluminous information has been omitted from the paper copy and is included only with the electronic copies:

- ☐ laboratory data sheets
- ☐ manifests
- ☐ other: NA

I certify that the information I am submitting is, to the best of my knowledge and belief, true, accurate, and complete.

Signature: Kathleen Roush

Name (printed): Kathleen Roush

Date: 7/26/2018

Organization: Apex Companies, LLC

Phone: 704-799-6390

Email: kroush@apexcos.com

Receipt Date
(for EPD use only)

July 27, 2018

Ms. Antonia Beavers
Environmental Protection Division - Response and Remediation Program
Georgia Department of Natural Resources
2 Martin Luther King Dr., S.E., Suite 1054 East
Atlanta, Georgia, 30334

Re: 8th Semi-Annual Progress Report
Former Loef Site – 590 Old Hull Road, Athens, Georgia – HIS Site No 10376
VRP Site No 80275980

Dear Ms. Beavers,

Commercial Metals Company (CMC) is pleased to submit the 8th Semi-Annual Progress Report for the above referenced site. The progress report was prepared by Apex Companies, LLC (Apex) on behalf of CMC. The current progress report details the results of the limited groundwater sampling event, a discussion on the progress towards finalizing the off-site access agreement to proceed with the investigation on the SKAPS properties with the four parties involved and is CMC's petition to remain in the Voluntary Remediation Program.

Should you have any questions or need additional information, please feel free to contact me at 336.506.1894, or email Peter.Pozzo@CMC.com.

Sincerely,

Peter F. Pozzo, PG
Area Environmental Manger

Enclosure

CMC Recycling
560 Old Hull Road
Athens, GA 30601
706.613.5201
www.cmc.com

8th SEMI-ANNUAL PROGRESS REPORT
COMMERCIAL METALS COMPANY/OWEN ELECTRIC STEEL FACILITY
(FORMER LOEF COMPANY SITE)
590 OLD HULL ROAD
ATHENS, GEORGIA
HSI SITE NO. 10376
VRP SITE NO. 802705980

Submitted to:

Georgia Department of Natural Resources
Environmental Protection Division
Response and Remediation Program
2 Martin Luther King Dr., S.E., Suite 1054 East
Atlanta, Georgia, 30334

Submitted by:

Apex Companies, LLC
10610 Metromont Parkway, Suite 206
Charlotte, North Carolina 28269

Apex Project No. 510507-001.04

July 26, 2018

Grant Watkins

S. Grant Watkins, PG, RSM
Program Manager

Kathleen A Roush

Kathleen A. Roush, PG, RSM
Division Manager

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION

Apex Companies, LLC (Apex) has prepared this 8th Semi-Annual Progress Report on behalf of Commercial Metals Company (CMC) for the Former Loef Company Site located on three parcels at 610 Old Hull Road (Parcel #221002C), 590 Old Hull Road (Parcel #221001), and 305 Athena Drive (Parcel #162037) in Athens, Clarke County, Georgia (the "site"). The site is an active industrial scrap metals recycling facility that occupies 21.34 acres of land, inclusive of the three property parcels that are identified as the "VRP Property" under the Georgia Department of Natural Resources (DNR) Voluntary Remediation Program (VRP).

The three parcels that comprise the VRP site property were previously owned by OmniSource Athens Division, LLC (OmniSource) and R.H. Realty, Inc. (c/o OmniSource Southeast). OmniSource entered into an Asset Purchase Agreement with Owen Electric Steel Company of South Carolina (a subsidiary of CMC) for the sale of the property. The transaction for the central and northern parcels of the VRP property closed on March 6, 2017. The southern-most parcel transaction closed on September 7, 2017. As a result of these transactions, Owen Electric Steel Company of South Carolina (a subsidiary of CMC) is currently the legal owner of the three property parcels that comprise the VRP site.

The site was listed on the Georgia Hazardous Site Inventory (HSI) as a Class II site on June 9, 1995 (Site Number 10376) following discovery of soil and groundwater contamination at the facility. The site location on a regional topographic map is shown on **Figure 1**. A site plan that includes the facility layout and existing monitoring well locations is shown on **Figure 2**.

This report was prepared for submittal to the Georgia DNR Environmental Protection Division (EPD). It documents work completed at the site since the last semi-annual reporting period and includes results of the most recent groundwater sampling event (May 2018).

1.1 Site Background and Regulatory Summary

Hull Real Estate, LLC (Hull) was the prior owner of the site before OmniSource's acquisition of the property. On November 7, 2011 Peachtree Environmental (Peachtree) submitted a VRP application to the EPD on behalf of Hull, and EPD accepted the site into the VRP in May 2012. Hull had committed to completing the site remediation under the VRP after selling the property to OmniSource. However, Hull later reneged on that commitment and informed the EPD that they were no longer willing to complete site remediation work.

On March 12, 2015 OmniSource submitted a VRP application with the intent to complete regulatory closure at the site. The VRP application identified additional activities to be conducted for site closure. EPD accepted OmniSource as a participant in the VRP for the referenced property in a letter dated May 8, 2015.

Prior remedial activities at the site include excavation and off-site disposal of approximately 43,000 tons of soil impacted by volatile organic compounds (VOCs) and metals from 2002 through 2003. An in-situ groundwater treatment event was also completed in 2003. The groundwater treatment event included injection of Hydrogen Release Compound (HRC®) as a carbon substrate to promote enhanced anaerobic biodegradation of chlorinated volatile organic compounds (cVOCs) in groundwater.

Both Hull and OmniSource performed ongoing, routine groundwater sampling events to monitor migration of the VOC plume and the long-term effectiveness of the enhanced biodegradation

treatment program combined with monitored natural attenuation (MNA) as a groundwater cleanup remedy. CMC has continued with a modified groundwater monitoring program to track the progress of the bioremediation remedy and the plume MNA processes.

The last semi-annual Progress Report submitted by CMC to EPD was the *7th Semi-Annual Progress Report* (Apex: January 29, 2018). Previous VRP site field activities and evaluations conducted by CMC and addressed by the 7th Progress Report included:

- Results of the October 2017 on-site groundwater monitoring event;
- Methods and results of the limited on-site groundwater assessment using direct push technology (DPT) sampling methods;
- Results of an initial screening level evaluation of the potential vapor intrusion (VI) exposure pathway;
- An updated Conceptual Site Model (CSM);
- A work plan for additional groundwater assessment to evaluate the potential presence and distribution of volatile organic compounds (VOCs) in groundwater at off-site properties east of the CMC property and to collect additional data as needed to further evaluate potential VI risks; and,
- An updated VRP schedule.

1.2 Work Scope Completed for Current Progress Report

This *8th Semi-Annual Progress Report* presents information about VRP site activities performed during the most recent semi-annual reporting period and since submittal of the last progress report. It also includes a slight modification to the prior work plan to conduct off-site investigation activities. Work completed since submittal of the last progress report, and presented for the current reporting period, includes the following:

1. Contacted owners of off-site properties east of the CMC property and initiated the process of obtaining access agreements to conduct the off-site groundwater investigation;
2. Methods and results of the May 2018 groundwater monitoring event at existing Site monitoring wells;
3. An updated CSM; and
4. An updated VRP schedule.

2.0 PROPERTY ACCESS UPDATE, WORK PLAN REVISION, AND VRP PETITION

In early February 2018, CMC and Apex initiated contact with adjacent property owners for two parcels east of the VRP site property for the purposes of obtaining an access agreement. The two property parcels on the east side of the railroad tracks, located hydraulically downgradient and due east of the CMC property, are part of the Athena Industrial Park. Both parcels were developed under a county-bonded economic development incentive program and have multiple property stakeholders that include the Athens-Clarke County Industrial Development Authority. The current ground lease tenants include Orient, Inc. for northern parcel #221 001B and SKAPS, Inc. (a subsidiary of PBR, Inc.) for the southern parcel #221 001A. Apex understands that under

their respective economic development lease contracts, these two parties will eventually become the sole legal owners of their parcels at some time in the future.

Since March 2018, CMC and the multiple owners and stakeholders of both parcels have been negotiating a Property Access Agreement that would allow CMC and its agents entry to the parcels to conduct the sampling that was outlined in the work plan included in the *7th Semi-Annual Progress Report*. Although progress has been made toward finalizing the access agreement, it is still under negotiation and CMC does not know the date that it will be executed.

During the access agreement negotiations, CMC has now proposed to move the one DPT groundwater boring on the northern parcel (#221 001B) down to the southern parcel (#221 001A). This would require that the DPT boring be moved approximately 45 feet to the south, which would result in each of the six proposed DPT groundwater borings being located on the southern parcel. This small change would not materially affect the objectives or integrity of the groundwater investigation and could further streamline the approval process. The figure labeled as Exhibit B, presented in **Appendix A**, shows the potential revised locations of the DPT borings on the off-site parcel.

2.1 Petition to Remain in VRP

Due to conditions outside of their control, CMC/Owen Electric Steel and the prior VRP Applicants were unable to complete the Compliance Status Report (CSR) within the timeframe required by the Georgia EPD VRP. Significant progress has been made to complete the CSR and it is expected to be finalized once off-site work is completed. To continue with the remediation plan already established for this Site under the VRP program, CMC hereby petitions Georgia EPD to allow the Site to remain in the VRP and for site work to continue under an alternate administrative process. CMC anticipates that Georgia EPD will determine the appropriate administrative process required in this situation, and CMC further agrees to work in good faith with Georgia EPD to implement an alternate administrative agreement.

3.0 GROUNDWATER MONITORING METHODS

This section describes the scope and methods used to conduct the most recent groundwater monitoring event at the site in May 2018. The groundwater monitoring program consisted of a routine groundwater gauging event at all existing Site monitoring wells and groundwater purging and sampling at select monitoring wells to monitor the on-site VOC plume in groundwater. This semi-annual groundwater sampling event was performed in general accordance with the work plan presented in the 7*th Semi-Annual Progress Report* (Apex: January 29, 2018).

3.1 Groundwater Gauging and Sampling at Monitoring Wells

A groundwater monitoring event was conducted on May 15, 2018 at select Site monitoring wells. The groundwater monitoring program is summarized in **Table 1**. Groundwater levels were first gauged from all thirteen Site monitoring wells (MW-1, MW-1D, MW-3A, MW-4A, MW-6, MW-7A, MW-8A, MW-9A, MW-10, MW-11, MW-12, MW-13, and MW-14). Water level gauging was followed by groundwater purging and sampling from the seven monitoring wells proposed for sampling in the work plan: MW-4A, MW-6, MW-7A, MW-8A, MW-10, MW-11, and MW-13.

Monitoring well MW-11 was found to be damaged in October 2017 with an obstruction at the ground surface level. The damaged metal outer casing, well pad, and PVC stickup pipe at monitoring well MW-11 were removed and the well could then be gauged and sampled. The well

was repaired after the October 2017 sampling event, but it has not been resurveyed. As a result, the October 2017 and May 2018 water level elevations for this monitoring well are not accurate because the top of casing elevation has been modified.

Prior to purging and sampling, each of the monitoring wells were opened and allowed to equilibrate. Groundwater levels were then gauged with a decontaminated electronic water level probe and were recorded to the nearest 0.01-foot. **Table 2** provides the historical groundwater gauging and elevation measurements, including data from the May 2018 gauging event. Following gauging activities, the seven designated monitoring wells were purged and sampled by low flow methods in accordance with the U.S. EPA Region IV Science & Ecosystem Support Division (SESD) Operating Procedure for Groundwater Sampling (SESDPROC-301-R3) protocols. The monitoring wells were purged using a peristaltic pump equipped with disposable polyethylene tubing with the intake placed near the middle of the screened interval. The monitoring wells were sampled in order of lowest to highest VOC concentrations based on historical sampling results.

During low-flow monitoring well purging, water quality indicator parameters of pH, temperature, specific conductance, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity were recorded at five-minute intervals using a Hanna 9829 multi-probe water quality meter. As a general practice, groundwater samples are collected when water chemistry parameters are stable (e.g., pH values within 0.1 standard unit, specific conductance within 3% and turbidity within 10%) for a minimum of three consecutive five-minute intervals. **Table 3** summarizes the historical groundwater field parameters, including those for the May 2018 sampling event. Groundwater sampling forms documenting the groundwater quality indicator parameters are provided in **Appendix B**. Each of the purged wells had stabilized turbidity levels below 10 nephelometric turbidity units (NTUs) with the exceptions of monitoring wells MW-8A (14 NTUs); MW-11 (25 NTUs); and MW-13 (39.2 NTUs).

Following purging, groundwater samples from each monitoring well were collected into laboratory supplied sample containers using the peristaltic pump. In accordance with SESDPROC-301-R3, samples for VOC analyses were collected using the "soda straw" method. The sample containers were labelled with a unique sample number, date and time of collection, sampler's initials and analyses required. Following collection, the samples were placed in a cooler with ice. Chain-of-custody documentation was maintained throughout the sampling event.

Samples from each well, a duplicate sample (labeled as Dup-1), and a trip blank were transported under chain-of-custody to Pace Analytical Services, Inc. (Pace) of Huntersville, North Carolina and analyzed for VOCs by EPA Method 8260B. The laboratory analytical report and chain-of-custody records are found in **Appendix C**. Pace is a Georgia-certified laboratory via reciprocity under Florida NELAP certification #E87627.

4.0 GROUNDWATER MONITORING RESULTS

4.1 May 2018 Groundwater Gauging Results

Table 2 summarizes the historical groundwater gauging and elevation measurements, inclusive of the May 15, 2018 gauging event. Groundwater elevations were generally higher in these monitoring wells during the May 2018 gauging event when compared to their prior groundwater elevations in October 2017. The groundwater elevation increases ranged from 0.06 feet at well MW-1 to 1.30 feet at MW-7A. Groundwater elevations decreased in monitoring wells MW-9A (7.18 feet) and MW-10 (0.10 feet) from October 2017 to May 2018. These results confirm prior observations that groundwater elevation fluctuations of several feet can occur in the shallow site

wells over relatively short time periods. Apex noted that the groundwater elevation in MW-9A during the October 2017 gauging event was the highest recorded since 2006 due to heavy rainfall and flooding that had occurred in the areas around monitoring wells MW-8A and MW-9A.

4.1.1 Groundwater Potentiometric Flow

Groundwater elevation data from Table 2 were used to construct a groundwater potentiometric map for May 15, 2018 as shown in **Figure 3**. The potentiometric map indicates that shallow groundwater was flowing generally toward the south-southeast over most of the Site during the May 2018 gauging event. Groundwater elevation data from MW-11 were not used in the potentiometric map construction for this gauging event due to the reasons previously discussed.

Groundwater horizontal flow gradients in the surficial aquifer zone vary across the site. The hydraulic gradient is lower in the northern portion of the site compared to the south-central portion of the site where the gradient becomes steeper for a short distance. Using three-point triangulation methods, a hydraulic gradient of 0.0119 feet per foot (ft/ft) was calculated for upgradient portions of the site in the area between monitoring wells MW-6, MW-12, MW-1, and MW-13. Slightly steeper hydraulic gradients ranging from 0.0364 ft/ft to 0.050 ft/ft were calculated using triangulation methods for areas between monitoring wells MW-14, MW-7A, MW-3A and MW-10 located near the east-southeastern property boundary. Further downgradient toward the southeast, the hydraulic gradient flattens out significantly to only 0.0057 ft/ft in the area between monitoring wells MW-7a, MW-8a, MW-9a, and MW-4a. The flatter gradient in this part of the site is likely a remnant of the historical groundwater mounding that has been observed in this area.

Because there is not a multi-depth cluster of closely-spaced shallow and deep wells at the site, vertical hydraulic gradients could not be directly determined from groundwater elevation data at deep well MW-1D. To estimate the vertical hydraulic gradients, the groundwater potentiometric elevations at deep well MW-1D have previously been compared to the shallow potentiometric contour value at this location. From Figure 3, the shallow groundwater potentiometric value is approximately 684 ft. MSL at monitoring well MW-1D and this value is assumed to represent both the groundwater table elevation at the middle of the screen of a hypothetical shallow well at this location. Since the groundwater elevation in deep well MW-1D (683.60 ft MSL) is lower than the groundwater table potentiometric value above it (684 ft MSL), the groundwater vertical flow vector is downward in this area. Vertical gradient calculations were not performed for the May 2018 gauging data due to the remnant groundwater mounding and flat gradient in this area (Note: the historical vertical gradient from the November 2016 sampling event was 0.0771 ft/ft).

4.2 Groundwater Analytical Results for Monitoring Wells

Table 4 summarizes the monitoring well VOC analytical results for the May 2018 sampling event along with historical groundwater VOC results. **Figure 4** shows the detected VOCs for monitoring wells sampled in May 2018. Historical 2015 analytical data from abandoned well MW-2A are also shown on this figure for reference.

Laboratory analytical results in Table 4 show that twelve different VOCs were detected at quantified or estimated (J-flagged) concentrations in one or more of the primary groundwater samples collected from the seven monitoring wells sampled in May 2018. However, only two of these VOCs were detected at concentrations above their Type 1 Risk Reduction Standards (RRSs) for groundwater in the primary groundwater samples: 1,1-Dichloroethene (1,1-DCE) and Trichloroethene (TCE).

Source area monitoring well MW-11 had the most detections (nine VOCs) above laboratory detection limits and this monitoring well also had the only exceedances of Type 1 RRSs. Trichloroethene was detected in MW-11 at a concentration of 291 micrograms per liter (µg/L), above the Type 1 RRS of 5 µg/L. The VOC 1,1-DCE was detected in MW-11 at a concentration of 9.1 µg/L, above its Type 1 RRS of 7 µg/L. Benzene was detected at 5.5 µg/L in the duplicate sample for MW-11, which is slightly above its Type 1 RRS of 5 µg/L; however, the primary sample at MW-11 had a benzene concentration (4.6 µg/L) below the Type 1 RRS.

When compared to the previous sampling events (April 2016, November 2016, or October 2017), the detected VOCs were generally lower concentrations or relatively unchanged during the May 2018 event (see Table 4). Trichloroethene concentrations have continued to decline at monitoring wells MW-4A and MW-11. **Table 5** summarizes the percent reductions in total VOC concentrations at several key Site monitoring wells since the 2003 in-situ bioremediation injections. Of specific interest is source area monitoring well MW-11, which continues to show a steady decline in total VOCs.

The inverse relationship between TCE concentration and groundwater elevations continued to be demonstrated at MW-4A during the May 2018 sampling event. Historical groundwater elevations and TCE concentrations have shown large fluctuations with an inverse relationship at MW-4A. The cause of this inverse relationship was confirmed through further vertical delineation of VOCs in groundwater in October 2017 and discussed in more detail in the 7th Progress Report.

4.2.1 Field QA/QC Samples

1,2-Dichloroethane (1,2-DCA) was detected in the trip blank submitted to Pace during the May 2018 sampling event at an estimated concentration of 0.27J µg/L. 1,2-DCA was also detected in MW-11 at an estimated concentration of 0.69J µg/L during the May 2018 sampling event. These detections do not exceed the Type 1 RSS for 1,2-DCA of 5 µg/L.

A duplicate groundwater sample (Dup-1) was collected from monitoring well MW-11 during the May 2018 sampling event and analyzed for VOCs by EPA Method 8260B. The duplicate sample showed similar results to its primary sample MW-11, with most VOC concentrations within 23 percent or less variations. Exceptions were mostly between non-detects and estimated (J-flagged) concentrations between the two samples including 1,2-DCA, where the reported duplicate concentration was <0.60 µg/L and the primary sample concentration at MW-11 was 0.69J µg/L; chloroform, where the reported duplicate concentration was <0.35 µg/L and the primary sample concentration at MW-11 was 0.96J µg/L; and chloromethane, where the reported duplicate concentration was <0.28 µg/L and the primary sample concentration was 0.79J µg/L. Additionally, the cis-1,2-DCE primary sample concentration at MW-11 (16.2 µg/L) showed a variation of 58% compared to its duplicate sample concentration (9.5 µg/L).

4.3 VOC Statistical Trends in Groundwater

Statistical analysis of groundwater contaminant trends is another important tool in the evaluation of primary lines of evidence. Two nonparametric statistical methods that are widely used are the Mann-Kendall and the Mann-Whitney tests. Both statistical tests can be used to demonstrate whether individual groundwater contaminants are decreasing, stable, or increasing over time. The Mann-Kendall test requires a minimum of four sets of sampling data that are not affected by large seasonal variations in concentrations.

Mann-Kendall statistical tests were used to evaluate VOC data from several key monitoring wells in the source area, the mid-plume area, and the downgradient areas that have four or more sampling events. Software developed by GSI was used to perform the tests. Mann-Kendall statistical tests were initially conducted on groundwater data collected through April 2016 and the results were presented in the 4th Semi-Annual Progress Report. Updated Mann-Kendall statistical tests were run on post-2005 through May 2018 data for wells MW-1D, MW-2A, MW-3A, MW-4A, MW-9A, MW-10 and MW-11 for the most prevalent regulated VOCs in site groundwater: TCE; 1,1-DCE; cis-1,2-dichloroethene (cis-1,2-DCE), vinyl chloride; and benzene. The following data management rules were used for consistency in the statistical evaluations:

- J-flagged (estimated concentration) data were input as a quantified detected value.
- Non-detects were input as one-half the value the laboratory reported Practical Quantitation Limit (PQL), as allowed by the method of imputing, or substitution.

Appendix D contains the GSI software output sheets for the Mann-Kendall tests. The updated statistical results by monitoring well and by VOC that include the May 2018 groundwater monitoring data are summarized in the following table:

Mann-Kendall Statistical Tests Summary (Updated Through May 2018)

	TCE						
Monitoring well	**MW-1D**	**MW-2A**	**MW-3A**	**MW-4A**	**MW-9A**	**MW-10**	**MW-11**
M-K Statistic (S)	-2	-18	-68	-49	-29	-13	-13
Confidence Factor	62.5%	93.4%	>99.9%	99.7%	97.4%	96.5%	99.2%
Trend Result	Stable	Prob. Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	1,1-DCE						
Monitoring well	**MW-1D**	**MW-2A**	**MW-3A**	**MW-4A**	**MW-9A**	**MW-10**	**MW-11**
M-K Statistic (S)	-5	-22	-43	-56	-29	-15	-1
Confidence Factor	89.6%	97.1%	99.0%	99.8%	97.4%	98.5%	50.0%
Trend Result	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Stable
	Cis-1,2-DCE						
Monitoring well	**MW-1D**	**MW-2A**	**MW-3A**	**MW-4A**	**MW-9A**	**MW-10**	**MW-11**
M-K Statistic (S)	-5	-13	-38	-34	-29	-16	-2
Confidence Factor	89.6%	85.4%	97.9%	94.9%	97.4%	99.0%	57.0%
Trend Result	No Trend	Stable	Decreasing	Prob. Decreasing	Decreasing	Decreasing	Stable
	Vinyl Chloride						
Monitoring well	**MW-1D**	**MW-2A**	**MW-3A**	**MW-4A**	**MW-9A**	**MW-10**	**MW-11**
M-K Statistic (S)	-5	7	-43	-56	-29	-16	0
Confidence Factor	89.6%	70.0%	99.0%	99.8%	97.4%	99.0%	39.3%
Trend Result	Stable	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Stable
	Benzene						
Monitoring well	**MW-1D**	**MW-2A**	**MW-3A**	**MW-4A**	**MW-9A**	**MW-10**	**MW-11**
M-K Statistic (S)	-5	-19	-10	-49	-29	-9	-9
Confidence Factor	89.6%	94.6%	70.5%	99.7%	97.4%	88.1%	93.2%
Trend Result	No Trend	Prob. Decreasing	Stable	Decreasing	Decreasing	No Trend	Prob. Decreasing

These statistical trend results indicate that TCE, the daughter products of TCE, and benzene are either decreasing, probably decreasing, or stable for source area and mid-plume monitoring wells where a trend could be established. Downgradient point of determination (POD) monitoring wells, MW-4A and MW-9A, show a decreasing or probably decreasing trend for each of the five COCs evaluated. Only the data sets from 2006 to the present were evaluated to eliminate effects from potential concentration spikes in daughter compounds or enhanced dissolution anomalies that would most likely occur within the first few years following the HRC® injections in 2003. This twelve-year data set best represents long term post-injection trends.

The influence of non-detects in the data set (a.k.a., left censored data) should be noted regarding their limitations and effects on the statistics results. When non-detects (without J-flag estimates) make up more than 80% of the data set, the statistical accuracy, bias and precision of nonparametric methods is largely unreliable, and there are few valid methods to evaluate a data set that is this strongly left censored. This limitation is further exacerbated if the data set consists of five or less values and/or if the non-detects are based on variable PQLs. These conditions are true for some of the Site's data set, even when a censoring point is established for non-detects using one-half of the PQL. Based on these methodology limitations, the following Mann-Kendall results cannot be substantiated for their accuracy:

- MW-9A all VOC data: 100% of the statistically analyzed data set is non-detect. With one exception in October 2017, no VOCs have been detected in this monitoring well since 2004. One VOC (methyl isobutyl ketone) was detected in October 2017 with a J-flag estimate, but this VOC was not part of the statistical data set. Also, the PQLs are varied in the MW-9A data set. The Mann-Kendall trend results of "Decreasing" derived for the five listed VOCs is based entirely on ½ PQL substituted values; therefore, the accuracy of this result is not substantiated by the statistical methodology.

- Vinyl chloride at MW-1D, MW-3A, MW-4A, MW-9A, MW-10, and MW-11: 100% of the vinyl chloride data are non-detect since 2006 (or when sampling was initiated) at these six monitoring wells, and there are no J-flagged data. Also, the PQLs are varied in the data set. The Mann-Kendall trend results of "Decreasing" or "Stable" derived for vinyl chloride at these monitoring wells is based entirely on ½ PQL substituted values; therefore, the accuracy of this result is not substantiated by the methodology. These six monitoring wells are best described as "not impacted" by vinyl chloride from 2006 (or when sampling was initiated) through 2018.

- 1,1-DCE at MW-1D, MW-3A, MW-4A, and MW-9A: 100% of the 1,1-DCE data are non-detect since 2006 (or when sampling was initiated) at these four monitoring wells, and there are no J-flagged data. Also, the PQLs are varied in the data set. The Mann-Kendall trend results of "Decreasing" or "No Trend" derived for 1,1-DCE at these monitoring wells is based entirely on ½ PQL substituted values; therefore, the accuracy of this result is not substantiated by the methodology. These four monitoring wells are best described as "not impacted" by 1,1-DCE from 2006 (or when sampling was initiated) through 2018.

- Cis-1,2-DCE at MW-1D, MW-9A, and MW-10: 100% of the cis-1,2-DCE data are non-detect since 2006 (or when sampling was initiated) at these three monitoring wells, and there are no J-flagged data. Also, the PQLs are varied in the data set. The Mann-Kendall trend results of "Decreasing" or "No Trend" derived for cis-1,2-DCE at these monitoring wells is based entirely on ½ PQL substituted values; therefore, the accuracy of this result is not substantiated by the methodology. These three monitoring wells are best described

as "not impacted" by cis-1,2-DCE from 2006 (or when sampling was initiated) through 2018.

- Benzene at MW-1D and MW-9A: 100% of the benzene data are non-detect since 2006 (or when sampling was initiated) at these two monitoring wells, and there are no J-flagged data. Also, the PQLs are varied in the data set. The Mann-Kendall trend results of "Decreasing" or "No Trend" derived for benzene at these monitoring wells is based entirely on ½ PQL substituted values; therefore, the accuracy of this result is not substantiated by the methodology. These two monitoring wells are best described as "not impacted" by benzene from 2006 (or when sampling was initiated) through 2018.

Parametric statistical methods are available to evaluate data sets with large frequencies of non-detects and varying PQLs within the data set. However, these are beyond the current scope and usefulness for the purposes of this progress report.

5.0 REVIEW AND UPDATE OF CONCEPTUAL SITE MODEL

This section provides a review and update of the CSM, including the status of each exposure pathway. The initial VRP application submitted by Hull in 2011 included a description of the CSM developed by Peachtree Environmental, Inc. A CSM update was provided in the *2nd Semi-Annual Progress Report* (April 2013) prepared by Peachtree and in subsequent progress reports submitted by Apex.

The CSM update in the *7th Semi-Annual Progress Report* presented a significant change to our understanding of the groundwater plume at the Site, based primarily on findings of the October 2017 groundwater DPT assessment. The CSM has not changed significantly since the last update. The current CSM understanding is described in the following sections.

5.1 CSM Update

Site Hydrogeology

Based on groundwater gauging data obtained by Apex during the last six monitoring events (January 2015, May 2015, April 2016, November 2016, October 2017, and May 2018), groundwater consistently flows toward the south-southeast over most of the Site under normal hydrologic conditions. The October 2017 gauging data showed the short-term effects on groundwater elevations caused by significant precipitation events. Specifically, the low-lying area around monitoring wells MW-8A and MW-9A are prone to surface flooding, and these shallow monitoring wells with well screens closer to the ground surface show relatively rapid changes in groundwater levels following major precipitation events. This was best illustrated at MW-9A during the October 2017 gauging event, where the groundwater elevation was the highest ever recorded and it was 14.49 feet higher than the November 2016 gauging event. As a result, a temporary mounding effect was seen with apparent reversal in the groundwater flow direction around the monitoring well. Remnant effects of this historical groundwater mounding are apparent in the areas around monitoring wells MW-8a and MW-9a where a relatively flat gradient was observed in May 2018.

Vertical hydraulic gradients could not be determined during the October 2017 and May 2018 gauging events but have been estimated from prior water level gauging events. During the November 2016 gauging event, the estimated vertical hydraulic gradient in groundwater was 0.0771 ft/ft, and the flow direction was downward at deep well MW-1D. Historical data show

variations in the vertical gradients between sampling events, but the flow direction remained downward in each event. Shallow and deep groundwater level data from the October 2017 and May 2018 gauging events suggest that a downward groundwater flow direction continues to exist in the area around MW-1D.

The upper 80 feet or more of the soil column consists of sandy silt to sandy clay residuum and saprolite. Dense saprolite with increasing content of rock fragments was encountered at depths between 60-74 feet bgs in the boring for deep well MW-1D. Dense, partially weathered rock (PWR) and/or consolidated bedrock was not encountered in the deep well boring. The on-site DPT refusal depths occurred between 52 and 74 feet bgs. Direct-push refusal depths encountered in October 2017 likely represent the deeper, dense saprolite zone and/or the top of the PWR transition zone.

Deep well MW-1D groundwater analytical data collected since June 2015 verify that VOC concentrations in the deeper portions of the saprolite are one to two orders of magnitude lower than the VOC concentrations in the shallow aquifer zones on this part of the VRP site. This comparison is made using current groundwater data from source area monitoring well MW-11, historical data from MW-2A (now abandoned), and the deep well MW-1D. These results suggest that the plume attenuates rapidly with depth, before reaching the PWR hydrostratigrahic zone in the south-central part of the Site. This limits the potential seepage velocity of the plume.

Slug test data indicate that the saprolitic material has a hydraulic conductivity (K) ranging from 0.3843 feet per day (ft/day) at the downgradient perimeter to 2.299 ft/day in upgradient areas. The average site K value from all slug tests is 0.6632 ft/day. Groundwater flows to the south-southeast over most of the Site based on potentiometric map interpretations.

For the May 2018 event, a hydraulic gradient of 0.0119 ft/ft was calculated for the upgradient portion of the Site in the area between monitoring wells MW-6, MW-12, MW-1, and MW-13. Steeper hydraulic gradients of 0.0364 ft/ft to 0.050 ft/ft were calculated using triangulation methods for monitoring wells MW-14, MW-7A, MW-3A and MW-10 located near the central south-eastern part of the property. In the areas around monitoring wells MW-8a, MW-9a and MW-4a, a much flatter gradient of 0.0057 ft/ft was calculated during May 2018.

The linear groundwater seepage velocity was derived from the following calculation that was used in prior progress reports and in the current calculations for May 2018 data:

Linear Seepage Velocity: $\mathbf{v_s = -K\ i\ /\ q}$

Where:

v_s = linear seepage velocity [units of Length/Time]

K = hydraulic conductivity [units of L/T; determined from slug tests]

i = hydraulic gradient [units of Length/Length; determined from potentiometric map]

q = effective porosity [units of percent Volume/Volume; literature values from soil type]

For the past few years, a range of linear seepage velocities have been calculated as following using the above equation:

- The *4th Semi-Annual Progress Report* stated an average groundwater linear seepage velocity of approximately 30.4 feet/year based on an effective porosity of 18%, an average K of 0.6632 ft/day (average of 2015 slug test values from MW-4A and MW-11), and a

gradient of 0.023 ft/ft (measured in April 2016 in the plume area between monitoring wells MW-11 and MW-4A).

- For the November 2016 monitoring event, a slightly higher gradient of 0.0376 ft/ft was measured between MW-11 and MW-4A, corresponding to a higher seepage velocity estimated as 50.6 ft/year using the above equation.

- For the October 2017 data, the seepage velocity estimates varied from 16.7 ft/year for the northern part of the Site property (where there was a lower hydraulic gradient) to 65.1 ft/year on the southeast portion of the property where the gradient was higher.

- For the May 2018 event, the seepage velocity estimates ranged from 16 ft/year for the northern part of the Site property to 67.2 ft/year on the central southeast part of the Site. These current results were similar to the October 2017 results. In areas around monitoring wells MW-8a and MW-9a where the hydraulic gradient was much flatter, a seepage velocity of only 7.66 ft/year was calculated (the lowest calculated value on record).

Earlier progress reports stated that the linear seepage velocities could range from 65 ft/year to 107 ft/year at various locations across the Site using the variable hydraulic gradients, variable K values, and an 18% effective porosity value. The 2015 through 2018 data suggest a lower range of linear seepage velocities (<65 ft/year) can be reasonably considered for the Site as well.

A trend graph was developed and presented in the *5th Progress Report* that compared long-term precipitation data from a nearby USGS monitoring station with long-term groundwater elevations at monitoring well MW-4A. This graph was presented to illustrate the time period (delay) between seasonal high and major precipitation events compared to increases in site groundwater levels due to recharge. The trend graph indicated that the highest groundwater elevations in MW-4A occurred approximately six to eight months following the peak of seasonal high precipitation trends, with shorter recharge time periods of four to six months also evident on the graph.

The groundwater elevation observations at MW-9A during the October 2017 gauging event indicate that recharge of the shallow aquifer from major precipitation events is even quicker in areas of the Site that have a thinner vadose zone. The groundwater elevation has subsequently decreased 7.18 feet in MW-9A from October 2017 to May 2018. These data show the large range of groundwater table fluctuations that can occur over short periods of time on some portions of the Site property.

Regulated Constituents

The list of regulated constituents for soil and groundwater was established in previous progress reports and has not changed based on the current data. During the April 2016 sampling event, seven VOCs that had previously not been tested or reported in site groundwater were detected at quantified or estimated (J-flagged) concentrations at one or more monitoring wells (see Table 4). Three of these newly-reported VOCs were again detected, and Dibromomethane and Diisopropyl Ether were also detected for the first time, at quantified or estimated (J-flagged) concentrations in one or more monitoring wells during the October 2017 event. During the May 2018 sampling event, three of these previously-detected VOCs were again detected at quantified or estimated (J-flagged) concentrations:

- 1,2-Dichloroethane
- Chloromethane

- Dibromomethane

None of these VOCs exceeded their Type 1 RRS (where applicable) during the May 2018 sampling event.

Soil Exposure Pathway

Soil COCs were previously identified and delineated to background concentrations by Peachtree. Remedial activities were conducted in 2002 and 2003 to address soil and groundwater. Prior remedial activities at the site include excavation and off-site disposal of approximately 43,000 tons of impacted soil. Compliance with non-residential Type 3 and Type 4 RRSs for soil was demonstrated in prior submittals to GAEPD. Based on this work, the impacts to unsaturated soil have been addressed and there is no known exposure pathway that remains in soil. The soil exposure pathway in the CSM remains unchanged from the previous progress report.

Groundwater Plume Extent and Exposure Pathways

The COCs are limited to those VOCs that have a RRS in groundwater. In the *5th Semi-Annual Progress Report* (Apex; February 27, 2017), the possibility that the dissolved TCE and benzene plume was migrating past the eastern fence line of the CMC property at levels above their respective Type 1 RRSs was discussed. That progress report was also the first to describe the periodic fluctuations of TCE and benzene concentrations at monitoring wells MW-4A and MW-10, and the inverse relationship between TCE concentrations and groundwater elevations at MW-3A, MW-4A, and MW-10. These observations led to the on-site DPT groundwater investigation that was conducted in October 2017 and the results presented in the *7th Semi-Annual Progress Report*.

The on-site DPT groundwater investigation conducted in October 2017 confirmed that higher concentrations of TCE and other VOCs are present in deeper groundwater in the areas around monitoring wells MW-10, MW-4A, and MW-7A than has been detected in these three shallow monitoring wells. Two cross sections were presented in the *7th Semi-Annual Progress Report* that showed the vertical distribution of VOCs using the October 2017 analytical data from the monitoring wells and the DPT groundwater borings. The cross sections A-A' and B-B' have been updated as **Figure 5** and **Figure 6**, respectively, for the current report.

Figure 5 shows cross section A-A' which traverses northeast-southwest between monitoring wells MW-10, MW-4A, and MW-9A. Figure 6 shows cross section B-B', which traverses roughly west-east through monitoring wells MW-14, MW-1D, and MW-4A. Both updated cross sections include the DPT boring analytical data from October 2017, as well as the monitoring well analytical results from October 2017 and/or May 2018. Groundwater elevations in both cross sections represent May 15, 2018 gauging data. Lithologic interpretations in these cross sections are taken from historical soil boring logs and geologic cross sections prepared by prior consultants.

Figure 5 cross section shows a deeper component of the TCE plume at monitoring wells MW-4A and MW-10 that is largely missed because these wells are screened near the groundwater table. Probe refusal was 71 feet bgs at GW-2, located adjacent to monitoring well MW-4A, where the benzene and TCE concentrations were one and two orders of magnitude above their Type 1 RRSs, respectively, in October 2017. This result confirms the prior speculation that VOC concentrations at MW-4A have an inverse relationship to groundwater elevation fluctuations due to its very shallow well screen. For the current interpretation, the October 2017 groundwater VOC concentrations at GW-2 are assumed to be unchanged.

Figure 6 cross section shows a similar vertical distribution of VOCs. It appears that the location of deep well MW-1D is too far south and west to detect the higher concentrations of deeper VOCs that are migrating from the MW-11 area toward areas around MW-4A. For the current interpretation, the October 2017 DPT groundwater boring VOC concentrations are assumed to be unchanged.

Current assessment results suggest that monitoring well MW-4A may no longer be suitable as a Point of Determination (POD) well for the deeper portions of the dissolved VOC plume. Monitoring well MW-4A may still have application as a supplemental POD well to monitor the very shallow zones of the aquifer at the eastern property line. Shallow groundwater VOC data may support a future VI assessment. Based on deeper groundwater analytical data from DPT borings GW-1 and GW-2 sampled in October 2017, it is apparent that the dissolved plume extends beyond the eastern CMC fence line and potentially beyond the eastern deeded property line (i.e., the center of the railroad tracks) above the Type 1 RRSs for TCE and benzene. Current concentrations of TCE and benzene at these locations and depths have not been verified through additional sampling but are assumed to be unchanged from the October 2017 conditions.

Surface Water Exposure Pathways

The closest perennial surface water body is East Fork Trail Creek, which is located south and southeast of the Site more than 1,000 feet from the currently-known extent of the groundwater plume. Based on the most recent groundwater data obtained, there is no evidence that the surface water exposure pathway is complete. The highest VOC concentrations in groundwater at the CMC eastern fence line (161 µg/L of TCE at DPT boring GW-2) are expected to attenuate before reaching the creek. The surface water exposure pathway will be re-evaluated if additional groundwater data are obtained east of the CMC property.

Subsurface Vapor Intrusion Exposure Pathway

Section 3.4 of the *7th Semi-Annual Progress Report* (Apex: January 29, 2018) described the methods and results of an initial on-site VI evaluation using the USEPA Vapor Intrusion Screening Level (VISL) calculator for the groundwater-to-indoor air exposure pathway. The VISL calculator was used to analyze the October 2017 groundwater data from monitoring wells MW-1 and MW-11. VISL results from the October 2017 event showed that chloroform exceeded its industrial/commercial Target Groundwater Concentration at monitoring well MW-1. For monitoring well MW-11, TCE and benzene exceeded their industrial/commercial Target Groundwater Concentrations.

The VISL calculator was not rerun for the May 2018 data set and only a comparison of relative changes has been made, where applicable. Monitoring well MW-1 was not sampled in May 2018, so an updated VISL calculation is not possible for that monitoring well. Monitoring well MW-11 showed decreases in both benzene and TCE between October 2017 and May 2018, so it is assumed that the VISL-calculated risk and hazard quotients are now lower at that monitoring well. No other monitoring wells sampled in May 2018 showed significant increases in groundwater VOCs that would change their presumed groundwater-to-indoor air risk potential compared to the October 2017 data.

The potential VI conditions at off-site properties is currently unknown. Off-site shallow DPT groundwater data will be input into the VISL calculator if they become available. If off-site data are not available, the VISL calculator will be run to evaluate shallow groundwater data for the

VRP site property boundary monitoring wells. The VI screening results at the property boundary would be used to predict the off-site VI exposure, based on the assumption that off-site VOC concentrations in shallow groundwater are lower. CMC will perform another round of updated VISL calculations for the on-site monitoring wells when the off-site groundwater data become available.

5.2 Point of Exposure Determination

Monitoring well MW-9A was the original POD well identified since it is hydraulically downgradient of the historical source area near monitoring well MW-2A. Monitoring well MW-4A was added as a POD well in 2015 since it was determined to be positioned more directly downgradient from the secondary source area near monitoring well MW-11. Both monitoring wells MW-9A and MW-4A have been used as POD wells for the past two or more years. As stated in the *7th Semi-Annual Progress Report*, MW-4A may no longer be suitable as a POD well and the location of a replacement POD well will be further evaluated as the off-site DPT groundwater investigation progresses.

In prior progress reports, the basis for establishing a point of exposure (POE) was a hypothetical receptor that is located 1,000 feet downgradient of the plume boundary. To this end, East Fork Trail Creek is the closest surface water body to the Site, and this creek is located more than 1,000 feet from the currently known extent of the VOC plume that could potentially impact this water body. The surface water exposure pathway is not complete based on current groundwater data and past fate-and-transport modeling predictions. There are no known water supply wells within 1,000 feet of the Site. The POE will continue to be re-evaluated as more data about the plume extent becomes available.

6.0 RECOMMENDATIONS AND SCHEDULE FOR FUTURE VRP ACTIVITIES

The following recommendations are made for continuing the VRP activities at the Former Loef Facility VRP site in Athens, Georgia. These recommendations include VRP site work proposed in the *7th Semi-Annual Progress Report* that has not yet been completed:

- Finalize and execute off-site access agreements and conduct an off-site DPT groundwater sampling program at the one off-site parcel with DPT boring locations updated in the current progress report as a work plan amendment. Determine if subsequent phases of DPT sampling are required to delineate the VOC plume to Type 1 RRSs and to establish a new POD well.
- Install and sample one new, on-site intermediate depth well adjacent to MW-4A.
- Based on the off-site DPT sampling results, potentially install one new off-site monitoring well to become an alternate POD well.
- Perform another semi-annual groundwater event using the modified sampling plan presented in this progress report (see Section 6.1 below for sampling work plan).
- Evaluate the potential for off-site VI exposure pathways using new off-site data when it becomes available.
- Submit the 9th Progress Report to EPD. The report should also include results of the off-site DPT sampling work and any additional VI evaluation data that are available at that time. An alternate reporting schedule for the off-site sampling results may be required and will be discussed with EPD beforehand if necessitated by the work schedule.

- Prepare and submit the UECs for the on-site parcels (and off-site parcels if warranted).

Apex has included a monthly summary of hours invoiced to this project by a Georgia licensed professional geologist as **Appendix E.**

6.1 Work Plan for Semi-Annual Groundwater Sampling Event

A semi-annual groundwater sampling event will be conducted in October or November 2018 in accordance with this revised groundwater sampling plan. For the next sampling event, groundwater elevations will be collected site-wide in each of the 13 site monitoring wells. Nine of the site monitoring wells will then be purged and sampled for laboratory analyses. The nine Site monitoring wells that will be sampled during the October 2018 semi-annual event include MW-1, MW-1D, MW-3A, MW-4A, MW-9A, MW-10, MW-11, MW-12, and MW-14. These monitoring wells were either not sampled during the last (May 2018) semi-annual sampling event or they are critical source area and plume monitoring locations that are on schedule to be sampled at least once per year. Monitoring wells MW-6, MW-7a, and MW-13 will not be sampled in October 2018 as they are now on an annual sampling basis and were last sampled in May 2018.

Following groundwater elevation gauging, the nine monitoring wells will be purged and sampled using low-flow methods as was done during previous monitoring events. Groundwater sampling methods specified in previously approved work plans will be followed. During low-flow purging, the groundwater quality field parameters of pH, temperature, dissolved oxygen, conductivity, and oxidation-reduction potential will be measured at three- to five-minute intervals to determine groundwater stabilization

Once the groundwater field parameters are stabilized, groundwater samples will be collected from each of the seven monitoring wells and placed in laboratory-provided bottle ware. Samples will be placed on ice and shipped to a Georgia-certified laboratory for analyses of VOCs by EPA Method 8260. The following primary and quality control samples are proposed for Method 8260 VOC analyses:

- 9-Primary samples
- 1-Trip blank (provided by lab)
- 1-Blind field duplicate

If scheduling allows, the semi-annual groundwater sampling event will be conducted during the same mobilization as the off-site DPT sampling event, or concurrent with sampling of any new wells that are installed on-site or off-site as described in prior work plans.

6.2 Ninth (9th) Semi-Annual Progress Report

The 9th Semi-Annual Progress Report will include data and results of the October 2018 semi-annual groundwater monitoring event; results of the off-site DPT sampling event (if available at that time); summary and sampling results of any new monitoring wells installed during the semi-annual period; an updated conceptual site model; responses to any EPD comments for prior Progress Reports; and any necessary updates to the VRP schedule.

The next Progress Report (9th) will be submitted at the end of January 2019. A separate report that presents only the off-site DPT groundwater data and off-site monitoring well construction and sampling data may be prepared and submitted on an alternate schedule if necessitated by the work schedule and agreed to by EPD.

6.3 VRP Schedule of Activities

The following table presents a preliminary schedule of potential future VRP activities. Past milestone tasks already completed at the Site are not included in the revised schedule. This schedule will be updated in the next Progress Report, or under separate submittal to EPD.

Table - Schedule of Future VRP Activities

VRP Task or Milestone	Estimated Start Date or Sequencing Timeframe
Petition EPD to remain in VRP using an alternate administrative process for completion	Included in current report
Finalize and execute off-site Access Agreements (underway)	August 24, 2018
Implement alternate administrative process for VRP program completion	TBD (estimated late September 2018)
Begin off-site DPT groundwater investigation (*schedule assumes access granted by August 24, 2018*)	September 10, 2018
Evaluate off-site DPT groundwater data; Determine if additional DPT sampling is required to complete delineation	September 27, 2018
Perform semi-annual groundwater monitoring event using modified sampling plan in 8th Progress Report	Late October 2018 or November, 2018
Install and sample deeper on-site and off-site permanent monitoring wells (including new POD well); perform VI sampling if required based on initial VI screening evaluations	Late November 2018
Submit 9th Progress Report. Include work plan for subsequent phase of groundwater investigations (if required)	January 31, 2019
Submit draft & final UECs (include off-site properties if needed)	TBD
Submit CSR with Completion Certification	TBD
Modify RAP and implement additional remedial measures (if required for Type 1 RRS and UEC compliance)	TBD

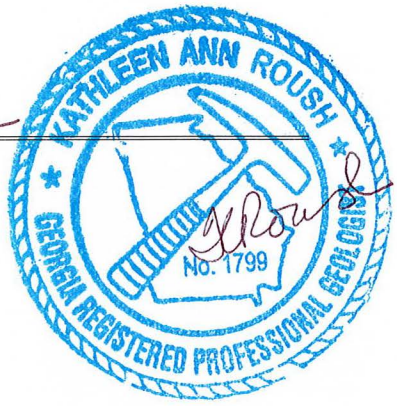
The above schedule includes several “to be determined” (TBD) dates that are currently unknown and are dependent on completing other work tasks that may have variable schedules. This schedule assumes that Site work can continue under previously submitted work plans while CMC and Georgia EPD develop an alternate administrative process to continue in the VRP.

7.0 Registered Professional Supporting Documentation

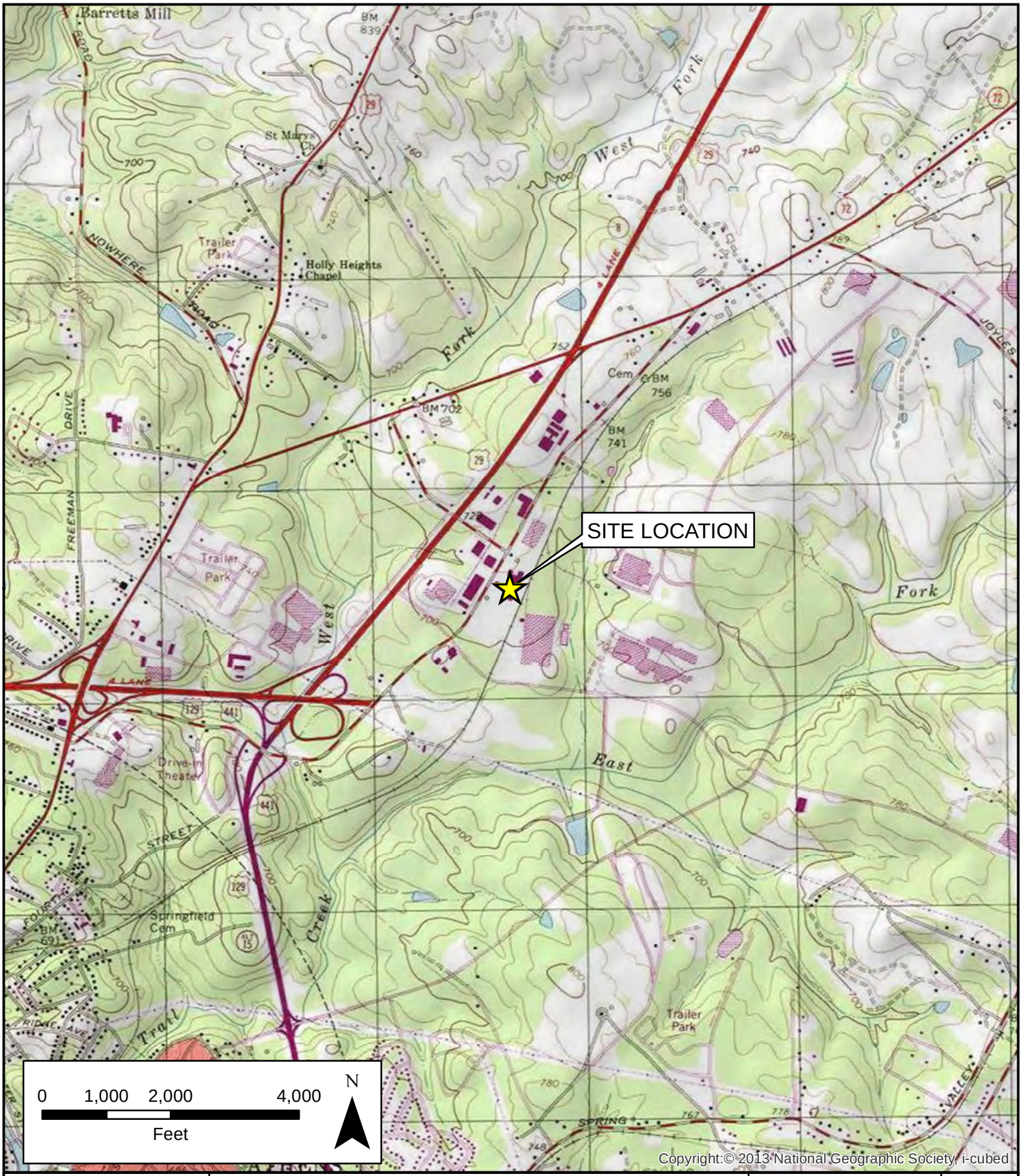
CERTIFICATION

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

Kathleen Roush, P.G.
Georgia Registration No. 1799



FIGURES



CHECK BY: GW	SITE LOCATION MAP	APEX	FIGURE
DRAWN BY: SP			1
DATE: 1/17/18	FORMER LOEF FACILITY		
SCALE: 1in = 2,000 ft	590 OLD HULL ROAD		
CAD NO.: 510507-001	ATHENS, GEORGIA		
PRJ NO.: 510507-001			

CHECK BY	SGW
DRAWN BY	SJP
DATE	7/11/18
SCALE	AS SHOWN
CAD NO.	510507-002
PRJ NO.	510507-001

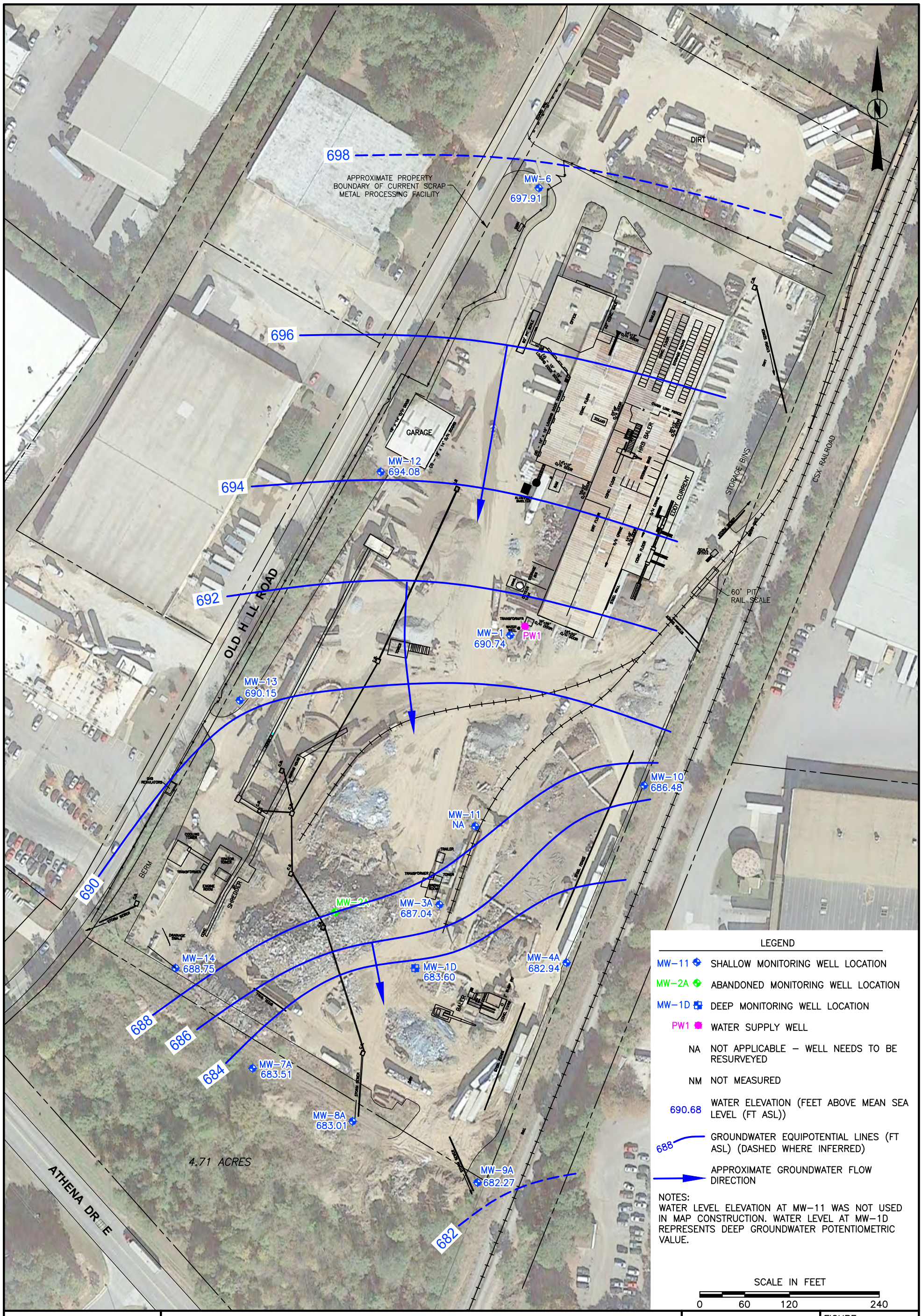
SITE PLAN WITH WELLS AND DPT BORINGS

FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, GEORGIA

APEX

FIGURE

2



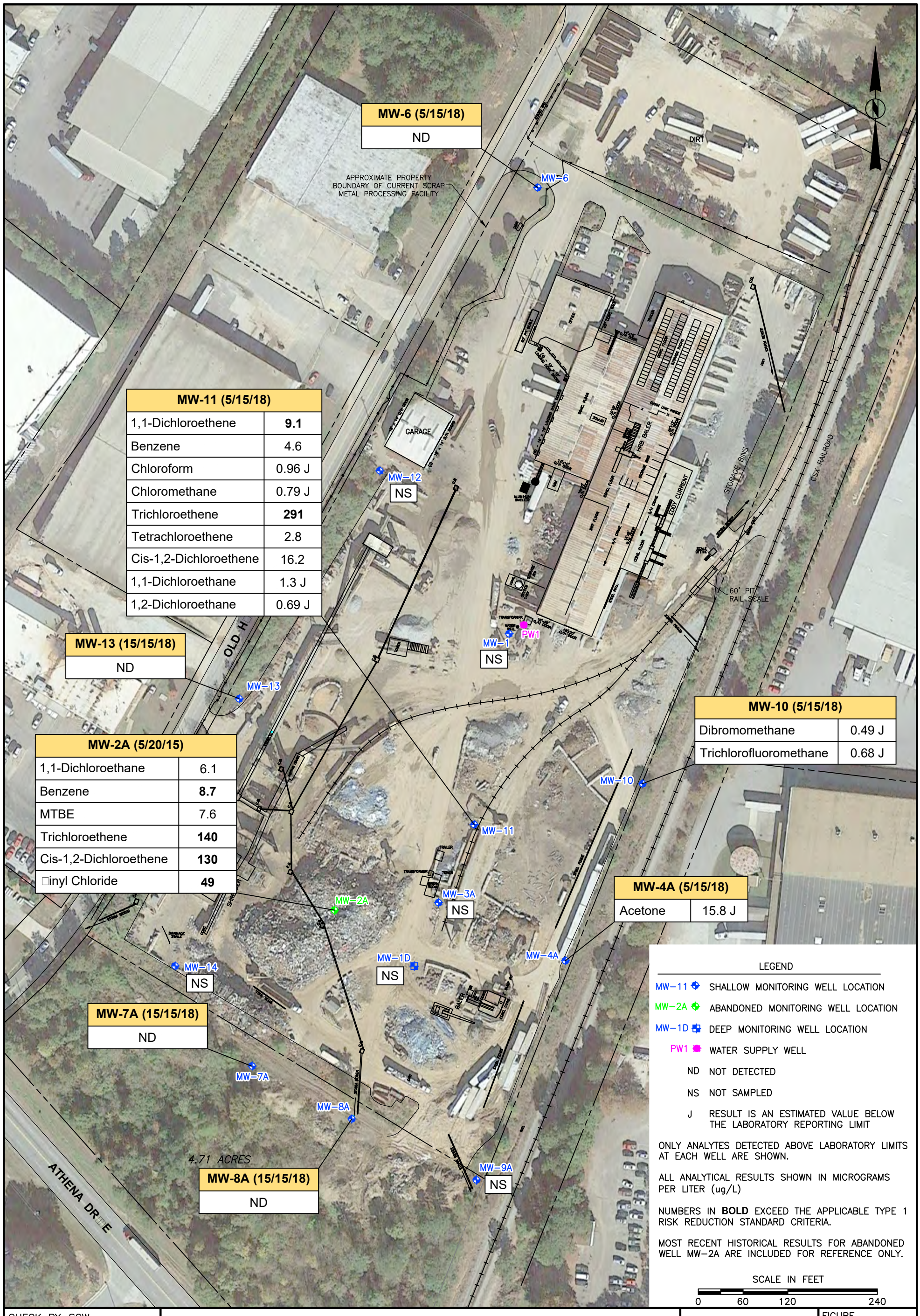
CHECK BY	SGW
DRAWN BY	SJP
DATE	6/22/18
SCALE	AS SHOWN
CAD NO.	510507-002
PRJ NO.	510507-002

SHALLOW GROUNDWATER POTENTIOMETRIC SURFACE MAP
(MAY 15, 2018)

FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, GEORGIA

APEX

FIGURE
3



CHECK BY	SGW
DRAWN BY	SJP
DATE	6/22/18
SCALE	AS SHOWN
CAD NO.	510507-002
PRJ NO.	510507-002

GROUNDWATER ANALYTICAL RESULTS: MONITORING WELLS
(MAY 2018)

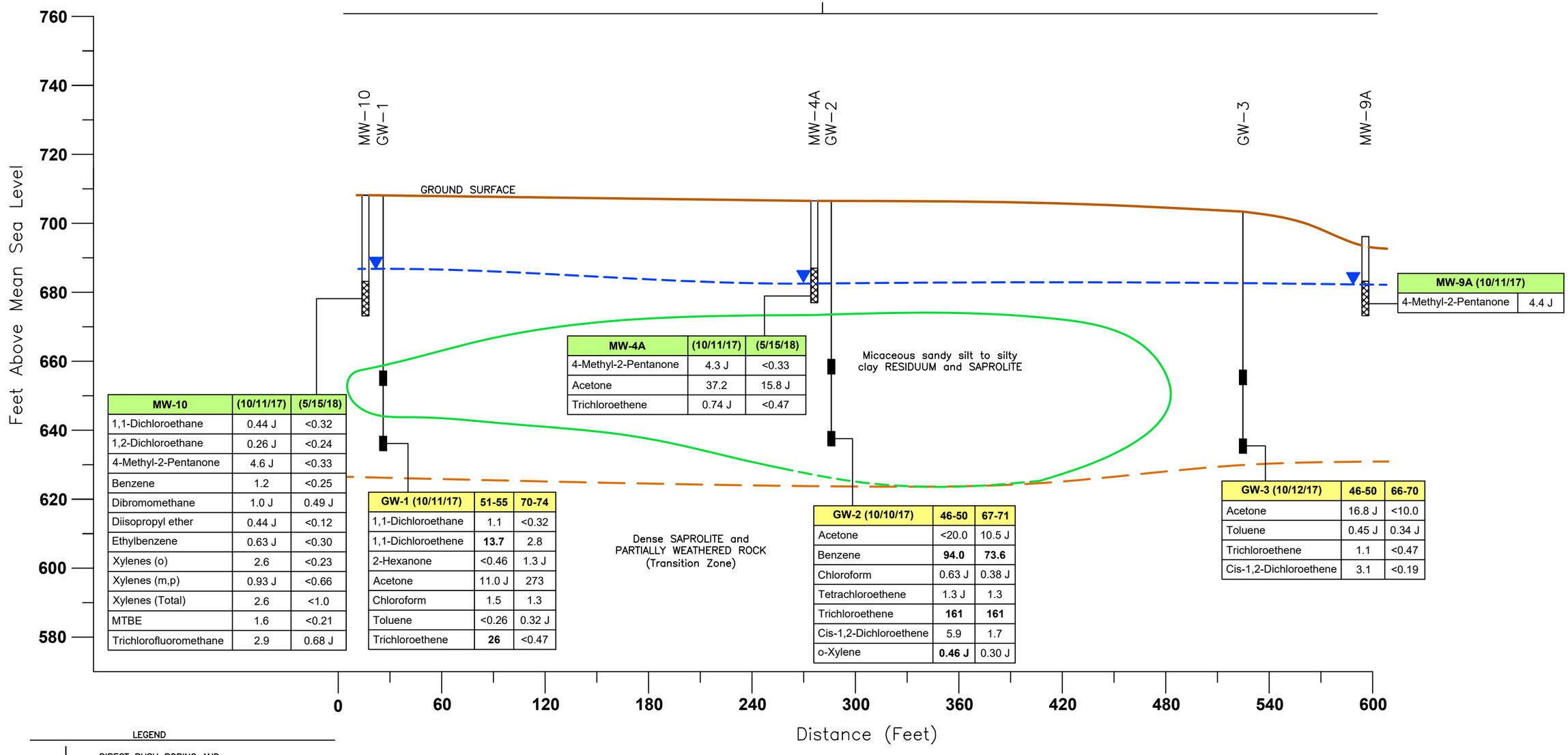
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, GEORGIA

APEX

FIGURE
4

A Northeast — A' Southwest

B–B'



MW-10	(10/11/17)	(5/15/18)
1,1-Dichloroethane	0.44 J	<0.32
1,2-Dichloroethane	0.26 J	<0.24
4-Methyl-2-Pentanone	4.6 J	<0.33
Benzene	1.2	<0.25
Dibromomethane	1.0 J	0.49 J
Diisopropyl ether	0.44 J	<0.12
Ethylbenzene	0.63 J	<0.30
Xylenes (o)	2.6	<0.23
Xylenes (m,p)	0.93 J	<0.66
Xylenes (Total)	2.6	<1.0
MTBE	1.6	<0.21
Trichlorofluoromethane	2.9	0.68 J

GW-1 (10/11/17)	51-55	70-74
1,1-Dichloroethane	1.1	<0.32
1,1-Dichloroethene	**13.7**	2.8
2-Hexanone	<0.46	1.3 J
Acetone	11.0 J	273
Chloroform	1.5	1.3
Toluene	<0.26	0.32 J
Trichloroethene	**26**	<0.47

MW-4A	(10/11/17)	(5/15/18)
4-Methyl-2-Pentanone	4.3 J	<0.33
Acetone	37.2	15.8 J
Trichloroethene	0.74 J	<0.47

GW-2 (10/10/17)	46-50	67-71
Acetone	<20.0	10.5 J
Benzene	**94.0**	**73.6**
Chloroform	0.63 J	0.38 J
Tetrachloroethene	1.3 J	1.3
Trichloroethene	**161**	**161**
Cis-1,2-Dichloroethene	5.9	1.7
o-Xylene	**0.46 J**	0.30 J

GW-3 (10/12/17)	46-50	66-70
Acetone	16.8 J	<10.0
Toluene	0.45 J	0.34 J
Trichloroethene	1.1	<0.47
Cis-1,2-Dichloroethene	3.1	<0.19

MW-9A (10/11/17)	
4-Methyl-2-Pentanone	4.4 J

LEGEND

- DIRECT PUSH BORING AND SAMPLE DEPTH
- MONITORING WELL AND SCREENED INTERVAL
- APPROXIMATE GROUNDWATER TABLE (MAY 15, 2018)
- DISSOLVED PHASE TCE (>5 ug/L)
- LITHOLOGIC CONTACT (DASHED WHERE ESTIMATED OR INFERRED)
- J ESTIMATED CONCENTRATION
- TCE TRICHLOROETHENE

NOTES:

LITHOLOGIC INTERPRETATIONS AND DEPTH INTERVALS ESTIMATED FROM HISTORICAL SOIL BORING LOGS AND GEOLOGIC CROSS SECTIONS (DASHED WHERE INFERRED).

ONLY ANALYTES DETECTED ABOVE LABORATORY LIMITS ARE SHOWN.

ALL ANALYTICAL RESULTS SHOWN IN MICROGRAMS PER LITER (ug/L).

NUMBERS IN **BOLD** EXCEED THE APPLICABLE TYPE 1 RISK REDUCTION STANDARD CRITERIA.

CHECK BY	GW
DRAWN BY	SP
DATE	6/22/18
SCALE	AS SHOWN
CAD NO.	510507–001
PRJ NO.	510507–001

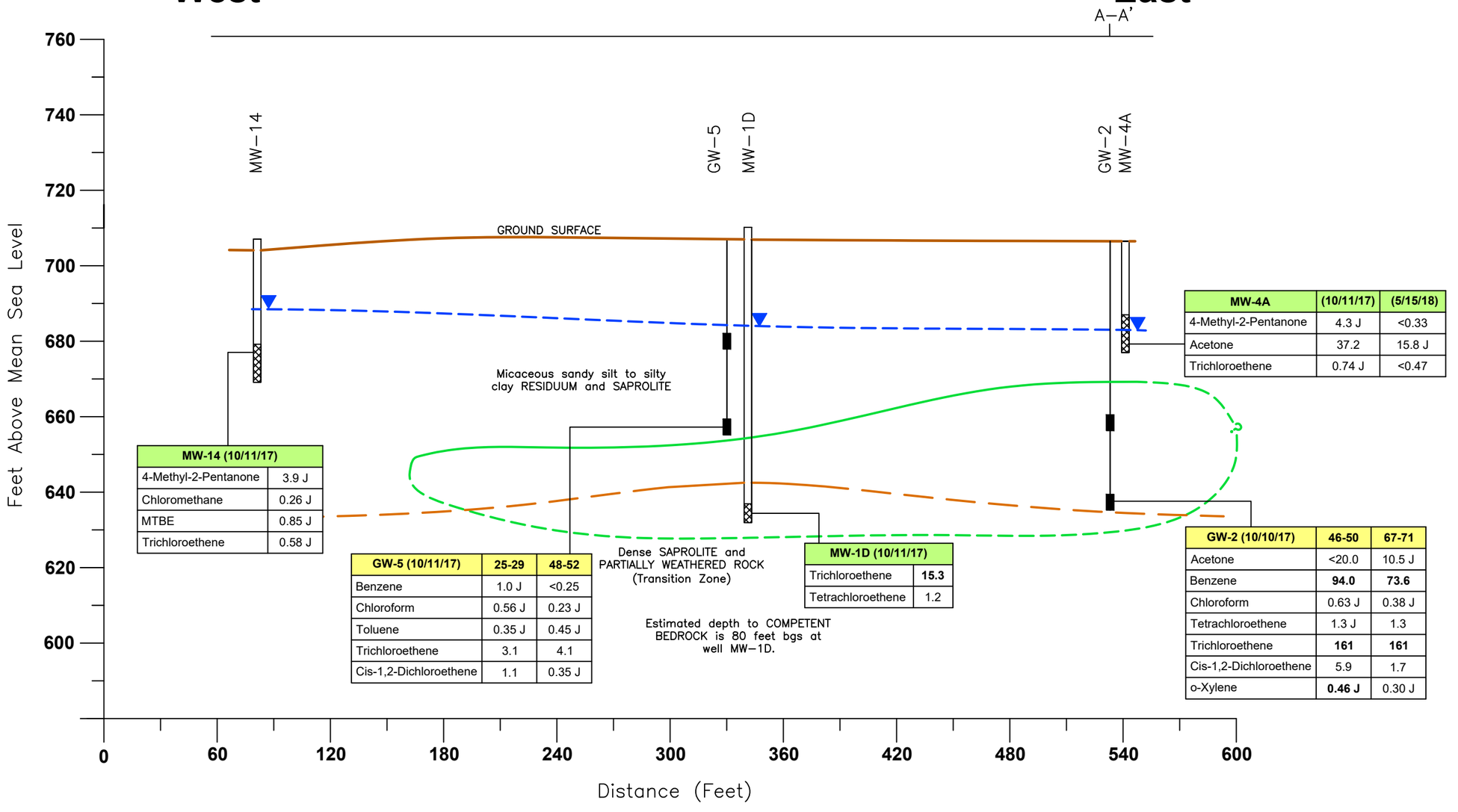
A–A' CROSS SECTION

FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, GEORGIA

APEX

FIGURE 5

B West — B' East



MW-14 (10/11/17)	
4-Methyl-2-Pentanone	3.9 J
Chloromethane	0.26 J
MTBE	0.85 J
Trichloroethene	0.58 J

GW-5 (10/11/17)	25-29	48-52
Benzene	1.0 J	<0.25
Chloroform	0.56 J	0.23 J
Toluene	0.35 J	0.45 J
Trichloroethene	3.1	4.1
Cis-1,2-Dichloroethene	1.1	0.35 J

MW-1D (10/11/17)	
Trichloroethene	**15.3**
Tetrachloroethene	1.2

MW-4A	(10/11/17)	(5/15/18)
4-Methyl-2-Pentanone	4.3 J	<0.33
Acetone	37.2	15.8 J
Trichloroethene	0.74 J	<0.47

GW-2 (10/10/17)	46-50	67-71
Acetone	<20.0	10.5 J
Benzene	**94.0**	**73.6**
Chloroform	0.63 J	0.38 J
Tetrachloroethene	1.3 J	1.3
Trichloroethene	**161**	**161**
Cis-1,2-Dichloroethene	5.9	1.7
o-Xylene	**0.46 J**	0.30 J

LEGEND

- DIRECT PUSH BORING AND SAMPLE DEPTH
- MONITORING WELL AND SCREENED INTERVAL
- APPROXIMATE GROUNDWATER TABLE (MAY 15, 2018)
- DISSOLVED PHASE TCE (>5 ug/L)
- LITHOLOGIC CONTACT (DASHED WHERE ESTIMATED OR INFERRED)
- J ESTIMATED CONCENTRATION
- TCE TRICHLOROETHENE

NOTES:

LITHOLOGIC INTERPRETATIONS AND DEPTH INTERVALS ESTIMATED FROM HISTORICAL SOIL BORING LOGS AND GEOLOGIC CROSS SECTIONS (DASHED WHERE INFERRED).

ONLY ANALYTES DETECTED ABOVE LABORATORY LIMITS ARE SHOWN.

ALL ANALYTICAL RESULTS SHOWN IN MICROGRAMS PER LITER (ug/L).

NUMBERS IN **BOLD** EXCEED THE APPLICABLE TYPE 1 RISK REDUCTION STANDARD CRITERIA.

CHECK BY	GW
DRAWN BY	SP
DATE	6/22/18
SCALE	AS SHOWN
CAD NO.	510507–001
PRJ NO.	510507–001

B–B' CROSS SECTION

FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, GEORGIA

APEX

FIGURE 6

TABLES

TABLE 1
GROUNDWATER SAMPLING AND ANALYTICAL PROGRAM: MAY 2018
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARK COUNTY, GEORGIA

Monitoing Well ID	Water Level	pH	Temperature	Conductivity	Dissolved Oxygen	Oxidation-Reduction Potential	Turbidity	VOCs (Method 8260)
	FIELD-MEASURED WATER QUALITY PARAMETERS							LABORATORY ANALYSES
MW-1	X							
MW-1D	X							
MW-3A	X							
MW-4A	X	X	X	X	X	X	X	X
MW-6*	X	X	X	X	X	X	X	X
MW-7A	X	X	X	X	X	X	X	X
MW-8A	X	X	X	X	X	X	X	X
MW-9A	X							
MW-10	X	X	X	X	X	X	X	X
MW-11	X	X	X	X	X	X	X	X
MW-12	X							
MW-13	X	X	X	X	X	X	X	X
MW-14	X							
QA/QC and IDW Samples								
Field Duplicate								X
Field Blank								
Trip Blank								X

NOTES:

* MW-6 is the Site background well

mV = Millivolts

SU = Standard Units

^{o}C = Degrees centigrade

mS/cm = Millisiemens per centimeter

TABLE 2
HISTORICAL GROUNDWATER GAUGING AND ELEVATIONS
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARK COUNTY, GEORGIA

Well Number	Date Measured	TOC Elevation (ft MSL)	Screen Interval (ft BGS)	Depth to Water (ft BTOC)	Water Table Elevation (ft MSL)
MW-1	5/18/2015	NS	14 to 24 ft	22.87	--
	5/21/2015	711.50		18.52	692.98
	6/3/2015			19.53	691.97
	4/25/2016			18.43	693.07
	11/16/2016			21.54	689.96
	10/10/2017			20.82	690.68
	5/15/2018			20.76	690.74
MW-1D	5/21/2015	710.17	70 to 75 ft	22.18	687.99
	6/3/2015			26.75	683.42
	4/25/2016			25.36	684.81
	11/16/2016			30.45	679.72
	10/10/2017			27.73	682.44
	5/15/2018			26.57	683.60
MW-2A*	5/9/2006	710.20	23.15 to 33.15 ft	21.50	688.70
	6/17/2009			22.87	687.33
	6/24/2010			21.00	689.20
	2/24/2011			18.05	692.15
	8/4/2011*	706.70	20 to 30 ft	18.00	688.70
	2/24/2012			19.13	687.57
	9/20/2012			18.89	687.81
	3/7/2013			NM	NM
	3/7/2013			NM	NM
	1/21/2015	706.26		18.15	688.11
	5/18/2015			16.86	689.40
MW-3A	5/9/2006	712.23	20 to 30 ft	25.44	686.79
	6/17/2009			26.79	685.44
	6/24/2010			24.82	687.41
	2/24/2011			25.15	687.08
	8/4/2011			26.15	686.08
	2/24/2012			26.83	685.40
	9/20/2012			26.76	685.47
	3/7/2013			25.72	686.51
	1/22/2015	712.20		25.59	686.61
	5/18/2015			24.31	687.89
	4/25/2016			23.30	688.90
	11/16/2016			27.08	685.12
	5/5/2017			26.38	685.82
	10/10/2017			25.85	686.35
	5/15/2018			25.16	687.04

TABLE 2
HISTORICAL GROUNDWATER GAUGING AND ELEVATIONS
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARK COUNTY, GEORGIA

Well Number	Date Measured	TOC Elevation (ft MSL)	Screen Interval (ft BGS)	Depth to Water (ft BTOC)	Water Table Elevation (ft MSL)
MW-4A	5/9/2006	709.18	19.5 to 29.5 ft	27.10	682.08
	6/17/2009			24.76	684.42
	6/24/2010			23.21	685.97
	2/24/2011			22.94	686.24
	8/4/2011			25.49	683.69
	2/24/2012			24.77	684.41
	9/20/2012			24.84	684.34
	3/7/2013			22.96	686.22
	1/22/2015	706.08		23.34	682.74
	5/18/2015			22.21	683.87
	4/25/2016			21.78	684.30
	11/16/2016			26.70	679.38
	5/5/2017			24.26	681.82
	10/10/2017			23.95	682.13
	5/15/2018			23.14	682.94
MW-6	6/22/2006	720.15	20 to 30 ft	21.67	698.48
	6/17/2009			23.00	697.15
	6/24/2010			20.42	699.73
	2/24/2011			20.62	699.53
	8/4/2011			20.50	699.65
	2/24/2012			22.90	697.25
	9/20/2012			23.81	696.34
	3/7/2013			22.38	697.77
	1/22/2015	719.87		22.36	697.51
	5/18/2015			20.54	699.33
	4/25/2016			19.28	700.59
	11/16/2016			23.75	696.12
	10/10/2017			22.96	696.91
	5/15/2018			21.96	697.91
MW-7A	5/9/2006	696.08	9.5 to 19.5 ft	15.09	680.99
	6/17/2009			15.47	680.61
	6/24/2010			12.46	683.62
	2/24/2011			12.81	683.27
	8/4/2011			18.05	678.03
	2/24/2012			14.51	681.57
	9/20/2012			15.52	680.56
	3/7/2013			11.97	684.11
	1/22/2015	697.15		12.61	684.54
	5/18/2015			13.05	684.10
	4/25/2016			12.52	684.63
	11/16/2016			18.90	678.25
	5/5/2017			13.52	683.63
	10/10/2017			14.94	682.21
	5/15/2018			13.64	683.51

TABLE 2
HISTORICAL GROUNDWATER GAUGING AND ELEVATIONS
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARK COUNTY, GEORGIA

Well Number	Date Measured	TOC Elevation (ft MSL)	Screen Interval (ft BGS)	Depth to Water (ft BTOC)	Water Table Elevation (ft MSL)
MW-8A	5/9/2006	695.23	9.5 to 19.5 Ft	12.49	682.74
	6/17/2009			14.02	681.21
	6/24/2010			11.30	683.93
	2/24/2011			11.54	683.69
	8/4/2011			16.87	678.36
	2/24/2012			12.93	682.30
	9/20/2012			13.89	681.34
	3/7/2013			10.91	684.32
	1/22/2015	695.26		11.39	683.87
	5/18/2015			11.75	683.51
	4/25/2016			11.39	683.87
	11/16/2016			17.96	677.30
	5/5/2017			12.04	683.22
	10/10/2017			NM[/A]	NM[/A]
	5/15/2018			12.25	683.01
MW-9A	5/9/2006	697.13	10 to 20 Ft	13.91	683.22
	6/17/2009			16.51	680.62
	6/24/2010			12.79	684.34
	2/24/2010			12.65	684.48
	8/4/2011			19.80	677.33
	2/24/2012			11.21	685.92
	9/20/2012			10.46	686.67
	3/7/2013			10.21	686.92
	1/22/2015	696.14		12.42	683.72
	5/18/2015			13.58	682.56
	4/25/2016			13.18	682.96
	11/16/2016			21.18	674.96
	5/5/2017			8.97	687.17
	10/10/2017			6.69	689.45
	5/15/2018			13.87	682.27
MW-10**	3/7/2013	NS	25 to 35 Ft	20.86	NS
	1/22/2015	708.16		21.28	686.88
	5/18/2015			20.23	687.93
	4/25/2016			19.72	688.44
	11/16/2016			23.82	684.34
	5/5/2017			22.34	685.82
	10/10/2017			21.58	686.58
	5/15/2018			21.68	686.48
MW-11	3/7/2013	NS	25 to 35 Ft	25.37	NS
	1/22/2015	713.32		25.30	688.02
	5/18/2015			24.14	689.18
	4/25/2016			23.06	690.26
	11/16/2016			26.22	687.10
	10/10/2017[/B]			22.13	691.19[/B]
	5/15/2018[/B]			25.22	688.10[/B]

TABLE 2
HISTORICAL GROUNDWATER GAUGING AND ELEVATIONS
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARK COUNTY, GEORGIA

Well Number	Date Measured	TOC Elevation (ft MSL)	Screen Interval (ft BGS)	Depth to Water (ft BTOC)	Water Table Elevation (ft MSL)
MW-12	3/7/2013	NS	25 to 35 Ft	15.81	NS
	1/22/2015	712.70		18.61	694.09
	5/18/2015			17.53	695.17
	4/25/2016			16.86	695.84
	11/16/2016			19.27	693.43
	10/10/2017			19.30	693.40
	5/15/2018			18.62	694.08
MW-13	3/7/2013	NS	25 to 35 Ft	17.29	NS
	1/22/2015	707.45		17.49	689.96
	5/18/2015			16.30	691.15
	4/25/2016			15.25	692.20
	11/16/2016			18.62	688.83
	10/10/2017			17.80	689.65
	5/15/2018			17.30	690.15
MW-14	3/7/2013	NS	25 to 35 Ft	18.78	NS
	1/22/2015	707.07		19.18	687.89
	5/18/2015			NM	--
	4/25/2016			16.23	690.84
	11/16/2016			21.18	685.89
	10/10/2017			19.34	687.73
	5/15/2018			18.32	688.75

Notes:

TOC = Top of Casing

BTOC = Below Top of Casing

ft BGS = feet Below Ground Surface

ft MSL - feet Mean Sea Level

NM = MW-2A was inaccessible in March 2013, so groundwater was not gauged in the well during that event.

NS = Not Surveyed. Wells MW-10 thru MW-14 were installed in December 2013 and were surveyed in January 2015.

Apex resurveyed all wells in January 2015 except MW-1 and MW-1D, which were surveyed in July 2016.

* - MW-2A was reinstalled and surveyed on March 18, 2011 then permanently abandoned in May 2015

**- Top of casing cut by Apex prior to survey

/A - MW-8A was inaccessible and could not be gauged during the October 2017 sampling event

/B - MW-11 stickup casing is damaged. The 10/10/17 and 5/15/18 values are not accurate; well needs to be repaired and re-surveyed

TABLE 3
GROUNDWATER BIO-GEOCHEMICAL, INORGANIC AND WATER QUALITY PARAMETERS
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARKE COUNTY, GEORGIA

Monitoing Well ID	Date	pH	Temperature (°C)	Conductivity (mS/cm)	Total Dissolved Solids (g/L)	Dissolved Oxygen (mg/L)	Oxidation-Reduction Potential (mV)	Turbidity (NTU)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Total Organic Carbon	Iron II	Chloride	Nitrate	Sulfate	Sulfide
		FIELD-MEASURED PARAMETERS							LABORATORY-MEASURED ANALYTICAL RESULTS (mg/L)								
MW-1	6/3/2015	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	4/26/2016	5.17	22.93	0.07	NM	0.61	99	1.7	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11/17/2016	5.32	22.19	0.058	NM	2.54	154	0.9	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/10/2017	6.09	26.78	0.063	NM	0.83	184.9	6.3	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1D	6/3/2015	NM	NM	NM	NM	NM	NM		NM	NM	NM	NM	NM	NM	NM	NM	NM
	4/26/2016	5.54	24.78	0.079	NM	1.52	121	0.8	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11/17/2016	4.84	16.96	0.078	NM	2.67	264	1.7	NM	NM	NM	<1.0	NM	NM	NM	NM	NM
	10/11/2017	11.54	25.49	0.098	NM	2.05	160.3	8.0	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2A	6/24/2010	4.65	18.1	0.581	0.037	10.2	450		3.2	0.16	<0.007	8.2	7.25	NM	0.49	<1	<2
	8/4/2011	5.45	20.78	0.295	NM	0.54	10		3.1	0.78	<0.007	60.8	47	NM	0.25	<1	<2
	2/24/2012	6.05	19.54	0.903	NM	0	-67		NM	NM	NM	NM	NM	NM	NM	NM	NM
	9/20/2012	5.25	22.42	0.91	NM	2.05	-9		NM	NM	NM	NM	NM	NM	NM	NM	NM
	3/8/2013	5.25	22.42	0.91	NM	2.05	-9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	1/22/2015	4.76	17.3	0.568	NM	0.58	73.5	6	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-3A	6/24/2010	4.63	19.2	0.852	0.054	9.64	398		4.2	0.36	<0.007	2.34	<0.1	NM	1.8	2	<2
	8/4/2011	4.4	20.94	0.57	NM	1.34	301		1.7	0.12	<0.007	1.42	<0.1	NM	1.7	<1	<2
	2/24/2012	5.13	20.01	0.06	NM	1.91	327		NM	NM	NM	NM	NM	NM	NM	NM	NM
	9/20/2012	4.21	22.44	0.067	NM	1.57	349		NM	NM	NM	NM	NM	NM	NM	NM	NM
	3/8/2013	4.21	22.44	0.067	NM	1.57	349	0.02	NM	NM	NM	NM	NM	NM	NM	NM	NM
	1/22/2015	4.63	19.51	0.075	NM	0.5	103.2	0.38	NM	NM	NM	NM	NM	NM	NM	NM	NM
	4/26/2016	5.11	23.08	0.133	NM	1.53	185	7.7	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11/17/2016	3.67	17.85	0.065	NM	1.52	410	2.3	1,200	91	<10	1.4	NM	NM	NM	NM	NM
	5/5/2017	4.58	17.9	0.075	NM	0.67	455	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/11/2017	4.85	22.35	0.101	NM	1.03	562	20.3	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 3
GROUNDWATER BIO-GEOCHEMICAL, INORGANIC AND WATER QUALITY PARAMETERS
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARKE COUNTY, GEORGIA

Monitoing Well ID	Date	pH	Temperature (°C)	Conductivity (mS/cm)	Total Dissolved Solids (g/L)	Dissolved Oxygen (mg/L)	Oxidation-Reduction Potential (mV)	Turbidity (NTU)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Total Organic Carbon	Iron II	Chloride	Nitrate	Sulfate	Sulfide
		FIELD-MEASURED PARAMETERS							LABORATORY-MEASURED ANALYTICAL RESULTS (mg/L)								
MW-4A	6/24/2010	4.66	18.8	0.164	0.11	9.54	414		0.34	0.029	<0.007	2.98	<0.1	NM	0.88	1.9	<2
	8/4/2011	4.62	21.76	0.093	NM	2.1	330		0.44	0.026	<0.007	<5	<0.1	NM	0.84	1.7	<2
	2/24/2012	4.77	19.13	0.117	NM	0.00	377		NM	NM	NM	NM	NM	NM	NM	NM	NM
	9/20/2012	4.16	22.98	0.134	NM	2.28	425		NM	NM	NM	NM	NM	NM	NM	NM	NM
	3/7/2013	4.16	22.98	0.134	NM	2.28	425	0	NM	NM	NM	NM	NM	NM	NM	NM	NM
	1/22/2015	4.26	18.06	0.196	NM	0.96	126.3	1.61	<4	<9	<7	<1	NM	44	1	1.3	<2
	4/26/2016	4.33	21.26	0.339	NM	1.77	225	0.8	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11/17/2016	3.84	20.93	0.089	NM	1.68	368	0	NM	NM	NM	NM	NM	NM	NM	NM	NM
	5/5/2017	4.29	16.1	0.168	NM	1.00	384	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/11/2017	7.67	23.78	0.689	NM	1.86	183.8	8.1	NM	NM	NM	NM	NM	NM	NM	NM	NM
	5/15/2018	4.72	23.77	0.325	NM	0.19	359	3.7	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-6*	6/24/2010	4.9	19.7	0.044	0.03	10.5	443		<0.004	<0.009	<0.007	1.79	<0.1	NM	0.44	<1	<2
	8/4/2011	4.25	19.7	0.03	NM	8.51	366		<0.004	<0.009	<0.007	<1	<0.1	NM	0.43	<1	<2
	2/24/2012	4.77	20.37	0.03	NM	3.75	354		NM	NM	NM	NM	NM	NM	NM	NM	NM
	9/20/2012	4.26	22.69	0.051	NM	4.72	681		NM	NM	NM	NM	NM	NM	NM	NM	NM
	3/7/2013	4.87	18.87	0.03	NM	5.51	359	0	<0.004	<0.009	<0.007	<1	NM	5.4	0.42	1.2	<2
	1/21/2015	4.48	19.5	0.048	NM	3.53	123.6	0.92	NM	NM	NM	NM	NM	NM	NM	NM	NM
	4/26/2016	4.39	20.12	0.049	NM	5.7	208	0.4	NM	NM	NM	NM	NM	NM	NM	NM	NM
	5/15/2018	4.60	21.32	0.030	NM	12.25	132.4	7.2	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-7A	3/8/2013	5.23	18.67	0.463	NM	3.44	301	7.23	NM	NM	NM	NM	NM	NM	NM	NM	NM
	1/22/2015	4.89	14.9	0.445	NM	0.61	195.3	3.13	NM	NM	NM	NM	NM	NM	NM	NM	NM
	4/25/2016	5.54	22.78	0.428	NM	0.8	201	0.1	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11/16/2016	5.08	24.26	0.303	NM	3.15	146	0	NM	NM	NM	NM	NM	NM	NM	NM	NM
	5/15/2018	5.11	17.33	0.400	NM	3.75	115.2	1.5	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 3
GROUNDWATER BIO-GEOCHEMICAL, INORGANIC AND WATER QUALITY PARAMETERS
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARKE COUNTY, GEORGIA

Monitoing Well ID	Date	pH	Temperature (°C)	Conductivity (mS/cm)	Total Dissolved Solids (g/L)	Dissolved Oxygen (mg/L)	Oxidation-Reduction Potential (mV)	Turbidity (NTU)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Total Organic Carbon	Iron II	Chloride	Nitrate	Sulfate	Sulfide
		FIELD-MEASURED PARAMETERS							LABORATORY-MEASURED ANALYTICAL RESULTS (mg/L)								
MW-8A	3/8/2013	5.37	18.33	0.83	NM	2.25	163	8.2	NM	NM	NM	NM	NM	NM	NM	NM	<2
	1/22/2015	5.72	16.6	0.714	NM	0.56	130.7	5.7	830	<9	<7	12.2	NM	23	<0.25	210	NM
	4/26/2016	6.57	19.3	0.737	NM	0.8	72	57	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11/16/2016	4.74	22.08	0.554	NM	1.23	173	2.3	210	<10	<10	20	NM	NM	NM	NM	NM
	10/11/2017	NS - inaccessible															
	5/15/2018	6.22	17.45	0.802	NM	0.76	71	14	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-9A	3/8/2013	5.56	18.65	0.676	NM	4.3	82	6.88	NM	NM	NM	NM	NM	NM	NM	NM	<2
	1/22/2015	6.04	14.91	0.658	NM	0.71	14.3	0.24	11	<9	<7	8.69	NM	12	<0.25	97	
	4/26/2016	6.74	20.45	0.569	NM	0.65	40	36	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11/16/2016	6.36	19.55	0.567	NM	2.22	-32	0	6.1 J	<10	<10	9.2	NM	NM	NM	NM	NM
	10/11/2017	7.04	27.04	0.547	NM	0.96	150.1	6.0	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-10	3/7/2013	4.44	20.27	0.142	NM	1.45	503	0.62	NM	NM	NM	NM	NM	NM	NM	NM	NM
	1/22/2015	4.18	17.7	0.143	NM	1.06	106.3	4	NM	NM	NM	NM	NM	NM	NM	NM	
	4/25/2016	4.67	21.97	0.223	NM	2.3	547	2.1	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11/17/2016	4.73	20.84	0.196	NM	2.22	274	0	NM	NM	NM	NM	NM	NM	NM	NM	NM
	5/5/2017	4.56	16.1	0.155	NM	0.87	474	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/10/2017	6.11	21.86	0.165	NM	1.46	473.8	8.5	NM	NM	NM	NM	NM	NM	NM	NM	NM
	5/15/2018	4.47	19.91	0.170	NM	1.90	389	4.6	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-11	3/8/2013	4.53	21.26	0.058	NM	1.09	414	1.28	NM	NM	NM	NM	NM	NM	NM	NM	<2
	1/22/2015	4.31	18.5	0.052	NM	1.85	120.6	0.65	3,600	330	<7	2.5	NM	4.8	2.1	<1	
	4/26/2016	4.75	24.28	0.06	NM	0.74	240	3.8	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11/17/2016	4.89	15.21	0.056	NM	3.76	247	3.5	2,000	92	<10	1.0	NM	NM	NM	NM	NM
	10/10/2017	8.15	22.68	0.063	NM	0.93	272.6	33.1	NM	NM	NM	NM	NM	NM	NM	NM	NM
	5/15/2018	4.75	21.70	0.043	NM	0.51	248	25	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 3
GROUNDWATER BIO-GEOCHEMICAL, INORGANIC AND WATER QUALITY PARAMETERS
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARKE COUNTY, GEORGIA

Monitoing Well ID	Date	pH	Temperature (^{o}C)	Conductivity (mS/cm)	Total Dissolved Solids (g/L)	Disslved Oxygen (mg/L)	Oxidation-Reduction Potential (mV)	Turbidity (NTU)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Total Organic Carbon	Iron II	Chloride	Nitrate	Sulfate	Sulfide
		FIELD-MEASURED PARAMETERS							LABORATORY-MEASURED ANALYTICAL RESULTS (mg/L)								
MW-12	3/7/2013	4.95	21.73	0.046	NM	2.18	400	0.12	NM	NM	NM	NM	NM	NM	NM	NM	NM
	1/22/2015	4.9	17.63	0.048	NM	3.59	192.8	2.01	NM	NM	NM	NM	NM	NM	NM	NM	
	4/26/2016	5.14	23.5	0.051	NM	3.42	134	0.4	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11/17/2016	5.48	21.84	0.054	NM	3.91	200	0	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/11/2017	6.39	24.76	0.065	NM	3.51	249.6	2.6	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-13	3/7/2013	4.82	22.29	0.05	NM	1.85	407	0.42	NM	NM	NM	NM	NM	NM	NM	NM	<2
	1/22/2015	4.48	18.71	0.049	NM	1.36	120.2	3.67	95	<9	<7	<1	NM	5	0.78	<1	
	4/26/2016	5.82	25.62	0.098	NM	2.6	225	0.9	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11/16/2016	5.39	21.79	0.052	NM	3.81	235	0.8	NM	NM	NM	NM	NM	NM	NM	NM	NM
	5/15/2018	6.51	22.13	0.179	NM	1.45	83.2	39.2	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-14	3/7/2013	5.11	22.3	0.523	NM	1.5	362	1.12	NM	NM	NM	NM	NM	NM	NM	NM	NM
	1/21/2015	5.47	18.57	0.659	NM	0.51	109.9	1.66	NM	NM	NM	NM	NM	NM	NM	NM	
	4/26/2016	5.96	26.4	0.724	NM	0.57	103	28.9	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11/16/2016	5.17	21.65	0.635	NM	1.85	128	5.1	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10/11/2017	5.83	22.26	0.647	NM	1.01	179.2	14.3	NM	NM	NM	NM	NM	NM	NM	NM	NM

NOTES:

NM - Parameter was not measured
µg/L = Micrograms per liter
mg/L = Milligrams per liter
* Background Well
mV = Millivolts
SU = Standard Units
mS/cm = Millisiemens per centimeter
^{o}C = Degrees centigrade
NTU = Nephelometric Turbidity Unit
NS = Not Sampled

TABLE 4
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARKE COUNTY, GEORGIA

Monitoing Well ID	Type 1 Risk Reduction Standard (µg/L)	1,1,2-Trichloro-1,2,2-Trifluoroethane	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	4-Methyl-2-Pentanone (Methyl isobutyl ketone)	2-Butanone (Methyl ethyl ketone)	2-Hexanone (Methyl butyl ketone)	Acetone	Benzene	Bromoform	Carbon Disulfide	Chloroform	Chloromethane (Methyl Chloride)	Cyclohexane	Dibromomethane	Diisopropyl ether	Toluene	Ethylbenzene	Isopropylbenzene (Cumene)	Methylcyclohexane	Methylene chloride	Xylenes (o)	Xylenes (m,p)	Xylenes (Total)	MTBE	Trichloroethene	Tetrachloroethene	Trichlorofluoromethane	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	Vinyl Chloride
		1.00E6	200	5	4,000	7	5	2,000	2,000	NE	4,000	5	80	4,000	80	3	NE	NE	NE	1,000	700	NE	NE	5	NE	NE	10,000	NE	5	5	2,000	70	100	2
	DATE	Analytical Results (µg/L)																																
MW-1*	6/23/2000	--	<1	<1	1.5	<1	--	--	--	--	--	1.5	--	--	--	--	--	--	--	<1	<1	--	--	--	<3	--	--	<1	**8.2**	<1	--	<1	--	<3
	6/3/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	17	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/26/2016	<1.0	<1.0	<1.0	1.1	1.9	<1.0	<1.0	<10	<10	1.6 J	1.8	<1.0	<1.0	13	0.33 J	1.3	--	--	<1.0	<1.0	0.49 J	0.89 J	4.3	--	--	0.49 J	<1.0	3.1	4.2	<1.0	3.5	<1.0	0.59 J
	11/17/2016	<1.0	<1.0	<1.0	1.2	1.8	<1.0	<10	<10	<10	<20	2.5	<1.0	<1.0	14	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	0.56 J	2.8	--	--	0.99 J	<1.0	3.8	4.2	<1.0	2.5	<1.0	<1.0
	10/10/2017	--	<0.48	<0.29	1.1	1.0	<0.24	<0.33	<0.96	<0.46	<10.0	1.7	<0.26	--	19.1	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	1.5 J	0.26 J	<0.66	<1.0	<0.21	1.8	1.7	<0.20	2.2	<0.49	<0.62
MW-1D	6/3/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	**17**	<5.0	<5.0	<5.0	<5.0	<2.0
	4/26/2016	7.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	**22**	2.2	<1.0	<1.0	<1.0	<1.0
	11/17/2016	6.2	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	**20**	2.2	<1.0	<1.0	<1.0	<1.0
	10/11/2017	--	<0.48	<0.29	<0.32	<0.56	<0.24	<0.33	<0.96	<0.46	<10.0	<0.25	<0.26	--	<0.14	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	**15.3**	1.2	<0.20	<0.19	<0.49	<0.62
MW-2A**	6/23/2000	--	<10	<10	12	**26**	--	--	--	--	--	<10	--	--	--	--	--	--	--	<10	<10	--	--	--	<30	--	<30	42	**570**	<5	--	**100**	**--**	**31**
	6/26/2003	--	9.7	<5	30	**43**	--	--	--	--	--	**11**	**--**	--	--	--	--	--	--	<5	<5	--	--	--	11	--	11	150	**1800**	<5	--	**250**	**--**	**52**
	8/12/2003	--	32	<5	110	**78**	--	--	--	--	--	**18**	**--**	--	--	--	--	--	--	8.9	<5	--	--	--	17	--	17	250	**6500**	<5	--	**1300**	**--**	**170**
	9/19/2003	--	28	<5	70	**65**	--	--	--	--	--	**17**	**--**	--	--	--	--	--	--	9.3	<5	--	--	--	18	--	18	200	**4700**	<5	--	**700**	**--**	**98**
	10/22/2003	--	28	<5	90	**80**	--	--	--	--	--	**36**	**--**	--	--	--	--	--	--	13	6.4	--	--	--	26	--	26	250	**3000**	<5	--	**590**	**--**	**140**
	11/18/2003	--	21	<5	71	**58**	--	--	--	--	--	**18**	**--**	--	--	--	--	--	--	9.1	<5	--	--	--	17	--	17	250	**8100**	<5	--	**1000**	**--**	**110**
	12/24/2003	--	34	<5	91	**70**	--	--	--	--	--	**16**	**--**	--	--	--	--	--	--	9.4	<5	--	--	--	22	--	22	280	**9600**	<5	--	**1500**	**--**	**130**
	1/23/2004	--	<50	<5	55	**60**	--	--	--	--	--	<50	**--**	--	--	--	--	--	--	<50	<5	--	--	--	<50	--	<50	370	**4000**	<5	--	**560**	**--**	**130**
	3/29/2004	--	16	<5	54	**46**	--	--	--	--	--	**22**	**--**	--	--	--	--	--	--	6.9	<5	--	--	--	14	--	14	250	**4000**	<5	--	**790**	**--**	**83**
	5/7/2004	--	11	<5	34	**42**	--	--	--	--	--	**20**	**--**	--	--	--	--	--	--	<5	5.8	--	--	--	14	--	14	210	**2500**	<5	--	**420**	**--**	**54**
	7/15/2004	--	11	<5	38	**32**	--	--	--	--	--	**25**	**--**	--	--	--	--	--	--	7.1	8.5	--	--	--	18	--	18	280	**1900**	<5	--	**420**	**--**	**67**
	9/30/2004	--	<5	<5	10	**23**	--	--	--	--	--	**21**	**--**	--	--	--	--	--	--	130	46	--	--	--	58	--	58	190	**430**	<5	--	**130**	**--**	**32**
	5/9/2006	--	9.4	<5	54	**38**	--	--	--	--	--	**13**	**--**	--	--	--	--	--	--	<5	<5	--	--	--	10	--	10	77	**2600**	<5	--	**720**	**--**	**51**
	6/17/2009	--	<5	<5	<5	<5	--	--	--	--	--	**14**	**--**	--	--	--	--	--	--	<5	<5	--	--	--	<10	--	<10	<5	**70**	<5	--	31	**--**	**7**
	6/24/2010	--	<5	<5	23	**17**	--	--	--	--	--	**12**	**--**	--	--	--	--	--	--	<5	<5	--	--	--	1.9	--	1.9	15	**710**	<5	--	**300**	**--**	**54**
	2/24/2011	--	<5	<5	19	**14**	--	11	--	--	90	**7.2**	**--**	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	20	**730**	<5	120	**370**	**--**	**33**
	3/18/2011**	--	<5	<5	6	**10**	--	11	--	--	<50	**7.8**	**--**	-	7	--	--	--	--	<5	<5	--	--	--	<5	--	<5	9.4	**210**	<5	<5	**120**	**--**	**19**
	8/4/2011	--	<5	<5	21	**19**	--	90	210	12	670	**13**	**--**	9	<5	--	--	--	--	13	<5	--	--	--	7.6	7.8	15.4	43	**810**	<5	<5	**390**	**--**	**61**
	8/4/2011(DUP)	--	<5	<5	21	**18**	--	79	150	10	630	**11**	**--**	7.2	<5	--	--	--	--	11	<5	--	--	--	6.8	7.1	13.9	38	**680**	<5	<5	**310**	**--**	**55**
	2/24/2012	--	<5	<5	<5	**7.7**	--	160	210	19	700	**11**	**--**	<5	<5	--	--	--	--	8.6	<5	--	--	--	7.3	9.8	17.1	32	**69**	<5	<5	**100**	**--**	**34**
	9/20/2012	--	<5	<5	9.1	**9.4**	--	96	150	22	530	**11**	**--**	8.3	<5	--	--	--	--	6.9	<5	--	--	--	5.9	8.3	14.2	34	**140**	<5	<5	**210**	**--**	**69**
	3/7/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/22/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	,10	5.4	**23**	<5.0	<5.0	21	<5.0	**29**
	DUP (FD012215B) 1/22/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	**5.2**	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	6	**43**	<5.0	<5.0	33	<5.0	**29**
	5/20/2015	--	<5.0	<5.0	6.1	<5.0	--	<10	<50	<10	<50	**8.7**	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	7.6	**140**	<5.0	<5.0	**130**	<5.0	**49**
MW-3A	6/23/2000	--	<1	<5	<1	<1	--	--	--	--	--	**36**	**--**	--	--	--	--	--	--	<1	<1	--	--	--	<3	--	<3	<1	**30**	<5	--	<1	--	<3
	5/7/2004	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	**11**	<5	--	<5	--	<2
	5/9/2006	--	<5	<5	<5	<5	--	--	--	--	--	**7.4**	**--**	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	**22**	<5	--	<5	--	<2
	6/17/2009	--	<5	<5	<5	<5	--	--	--	--	--	**13**	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	**15**	<5	--	<5	--	<2
	6/24/2010	--	<5	<5	<5	<5	--	--	--	--	--	**16**	**--**	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	**17**	<5	--	<5	--	<2
	2/24/2011	--	<5	<5	<5	<5	--	<10	<50	<10	<50	**14**	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	**13**	<5	<5	<5	--	<2
	8/4/2011	--	<5	<5	<5	<5	--	<10	<50	<10	<50	**13**	**--**	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	**11**	<5	<5	<5	--	<2
	2/24/2012	--	<5	<5	<5	<5	--	<10	<50	<10	<50	**10**	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	**8**	<5	<5	<5	--	<2
	9/20/2012	--	<5	<5	<5	<5	--	<10	<50	<10	<50	**14**	**--**	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	**9.8**	<5	<5	<5	--	<2
	3/7/2013	--	<5	<5	<5	<5	--	<10	<50	<10	<50	**14**	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	**9.6**	<5	<5	<5	--	<2
	1/22/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	**22**	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	**8.8**	<5.0	<5.0	<5.0	<5.0	<2.0
	4/26/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	**8.2**	<1.0	<1.0	<1.0	0.19 J	0.90 J	--	--	<1.0	<1.0	<1.0	0.45 J	<1.0	--	--	<1.0	<1.0	3.9	<1.0	<1.0	0.97 J	<1.0	<1.0
	11/17/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	**14**	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	**5.0**	<1.0	<1.0	0.70 J	<1.0	<1.0
	5/5/2017	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	2.2J	**7.3**	<1.0	<1.0	<1.0	<1.0	0.72J	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	3.4	<1.0	<1.0	1.5	<1.0	<1.0
	10/11/2017	--	<0.48	<0.29	<0.32	<0.56	<0.24	<0.33	<0.96	<0.46	<10.0	**7.4**	<0.26	--	<0.14	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	2.5	<0.46	<0.20	1.0	<0.49	<0.62
	DUP10112017 10/11/2017	--	<0.48	<0.29	<0.32	<0.56	<0.24	4.4 J	<0.96	<0.46	<10.0	**7.5**	<0.26	--	<0.14	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	2.9	<0.46	<0.20	0.89 J	<0.49	<0.62

TABLE 4
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARKE COUNTY, GEORGIA

Monitoing Well ID	Type 1 Risk Reduction Standard (µg/L)	1,1,2-Trichloro-1,2,2-Trifluoroethane	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	4-Methyl-2-Pentanone (Methyl isobutyl ketone)	2-Butanone (Methyl ethyl ketone)	2-Hexanone (Methyl butyl ketone)	Acetone	Benzene	Bromoform	Carbon Disulfide	Chloroform	Chloromethane (Methyl Chloride)	Cyclohexane	Dibromomethane	Diisopropyl ether	Toluene	Ethylbenzene	Isopropylbenzene (Cumene)	Methylcyclohexane	Methylene chloride	Xylenes (o)	Xylenes (m,p)	Xylenes (Total)	MTBE	Trichloroethene	Tetrachloroethene	Trichlorofluoromethane	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	Vinyl Chloride
		1.00E6	200	5	4,000	7	5	2,000	2,000	NE	4,000	5	80	4,000	80	3	NE	NE	NE	1,000	700	NE	NE	5	NE	NE	10,000	NE	5	5	2,000	70	100	2
	DATE	Analytical Results (µg/L)																																
MW-4A	6/23/2000	--	<1	<5	<1	<1	--	--	--	--	--	**12**	**--**	--	--	--	--	--	--	<1	<1	--	--	--	<1	--	<1	<1	<1	2.7	--	<1	--	<1
	5/7/2004	--	<5	<5	<5	<5	--	--	--	--	--	**27**	**--**	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	**29**	<5	--	<5	--	<5
	5/9/2006	--	<5	<5	<5	<5	--	--	--	--	--	**37**	**--**	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	**51**	<5	--	<5	--	<2
	6/17/2009	--	<5	<5	<5	<5	--	--	--	--	--	<5	**--**	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	**7.2**	<5	--	<5	--	<2
	6/24/2010	--	<5	<5	<5	<5	--	--	--	--	--	4.9	**--**	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	**6.1**	<5	--	<5	--	<2
	2/24/2011	--	<5	<5	<5	<5	--	<10	<50	<10	<50	**7**	**--**	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	**13**	<5	<5	<5	--	<2
	8/4/2011	--	<5	<5	<5	<5	--	<10	<50	<10	<50	**29**	**--**	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	**51**	<5	<5	9.5	--	<2
	2/24/2012	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	**--**	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	9/20/2012	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	**--**	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	**6.3**	<5	<5	<5	--	<2
	3/7/2013	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	**--**	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	1/22/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/26/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	0.35 J	<1.0	<1.0	<1.0	<1.0	<1.0
	11/17/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	**34**	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	1.2	<1.0	**81**	2.9	<1.0	21	0.43 J	<1.0
	5/5/2017	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	1.7	<1.0	<1.0	0.53J	<1.0	<1.0
	10/11/2017	--	<0.48	<0.29	<0.32	<0.56	<0.24	4.3 J	<0.96	<0.46	37.2	<0.25	<0.26	--	<0.14	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	0.74 J	<0.46	<0.20	<0.19	<0.49	<0.62
	5/15/2018	--	<0.48	<0.29	<0.32	<0.56	<0.24	<0.33	<0.96	<0.46	15.8 J	<0.25	<0.26	--	<0.14	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	<0.47	<0.46	<0.20	<0.19	<0.49	<0.62
MW-5	6/23/2000	--	1.5	<1	<1	<1	--	--	--	--	--	<1	--	--	--	--	--	--	--	<1	<1	--	--	--	<1	--	--	<1	<1	<1	--	<1	--	<1
MW-6	11/5/2000	--	--	<5	<1	--	--	--	--	--	--	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<1	<1	--	<1	--	--
	6/17/2009	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	6/24/2010	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	2/24/2011	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	8/4/2011	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	2/24/2012	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	9/20/2012	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	3/7/2013	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	1/21/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/26/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/15/2018	--	<0.48	<0.29	<0.32	<0.56	<0.24	<0.33	<0.96	<0.46	<10.0	<0.25	<0.26	--	<0.14	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	<0.47	<0.46	<0.20	<0.19	<0.49	<0.62
MW-7A	11/5/2000	--	--	--	<1	--	--	--	--	--	--	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**5.4**	<1	--	2.1	--	--
	5/7/2004	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	5/9/2006	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	6/17/2009	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	6/24/2010	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	2/24/2011	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	8/4/2011	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	2/24/2012	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	9/20/2012	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	3/8/2013	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	1/22/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/26/2016	<1.0	<1.0	<1.0	<1.0	0.63 J	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/16/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/15/2018	--	<0.48	<0.29	<0.32	<0.56	<0.24	<0.33	<0.96	<0.46	<10.0	<0.25	<0.26	--	<0.14	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	<0.47	<0.46	<0.20	<0.19	<0.49	<0.62

TABLE 4
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARKE COUNTY, GEORGIA

Monitoing Well ID	Type 1 Risk Reduction Standard (µg/L)	1,1,2-Trichloro-1,2,2-Trifluoroethane	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	4-Methyl-2-Pentanone (Methyl isobutyl ketone)	2-Butanone (Methyl ethyl ketone)	2-Hexanone (Methyl butyl ketone)	Acetone	Benzene	Bromoform	Carbon Disulfide	Chloroform	Chloromethane (Methyl Chloride)	Cyclohexane	Dibromomethane	Diisopropyl ether	Toluene	Ethylbenzene	Isopropylbenzene (Cumene)	Methylcyclohexane	Methylene chloride	Xylenes (o)	Xylenes (m,p)	Xylenes (Total)	MTBE	Trichloroethene	Tetrachloroethene	Trichlorofluoromethane	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	Vinyl Chloride
		1.00E6	200	5	4,000	7	5	2,000	2,000	NE	4,000	5	80	4,000	80	3	NE	NE	NE	1,000	700	NE	NE	5	NE	NE	10,000	NE	5	5	2,000	70	100	2
	DATE	Analytical Results (µg/L)																																
MW-8A	11/5/2000	--	--	--	<1	--	--	--	--	--	--	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**15**	<1	--	<1	--	--
	5/7/2004	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	5/9/2006	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	6/17/2009	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	6/24/2010	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	2/24/2011	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	8/4/2011	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	2/24/2012	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	9/20/2012	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	3/8/2013	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	1/22/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/26/2016	<1.0	<1.0	<1.0	<1.0	0.42 J	<1.0	<10	<10	<10	5.3 J	<1.0	<1.0	<1.0	<1.0	0.41 J	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.97 J
	11/16/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2
	DUP-1 11/16/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3
	10/11/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/15/2018	--	<0.48	<0.29	<0.32	<0.56	<0.24	<0.33	<0.96	<0.46	<10.0	<0.25	<0.26	--	<0.14	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	<0.47	<0.46	<0.20	<0.19	<0.49	<0.62
MW-9A	5/7/2004	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	5/9/2006	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	6/17/2009	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	6/24/2010	--	<5	<5	<5	<5	--	--	--	--	--	<5	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<2
	2/24/2011	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	8/4/2011	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	2/24/2012	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	9/20/2012	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	3/8/2013	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	1/22/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/26/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/16/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/11/2017	--	<0.48	<0.29	<0.32	<0.56	<0.24	4.4 J	<0.96	<0.46	<10.0	<0.25	<0.26	--	<0.14	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	<0.47	<0.46	<0.20	<0.19	<0.49	<0.62
MW-10	3/7/2013	--	<5	<5	<5	<5	--	<10	<50	<10	<50	**5.3**	**--**	<5	<5	--	--	--	--	<5	<5	--	--	--	12	22	34	<5	<5	<5	<5	<5	--	<2
	1/22/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	8.6	<5.0	8.6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/26/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0
	11/17/2016	<1.0	<1.0	<1.0	0.94 J	1.3	<1.0	<10	<10	<10	<20	**8.9**	1.4	<1.0	<1.0	<1.0	<1.0	--	--	0.70 J	4.2	1.2	<5.0	0.88 J	--	--	30	2.6	2.5	<1.0	2.8	<1.0	<1.0	<1.0
	5/5/2017	<1.0	<1.0	<1.0	0.71J	0.75J	<1.0	<10	<10	<10	2.2J	2.6	0.52J	<1.0	<1.0	<1.0	<1.0	--	--	0.70 J	1.2	0.5J	<5.0	0.63J	--	--	6.4	2.5	1.1	<1.0	3.2	<1.0	<1.0	<1.0
	10/10/2017	--	<0.48	<0.29	0.44 J	<0.56	0.26 J	4.6 J	<0.96	<0.46	<10.0	1.2	<0.26	--	<0.14	<0.11	--	1.0 J	0.44 J	<0.26	0.63 J	--	--	<0.97	2.6	0.93 J	2.6	1.6	<0.47	<0.46	2.9	<0.19	<0.49	<0.62
	5/15/2018	--	<0.48	<0.29	<0.32	<0.56	<0.24	<0.33	<0.96	<0.46	<10.0	<0.25	<0.26	--	<0.14	<0.11	--	0.49 J	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	<0.47	<0.46	0.68 J	<0.19	<0.49	<0.62
MW-11	3/8/2013	--	<5	<5	<5	**8.5**	--	<10	<50	<10	<50	**16**	**--**	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	**1,300**	**10**	<5	12	--	<2
	1/22/2015	--	<5.0	<5.0	<5.0	**13**	--	<10	<50	<10	<50	**27**	<5.0	<5.0	<5.0	<5.0			--	<5.0	<5.0				<5.0	<5.0	<10	<5.0	**1,500**	**15**	<5.0	12	<5.0	<2.0
	4/26/2016	<5.0	<5.0	<5.0	<5.0	**9**	<5.0	<50	<50	<50	<100	**9.2**	<5.0	<1.0	1.7 J	<5.0	<5.0	--	--	<5.0	<5.0	<5.0	<25.0	<5.0	--	--	<5.0	<5.0	**760**	**5.8**	<5.0	7.5	<5.0	<5.0
	11/17/2016	<10	<10	<10	<10	<10	<10	<100	<100	<100	<200	**15**	<10	<10	<10	<10	<10	--	--	<10	<10	<10	<50	<10	--	--	<10	<10	**640**	**8.3 J**	<10	<10	<10	<10
	DUP-2 11/17/2016	<10	<10	<10	<10	<10	**32**	<100	<100	<100	<200	**15**	5.3 J	<10	<10	<10	<10	--	--	<10	<10	<10	<50	<10	--	--	<10	<10	**590**	**7.0 J**	<10	<10	<10	<10
	10/10/2017	--	<1.9	<1.2	<1.3	**7.8**	<0.96	<1.3	<3.8	<1.8	<40.0	**12.7**	<1.0	--	1.6 J	<0.44	--	<0.84	<0.48	<1.0	<1.2	--	--	**10.8**	<0.92	<2.6	<4.0	<0.84	**450**	3.6 J	<0.80	5.6	<2.0	<2.5
	5/15/2018	--	<1.2	<0.72	1.3 J	**9.1**	0.69 J	<0.82	<2.4	<1.2	<25.0	4.6	<0.65	--	0.96 J	0.79 J	--	<0.52	<0.30	<0.65	<0.75	--	--	<2.4	<0.58	<1.6	<2.5	<0.52	**291**	2.8	<0.50	16.2	<1.2	<1.6
	Dup-1 5/15/2018	--	<1.2	<0.72	1.2 J	**7.2**	<0.60	<0.82	<2.4	<1.2	<25.0	**5.5**	<0.65	--	<0.35	<0.28	--	<0.52	<0.30	<0.65	<0.75	--	--	<2.4	<0.58	<1.6	<2.5	<0.52	**292**	2.5 J	<0.50	9.5	<1.2	<1.6

TABLE 4
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARKE COUNTY, GEORGIA

Monitoing Well ID	Type 1 Risk Reduction Standard (µg/L)	1,1,2-Trichloro-1,2,2-Trifluoroethane	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	4-Methyl-2-Pentanone (Methyl isobutyl ketone)	2-Butanone (Methyl ethyl ketone)	2-Hexanone (Methyl butyl ketone)	Acetone	Benzene	Bromoform	Carbon Disulfide	Chloroform	Chloromethane (Methyl Chloride)	Cyclohexane	Dibromomethane	Diisopropyl ether	Toluene	Ethylbenzene	Isopropylbenzene (Cumene)	Methylcyclohexane	Methylene chloride	Xylenes (o)	Xylenes (m,p)	Xylenes (Total)	MTBE	Trichloroethene	Tetrachloroethene	Trichlorofluoromethane	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	Vinyl Chloride
		1.00E6	200	5	4,000	7	5	2,000	2,000	NE	4,000	5	80	4,000	80	3	NE	NE	NE	1,000	700	NE	NE	5	NE	NE	10,000	NE	5	5	2,000	70	100	2
	DATE	Analytical Results (µg/L)																																
MW-12	3/7/2013	--	<5	<5	<5	**30**	--	<10	<50	<10	<50	<5	--	<5	28	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	1/22/2015	--	<5.0	<5.0	<5.0	**45**	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	5	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	DUP (FD012215A) 1/22/2015	--	<5.0	<5.0	<5.0	**43**	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	5.4	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/26/2016	<1.0	<1.0	0.29 J	<1.0	**13**	0.28 J	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	0.49 J	<1.0	<1.0	<1.0	<1.0	<1.0
	DUP-2 4/26/2016	<1.0	<1.0	0.29 J	<1.0	**14**	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	0.43 J	<1.0	1.2	<1.0	<1.0	<1.0
	11/17/2016	<1.0	<1.0	<1.0	<1.0	6.2	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/11/2017	--	<0.48	<0.29	<0.32	**7.3**	<0.24	<0.33	<0.96	<0.46	<10.0	<0.25	<0.26	--	<0.14	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	<0.47	<0.46	<0.20	<0.19	<0.49	<0.62
MW-13	3/7/2013	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	1/22/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/26/2016	<1.0	<1.0	<1.0	0.25 J	0.40 J	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	DUP-1 4/26/2016	<1.0	<1.0	<1.0	0.25 J	0.44 J	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/16/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/15/2018	--	<0.48	<0.29	<0.32	<0.56	<0.24	<0.33	<0.96	<0.46	<10.0	<0.25	<0.26	--	<0.14	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	<0.47	<0.46	<0.20	<0.19	<0.49	<0.62
MW-14	3/7/2013	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	5.6	<5	<5	<5	<5	--	<2
	1/21/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/26/2016	<1.0	<1.0	<1.0	<1.0	0.44 J	<1.0	0.58 J	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	1	<1.0	<1.0	<1.0	<1.0	<1.0	**2.1**
	11/16/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	0.47 J	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	0.72 J	<1.0	<1.0	<1.0	<1.0	<1.0	0.70 J
	10/11/2017	--	<0.48	<0.29	<0.32	<0.56	<0.24	3.9 J	<0.96	<0.46	<10.0	<0.25	<0.26	--	<0.14	0.26 J	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	0.85 J	0.58 J	<0.46	<0.20	<0.19	<0.49	<0.62
TW-1	5/4/2006	--	<5	<5	<5	<5	<5	--	--	--	--	--	**38**	**--**	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	**10**	<5	--	<5	--	<5
TW-2	5/4/2006	--	<5	<5	<5	<5	<5	--	--	--	--	--	**100**	**--**	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	**15**	**6.6**	--	<5	--	<5
TW-3	5/4/2006	--	<5	<5	<5	**29**	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	**8.2**	<5	--	<5	--	<5
TW-4	5/4/2006	--	<5	**5.9**	<5	**150**	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<5
TW-5	5/4/2006	--	<5	<5	<5	<5	<5	--	--	--	--	--	**24**	**--**	--	--	--	--	--	--	--	<5	<5	--	--	--	<5	--	<5	<5	<5	<5	--	<5	--	<5
Equipment Blank	2/24/2011	--	<5	<5	<5	<5	<5	--	<10	<50	<10	59	<5	--	<5	<5	--	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
FB-1	4/26/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
FB-1	11/17/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	2.1	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trip Blank	8/5/2011	--	<5	<5	<5	<5	--	<10	<50	<10	<50	<5	--	<5	<5	--	--	--	--	<5	<5	--	--	--	<5	<5	<10	<5	<5	<5	<5	<5	--	<2
	1/21/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	1/22/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	5/21/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	6/5/2015	--	<5.0	<5.0	<5.0	<5.0	--	<10	<50	<10	<50	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<5.0	<5.0	--	--	--	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/26/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/17/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/5/2017	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<5.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/11/2017	--	<0.48	<0.29	<0.32	<0.56	<0.24	<0.33	<0.96	<0.46	<10.0	<0.25	<0.26	--	<0.14	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	<0.47	<0.46	<0.20	<0.19	<0.49	<0.62
	5/15/2018	--	<0.48	<0.29	<0.32	<0.56	0.27 J	<0.33	<0.96	<0.46	<10.0	<0.25	<0.26	--	<0.14	<0.11	--	<0.21	<0.12	<0.26	<0.30	--	--	<0.97	<0.23	<0.66	<1.0	<0.21	<0.47	<0.46	<0.20	<0.19	<0.49	<0.62

NOTES:

VOC - Volatile Organic Compounds

"760" - Numbers in bold exceed the applicable Type 1 Risk Reduction Standard criteria.

* - Casing for MW-1 was damaged. Sampling access was not available on this date.

**- MW-2A was overdrilled and replaced 3/18/11.

J - Result is an estimated value below the laboratory reporting limit.

NE - Not Established (no Type 1 Groundwater Risk Reduction Standard is assigned).

NS - Not Sampled (MW-2A was inaccessible in March 2013 and MW-8A was inaccessible in October 2017 and not sampled).

-- - Not Analyzed.

MW-10 thru MW-14 were installed December 19 - 21, 2013 .

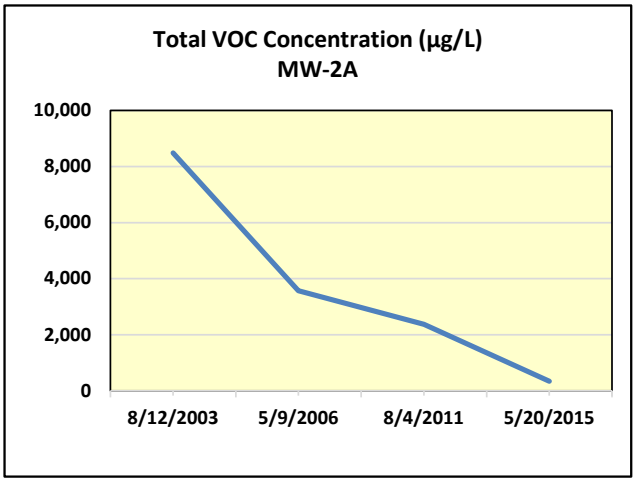
Shaded cell: VOC was previously not reported or tested by lab. First reporting for this compound was April 2016 sampling event.

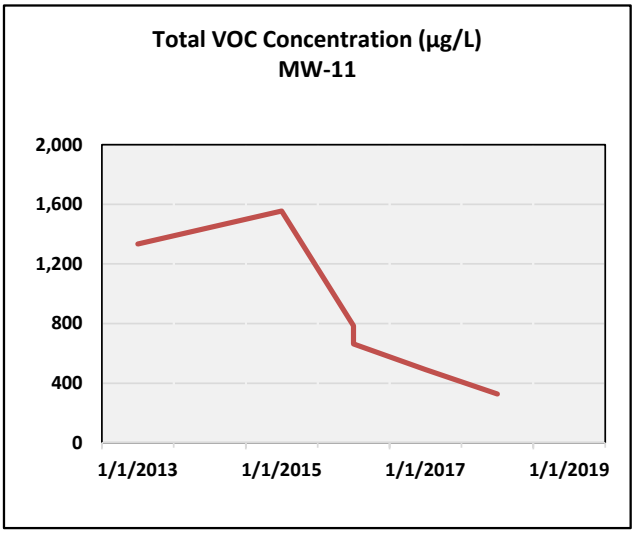
Shaded cell: VOC was previously not reported or tested by lab. First reporting for this compound was October 2017 sampling event.

TABLE 5
HISTORICAL TOTAL VOC CONCENTRATIONS IN GROUNDWATER
FORMER LOEF FACILITY
590 OLD HULL ROAD
ATHENS, CLARKE COUNTY, GEORGIA

Monitoring Well	Date	Total VOC Concentration* (µg/L)	Reduction in Total VOC Concentration** (%)
Source Area Wells			
MW-2A	8/12/2003	8,483.9	
	5/9/2006	3,572.4	58%
	8/4/2011	2,376.4	72%
	5/20/2015	341.4	96%
MW-3A	6/23/2000	66.0	
	5/9/2006	29.4	55%
	8/4/2011	24.0	64%
	4/26/2016	14.61	78%
	11/17/2016	19.7	70%
	5/5/2017	15.1	77%
	10/11/2017	10.9	83%
MW-11	3/8/2013	1,334.2	
	1/22/2015	1,555.0	-17%
	4/26/2016	785.7	41%
	11/17/2016	663.3	50%
	10/10/2017	492.1	63%
	5/15/2018	327.4	75%
Perimeter/Downgradient Wells			
MW-4A	5/7/2004	56.0	
	5/9/2006	88.0	-57%
	8/4/2011	89.5	-60%
	9/20/2012	6.3	89%
	4/26/2016	0.35	99%
	11/17/2016	140.53	-151%
	5/15/2018	15.8	72%
MW-10	3/7/2013	39.3	
	1/22/2015	17.2	56%
	4/26/2016	1.2	97%
	11/17/2016	57.42	-46%
	5/15/2018	1.17	97%
MW-12	3/7/2013	58.0	
	1/22/2015	50.0	14%
	4/26/2016	14.06	76%
	11/17/2016	6.2	88%
	10/11/2017	7.3	87%

Trend Graphs for Key Source Area Wells





Notes:

VOCs = Volatile Organc Compounds

*Total VOCs is the sum of all chlorinated and non-chlorinated Method 8260 VOCs detected, including estimated (J-flag) concentrations.

**Reduction percent by date compares total change to the first date listed. Negative percent change equals an increase.

APPENDIX A

EXHIBIT B FIGURE FOR OFF-SITE WORK PLAN ADDENDUM

CHECK BY: GW	PROPOSED OFF-SITE DPT GROUNDWATER BORINGS	APEX	EXHIBIT
DRAWN BY: SP			
DATE: 4/19/18	FORMER LOEF FACILITY 590 OLD HULL ROAD ATHENS, GEORGIA		B
SCALE: 1in = 200 ft			
CAD NO.: 510507-002-01			
PRJ NO.: 510507-002-01			

APPENDIX B

GROUNDWATER SAMPLING FORMS (MAY 2018)

APEX

APEX COMPANIES, LLC
GROUND-WATER SAMPLING LOG

Date: 5/15/18 Time: 1035 Monitor Well Number: MW-4A
Apex Personnel: T. Fisher Purpose of Sampling Event: Semi-annual
Location (Site/Facility Name): Weather/Temp: Cloudy 78

Circle:
Measuring Point (MP): ~~top of casing~~, top of ground
Depth to Product (MP): NA
Depth to Water (MP): 23.14
Total Depth of Well (MP): (0.1')
Water Column (ft): (0.1')
Well Material: PVC, Stainless Steel, Other:
Well pad condition: Good, Cracked, Replace

Low Flow purge rate: 100 mL/min
Well Cover Bolted: Yes No
Well Cap Condition: Good Replaced
Well Cap Locked: Yes, No, Replaced
Well Tag Present: Yes No
Well Info. On Tag: Yes No
Well Diameter (in): 2

Well Type: surface completion, above grade
Well Screen Length: 5, 10, 15, 20 feet;
Pump Intake depth below water (MP):
Purging/Sampling Device: Bailer, Peristaltic, Monsoon, Grundfos;
OTHER:
Noticeable Odor: None
Sample Color: Clear

Time	Depth to Water (MP)	Well volume Bailed	Low Flow Vol Purged	Temp.	Spec. Cond.	pH	ORP	DO	Turbidity	Water Quality Comments
min	Feet	gallons	Liters	C	uS/cm		mV	mg/L	NTU	
Initial	23.25	—	0.5	21.25	316	4.78	359	0.36	3.6	
5	23.27	—	1.0	22.84	318	4.69	361	0.33	3.8	
10	23.28	—	1.5	23.14	320	4.70	361	0.10	3.6	
15	23.30	—	2.0	23.40	323	4.71	362	0.22	3.8	
20	23.30	—	2.5	23.96	324	4.71	359	0.21	3.5	
25	23.31	—	3.0	23.77	325	4.72	359	0.19	3.7	
Criteria	0.33	0.2-0.5 L/min		+/-3%	+/-5%	+/-10mV	+/-0.3mg/L	+/-10%	NA	

Field Comments/Site Conditions, etc.:
Collected via soda straw method

Purge Volume Conversions: 1" = 0.04, 1.5" = 0.09, 2" = 0.17, 3" = 0.38, 4" = 0.66, 6" = 1.5, 8" = 2.6, 10" = 4.1

Water quality parameters Collected with: YSI 556, Horiba U-52, Hanna turbidity; Other: HI-9828

Parameters Stabilized (circle): YES NO If no, why?

Samples collected	Analysis	Bottle Type	Preservative	Lab	Sample date	Sample Time
1	VOC	40mL VOA	HCl	Pace	5/15/18	1110

APEX

APEX COMPANIES, LLC
GROUND-WATER SAMPLING LOG

Date: 5/15/18 Time: 1120
Apex Personnel: K. Schwarz
Location (Site/Facility Name): CMC Athens

Monitor Well Number: MW-6
Purpose of Sampling Event: Semiannual
Weather/Temp: cloudy / 80°F

Circle:
Measuring Point (MP): top of casing, top of ground
Depth to Product (MP):
Depth to Water (MP): 21.96
Total Depth of Well (MP): 30 (0.1')
Water Column thickness (ft):
Well Material: PVC, Stainless Steel, Other:
Well pad condition: Good, Cracked, Replace

Low Flow purge rate: 200 mL/min
Well Cover Bolted: Yes No
Well Cap Condition: Good Replaced
Well Cap Locked: Yes No, Replaced
Well Tag Present: Yes No
Well Info. On Tag: Yes No
Well Diameter (in): 2

Well Type: surface completion, above grade
Well Screen Length: 5, 10, 15, 20 feet; 20-30
Pump Intake depth below water (MP): 25
Purging/Sampling Device: Bailer, Peristaltic, Monsoon, Grundfos;
OTHER:
Noticeable Odor: none
Sample Color: clear

Time	Depth to Water (MP)	Well volume Bailed	Low Flow Vol Purged	Temp.	Spec. Cond.	pH	ORP	DO	Turbidity	Water Quality Comments
min	Feet	gallons	Liters	°C	mS/cm		mV	mg/L	NTU	
Initial	21.96	—	—	23.18	31	5.69	133.6	13.03	4.1	
1125	22.10	—	1	21.89	31	5.02	112.1	12.71	6.4	
1130	22.12	—	2	21.66	31	4.89	114.1	11.70	7.6	
1135	22.12	—	3	21.65	31	4.78	120.3	12.41	6.8	
1140	22.12	—	4	21.66	29	4.78	130.1	2.45	6.5	
1145	22.14	—	5	21.41	29	4.73	136.7	2.46	6.9	
1150	22.14	—	6	21.37	29	4.67	139.7	12.46	7.1	
1155	22.14	—	7	21.32	31	4.68	136.5	12.31	6.8	
1200	22.14	—	8	21.32	30	4.60	132.4	12.25	7.2	
Criteria	0.33	0.2-0.5L/min		+/-3%	+/-3%	+/-0.1	+/-10mV	+/-0.3mg/L	+/-10%	

Field Comments/Site Conditions, etc.: collected via soda straw method

Purge Volume Conversions: 1" = 0.04, 1.5" = 0.09, 2" = 0.17, 3" = 0.38, 4" = 0.66, 6" = 1.5, 8" = 2.6, 10" = 4.1

Water quality parameters Collected with: YSI 556, Horiba U-52, Hanna turbidity; Other: Hanna 9829

Parameters Stabilized (circle): YES NO If no, why?

Samples collected	Analysis	Bottle Type	Preservative	Lab	Sample date	Sample Time
3	8260	40mL VOA	HCl	Pace	5/15/18	1205

APEX

APEX COMPANIES, LLC
GROUND-WATER SAMPLING LOG

Date: 5/15/18 Time: 0825 Monitor Well Number: MW-7A
Apex Personnel: K. Schwarz Purpose of Sampling Event: semiannual
Location (Site/Facility Name): CMC Athens Weather/Temp: cloudy / 70°F

Circle:
Measuring Point (MP): top of casing, top of ground
Depth to Product (MP): NA
Depth to Water (MP): 13.64
Total Depth of Well (MP): (0.1')
Water Column thickness (ft):
Well Material: PVC, Stainless Steel, Other:
Well pad condition: Good, Cracked, Replace

Low Flow purge rate: 200 mL/min
Well Cover Bolted: Yes No stick up
Well Cap Condition: Good Replaced, locked
Well Cap Locked: Yes, No, Replaced none
Well Tag Present: Yes No
Well Info. On Tag: Yes No
Well Diameter (in): 2

Well Type: surface completion, above grade
Well Screen Length: 5, 10, 15, 20 feet; 9.5-19.5
Pump Intake depth below water (MP): 15 BTOC
Purging/Sampling Device: Bailer, Peristaltic, Monsoon, Grundfos;
OTHER:
Noticeable Odor: none
Sample Color: clear

Time	Depth to Water (MP)	Well volume Bailed	Low Flow Vol Purged	Temp.	Spec. Cond.	pH	ORP	DO	Turbidity	Water Quality Comments
min	Feet	gallons	Liters	°C	µS/cm		mV	mg/L	NTU	
Initial	13.64	—	—	17.62	402	5.29	120.1	0.08	3.3	
0830	13.82	—	1	17.20	399	5.14	128.1	0.14	3.4	
0835	13.86	—	2	17.23	402	5.02	123.1	7.71	2.1	
0840	13.86	—	3	17.37	401	4.96	123.6	5.29	2.0	
0845	13.87	—	4	17.19	401	4.98	120.7	4.47	1.2	
0850	13.89	—	5	17.52	400	5.01	118.4	3.84	1.4	
0855	13.90	—	6	17.40	401	5.07	117.2	3.82	1.6	
0900	13.90	—	7	17.33	400	5.11	115.2	3.75	1.5	
Criteria	0.33	0.2-0.5 L/min			+/- 3%	+/- 0.1	+/- 10mV	+/- 10% or 0.3mg/L	+/- 10%	

Field Comments/Site Conditions, etc.:
collected via soda straw method

Purge Volume Conversions: 1" = 0.04, 1.5" = 0.09, 2" = 0.17, 3" = 0.38, 4" = 0.66, 6" = 1.5, 8" = 2.6, 10" = 4.1

Water quality parameters Collected with: YSI 556, Horiba U-52, Hanna turbidity; Other: Hanna 9829

Parameters Stabilized (circle): YES NO If no, why?

Samples collected	Analysis	Bottle Type	Preservative	Lab	Sample date	Sample Time
3	8260	40 mL VOA	HCl	Pace	5/15/18	0905

APEX

APEX COMPANIES, LLC
GROUND-WATER SAMPLING LOG

Date: 5/15/18 Time: 815 Monitor Well Number: MW-8A
Apex Personnel: T. Fisher Purpose of Sampling Event: Semi-annual
Location (Site/Facility Name): CMC Metals Weather/Temp: Cloudy 78°F

Circle:
Measuring Point (MP): top of casing, top of ground
Depth to Product (MP):
Depth to Water (MP): 12.25
Total Depth of Well (MP): (0.1')
Water Column thickness (ft):
Well Material: PVC, Stainless Steel, Other:
Well pad condition: Good, Cracked, Replace

Low Flow purge rate: 100 mL/min
Well Cover Bolted: Yes No NA
Well Cap Condition: Good Replaced
Well Cap Locked: Yes, No, Replaced
Well Tag Present: Yes No
Well Info. On Tag: Yes No
Well Diameter (in): 2

Well Type: surface completion, above grade
Well Screen Length: 5, 10, 15, 20 feet;
Pump Intake depth below water (MP): 20-4 feet = 16
Purging/Sampling Device: Bailer, Peristaltic, Monsoon, Grundfos;
OTHER:
Noticeable Odor: None
Sample Color: clear

Time	Depth to Water (MP)	Well volume Bailed	Low Flow Vol Purged	Temp.	Spec. Cond.	pH	ORP	DO	Turbidity	Water Quality Comments
min	Feet	gallons	Liters	°C	mS/cm		mV	mg/L	NTU	
Initial	12.28	—	0.5	18.32	810	6.26	96	0.79	2.8	
5	12.30	—	1.0	17.60	798	6.02	93	0.78	2.5	
10	12.31	—	1.5	17.48	796	5.96	91	0.77	2.1	
15	12.31	—	2.0	17.42	797	6.02	86	0.76	2.8	
20	12.32	—	2.5	17.42	798	6.13	80	0.75	14	
25	12.33	—	3.0	17.41	800	6.17	75	0.75	13	
30	12.33	—	3.5	17.45	802	6.22	71	0.76	14	
Criteria	±0.33	0.2-0.5 L/min		±3%	±3%	±0.1	±10mV	±0.3mg/L	±10%	

Field Comments/Site Conditions, etc.:
collected via Eda straw method.

Purge Volume Conversions: 1" = 0.04, 1.5" = 0.09, 2" = 0.17, 3" = 0.38, 4" = 0.66, 6" = 1.5, 8" = 2.6, 10" = 4.1

Water quality parameters Collected with: YSI 556, Horiba U-52, Hanna turbidity; Other: HI-9829

Parameters Stabilized (circle): YES NO If no, why?

Samples collected	Analysis	Bottle Type	Preservative	Lab	Sample date	Sample Time
1	VOC	40mL VOA	HCl	Pace	5/15/18	855

APEX

APEX COMPANIES, LLC
GROUND-WATER SAMPLING LOG

Date: 5/15/18 Time: 930 Monitor Well Number: MW-10
Apex Personnel: T. Fisher Purpose of Sampling Event: Semi-annual
Location (Site/Facility Name): CMC Athens Weather/Temp: Cloudy 78°F

Circle:

Measuring Point (MP): top of casing, top of ground
Depth to Product (MP):
Depth to Water (MP): 21.68
Total Depth of Well (MP): (0.1')
Water Column thickness (ft):
Well Material: PVC, Stainless Steel, Other:
Well pad condition: Good, Cracked, Replace

Low Flow purge rate: 100 mL/min
Well Cover Bolted: Yes No
Well Cap Condition: Good Replaced
Well Cap Locked: Yes, No, Replaced
Well Tag Present: Yes No
Well Info. On Tag: Yes No
Well Diameter (in): 2

Well Type: surface completion, above grade
Well Screen Length: 5, 10, 15, 20 feet;
Pump Intake depth below water (MP):
Purging/Sampling Device: Bailer, Peristaltic, Monsoon, Grundfos;
OTHER:
Noticeable Odor: None
Sample Color: Clear

Time	Depth to Water (MP)	Well volume Bailed	Low Flow Vol Purged	Temp.	Spec. Cond.	pH	ORP	DO	Turbidity	Water Quality Comments
min	Feet	gallons	Liters	°C	mS/cm	S.U.	mV	mg/L	NTU	
Initial	21.79	—	0.5	19.58	171	4.75	288	2.72	9.4	
5	21.80	—	1.0	19.66	171	4.55	334	2.05	5.5	
10	21.80	—	1.5	19.63	171	4.50	352	1.87	4.9	
15	21.81	—	2.0	19.70	170	4.49	369	1.91	5.2	
20	21.82	—	2.5	19.74	170	4.48	382	1.92	4.9	
25	21.82	—	3.0	19.91	170	4.47	392	1.82	4.4	
30		—	3.5	19.91	170	4.47	389	1.90	4.6	
Criteria	±0.33	0.2-0.5 L/min			+/-3%	+/-0.1	+/-10mV	+/-0.3mg/L	+/-10%	

Field Comments/Site Conditions, etc.:
collected via soda straw method

Purge Volume Conversions: 1" = 0.04, 1.5" = 0.09, 2" = 0.17, 3" = 0.38, 4" = 0.66, 6" = 1.5, 8" = 2.6, 10" = 4.1

Water quality parameters Collected with: YSI 556, Horiba U-52, Hanna turbidity; Other: HI-9826

Parameters Stabilized (circle): YES NO If no, why?

Samples collected	Analysis	Bottle Type	Preservative	Lab	Sample date	Sample Time
1	VOC	40 mL VOA	HCl	Pace	5/15/18	1015

APEX

APEX COMPANIES, LLC
GROUND-WATER SAMPLING LOG

Date: 5/15/18 Time: 1140
Apex Personnel: T. Fisher
Location (Site/Facility Name): CMC Athens

Monitor Well Number: MW-11
Purpose of Sampling Event: Semi-annual
Weather/Temp: Cloudy 78°F

Circle:
Measuring Point (MP): top of casing, top of ground
Depth to Product (MP):
Depth to Water (MP): 25.22
Total Depth of Well (MP): (0.1')
Water Column thickness (ft):
Well Material: PVC, Stainless Steel, Other:
Well pad condition: Good, Cracked, Replace

Low Flow purge rate: 100 mL/min
Well Cover Bolted: Yes No N/A
Well Cap Condition: Good Replaced
Well Cap Locked: Yes, No, Replaced
Well Tag Present: Yes No
Well Info. On Tag: Yes No
Well Diameter (in): 2

Well Type: surface completion, above grade
Well Screen Length: 5, 10, 15, 20 feet;
Pump Intake depth below water (MP):
Purging/Sampling Device: Baller, Peristaltic, Monsoon, Grundfos;
OTHER:
Noticeable Odor: None
Sample Color: clear

Time	Depth to Water (MP)	Well volume Bailed	Low Flow Vol Purged	Temp.	Spec. Cond.	pH	ORP	DO	Turbidity	Water Quality Comments
min	Feet	gallons	Liters	C	µS/cm		mV	mg/L	NTU	
Initial	25.27	—	0.5	22.16	46	5.05	208	0.53	30	
5	25.28	—	1.0	21.70	45	4.72	231	0.55	28	
10	25.29	—	1.5	21.68	44	4.80	240	0.56	27	
15	25.29	—	2.0	21.71	44	4.78	243	0.53	26	
20	25.30	—	2.5	21.70	43	4.75	248	0.51	25	
Criteria	0.33	0.2-0.5 L/min		+/-3%		+/-0.1	+/-10 mV	+/-0.3mg/L	+/-10%	

Field Comments/Site Conditions, etc.:
Collected via soda straw method

Purge Volume Conversions: 1" = 0.04, 1.5" = 0.09, 2" = 0.17, 3" = 0.38, 4" = 0.66, 6" = 1.5, 8" = 2.6, 10" = 4.1

Water quality parameters Collected with: YSI 556, Horiba U-52, Hanna turbidity; Other: HI-9826

Parameters Stabilized (circle): YES NO If no, why?

Samples collected	Analysis	Bottle Type	Preservative	Lab	Sample date	Sample Time
1	VOC	40mL VOA	HCl	Pace	5/15/18	1220

Dup-1 collected.

APEX

APEX COMPANIES, LLC
GROUND-WATER SAMPLING LOG

Date: 5/15/18 Time: 0945 Monitor Well Number: MW-13
Apex Personnel: K Schwarz Purpose of Sampling Event: Semiannual
Location (Site/Facility Name): CMC Athens Weather/Temp: cloudy / 70s F

Circle:

Measuring Point (MP): (top of casing) top of ground
Depth to Product (MP): NA
Depth to Water (MP): 17.30
Total Depth of Well (MP): 35 (0.1')
Water Column thickness (ft):
Well Material: (PVC), Stainless Steel, Other:
Well pad condition: (Good), Cracked, Replace

Low Flow purge rate: 200 mL/min
Well Cover Bolted: (Yes) No
Well Cap Condition: (Good) Replaced
Well Cap Locked: (Yes) No, Replaced
Well Tag Present: (Yes) No
Well Info. On Tag: Yes (No)
Well Diameter (in): 2

Well Type: (surface completion,) above grade
Well Screen Length: 5, (10,) 15, 20 feet; 25-35
Pump Intake depth below water (MP): 30
Purging/Sampling Device: Bailer, (Peristaltic) Monsoon, Grundfos;
OTHER:
Noticeable Odor: none
Sample Color: clear w/ orange particles

Time	Depth to Water (MP)	Well volume Bailed	Low Flow Vol Purged	Temp.	Spec. Cond.	pH	ORP	DO	Turbidity	Water Quality Comments
min	Feet	gallons	Liters	°C	mS/cm		mV	mg/L	NTU	
Initial	17.30	—	—	21.23	181	6.54	158.1	8.39	112	
0950	17.79	—	1	21.29	180	6.53	105.2	7.08	160	
0955	17.81	—	2	21.37	181	6.52	98.7	6.95	65.8	
1000	17.81	—	3	21.55	182	6.49	96.3	7.31	95.6	
1005	17.81	—	4	21.62	181	6.48	94.3	7.38	75.4	
1010	17.81	—	5	22.02	181	6.48	91.3	7.29	71.1	
1015	17.81	—	6	22.12	180	6.48	85.3	5.84	67.0	
1020	17.81	—	7	21.99	179	6.50	87.6	1.58	40.8	
1025	17.81	—	8	22.22	179	6.49	87.4	1.59	41.6	
1030	17.81	—	9	22.13	179	6.51	83.2	1.45	39.2	
Criteria	0.33'	0.2-0.5L/min		+/-3%		+/-0.1	+/-10mV	+/-0.3mg/L	+/-10%	

Field Comments/Site Conditions, etc.:
Soda straw method

Purge Volume Conversions: 1" = 0.04, 1.5" = 0.09, 2" = 0.17, 3" = 0.38, 4" = 0.66, 6" = 1.5, 8" = 2.6, 10" = 4.1

Water quality parameters Collected with: YSI 556, Horiba U-52, Hanna turbidity; Other: Hanna 9829

Parameters Stabilized (circle): (YES) NO If no, why?

Samples collected	Analysis	Bottle Type	Preservative	Lab	Sample date	Sample Time
3	8260	40 ml VOA	HCl	Pace	5/15/18	~~1230~~ 1035

APPENDIX C

LABORATORY ANALYTICAL REPORT

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

May 23, 2018

Grant Watkins
Apex Companies
1071 Pemberton Hill Rd.
Suite 203
Apex, NC 27502

RE: Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Dear Grant Watkins:
Enclosed are the analytical results for sample(s) received by the laboratory on May 16, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Trey Carter
trey.carter@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Katie Schwarz, Apex Company, LLC

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92384877001	**MW-4A**	Water	05/15/18 11:10	05/16/18 12:05
92384877002	**MW-6**	Water	05/15/18 12:05	05/16/18 12:05
92384877003	**MW-7A**	Water	05/15/18 09:05	05/16/18 12:05
92384877004	**MW-8A**	Water	05/15/18 08:55	05/16/18 12:05
92384877005	**MW-10**	Water	05/15/18 10:15	05/16/18 12:05
92384877006	**MW-11**	Water	05/15/18 12:20	05/16/18 12:05
92384877007	**MW-13**	Water	05/15/18 10:35	05/16/18 12:05
92384877008	**DUP-1**	Water	05/15/18 00:00	05/16/18 12:05
92384877009	**TRIP BLANK**	Water	05/15/18 00:00	05/16/18 12:05

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92384877001	**MW-4A**	EPA 8260	CAH	63	PASI-C
92384877002	**MW-6**	EPA 8260	CAH	63	PASI-C
92384877003	**MW-7A**	EPA 8260	CAH	63	PASI-C
92384877004	**MW-8A**	EPA 8260	CAH	63	PASI-C
92384877005	**MW-10**	EPA 8260	GAW	63	PASI-C
92384877006	**MW-11**	EPA 8260	GAW	63	PASI-C
92384877007	**MW-13**	EPA 8260	GAW	63	PASI-C
92384877008	**DUP-1**	EPA 8260	GAW	63	PASI-C
92384877009	**TRIP BLANK**	EPA 8260	GAW	63	PASI-C

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92384877001	**MW-4A**					
EPA 8260	Acetone	15.8J	ug/L	25.0	05/18/18 10:33	
92384877005	**MW-10**					
EPA 8260	Dibromomethane	0.49J	ug/L	1.0	05/19/18 07:37	
EPA 8260	Trichlorofluoromethane	0.68J	ug/L	1.0	05/19/18 07:37	
92384877006	**MW-11**					
EPA 8260	Benzene	4.6	ug/L	2.5	05/22/18 04:07	
EPA 8260	Chloroform	0.96J	ug/L	2.5	05/22/18 04:07	B
EPA 8260	Chloromethane	0.79J	ug/L	2.5	05/22/18 04:07	B
EPA 8260	1,1-Dichloroethane	1.3J	ug/L	2.5	05/22/18 04:07	
EPA 8260	1,2-Dichloroethane	0.69J	ug/L	2.5	05/22/18 04:07	B
EPA 8260	1,1-Dichloroethene	9.1	ug/L	2.5	05/22/18 04:07	
EPA 8260	cis-1,2-Dichloroethene	16.2	ug/L	2.5	05/22/18 04:07	
EPA 8260	Tetrachloroethene	2.8	ug/L	2.5	05/22/18 04:07	
EPA 8260	Trichloroethene	291	ug/L	2.5	05/22/18 04:07	
92384877008	**DUP-1**					
EPA 8260	Benzene	5.5	ug/L	2.5	05/22/18 17:44	
EPA 8260	1,1-Dichloroethane	1.2J	ug/L	2.5	05/22/18 17:44	
EPA 8260	1,1-Dichloroethene	7.2	ug/L	2.5	05/22/18 17:44	
EPA 8260	cis-1,2-Dichloroethene	9.5	ug/L	2.5	05/22/18 17:44	
EPA 8260	Tetrachloroethene	2.5J	ug/L	2.5	05/22/18 17:44	
EPA 8260	Trichloroethene	292	ug/L	2.5	05/22/18 17:44	
92384877009	**TRIP BLANK**					
EPA 8260	1,2-Dichloroethane	0.27J	ug/L	1.0	05/19/18 04:39	

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: MW-4A **Lab ID: 92384877001** Collected: 05/15/18 11:10 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	**15.8J**	ug/L	25.0	10.0	1		05/18/18 10:33	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		05/18/18 10:33	71-43-2	
Bromobenzene	**<0.30**	ug/L	1.0	0.30	1		05/18/18 10:33	108-86-1	
Bromochloromethane	**<0.17**	ug/L	1.0	0.17	1		05/18/18 10:33	74-97-5	
Bromodichloromethane	**<0.18**	ug/L	1.0	0.18	1		05/18/18 10:33	75-27-4	
Bromoform	**<0.26**	ug/L	1.0	0.26	1		05/18/18 10:33	75-25-2	
Bromomethane	**<0.29**	ug/L	2.0	0.29	1		05/18/18 10:33	74-83-9	
2-Butanone (MEK)	**<0.96**	ug/L	5.0	0.96	1		05/18/18 10:33	78-93-3	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		05/18/18 10:33	56-23-5	
Chlorobenzene	**<0.23**	ug/L	1.0	0.23	1		05/18/18 10:33	108-90-7	
Chloroethane	**<0.54**	ug/L	1.0	0.54	1		05/18/18 10:33	75-00-3	
Chloroform	**<0.14**	ug/L	1.0	0.14	1		05/18/18 10:33	67-66-3	
Chloromethane	**<0.11**	ug/L	1.0	0.11	1		05/18/18 10:33	74-87-3	
2-Chlorotoluene	**<0.35**	ug/L	1.0	0.35	1		05/18/18 10:33	95-49-8	
4-Chlorotoluene	**<0.31**	ug/L	1.0	0.31	1		05/18/18 10:33	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.0**	ug/L	2.0	2.0	1		05/18/18 10:33	96-12-8	
Dibromochloromethane	**<0.21**	ug/L	1.0	0.21	1		05/18/18 10:33	124-48-1	
1,2-Dibromoethane (EDB)	**<0.27**	ug/L	1.0	0.27	1		05/18/18 10:33	106-93-4	
Dibromomethane	**<0.21**	ug/L	1.0	0.21	1		05/18/18 10:33	74-95-3	
1,2-Dichlorobenzene	**<0.30**	ug/L	1.0	0.30	1		05/18/18 10:33	95-50-1	
1,3-Dichlorobenzene	**<0.24**	ug/L	1.0	0.24	1		05/18/18 10:33	541-73-1	
1,4-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/18/18 10:33	106-46-7	
Dichlorodifluoromethane	**<0.21**	ug/L	1.0	0.21	1		05/18/18 10:33	75-71-8	
1,1-Dichloroethane	**<0.32**	ug/L	1.0	0.32	1		05/18/18 10:33	75-34-3	
1,2-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		05/18/18 10:33	107-06-2	
1,1-Dichloroethene	**<0.56**	ug/L	1.0	0.56	1		05/18/18 10:33	75-35-4	
cis-1,2-Dichloroethene	**<0.19**	ug/L	1.0	0.19	1		05/18/18 10:33	156-59-2	
trans-1,2-Dichloroethene	**<0.49**	ug/L	1.0	0.49	1		05/18/18 10:33	156-60-5	
1,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		05/18/18 10:33	78-87-5	
1,3-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		05/18/18 10:33	142-28-9	
2,2-Dichloropropane	**<0.13**	ug/L	1.0	0.13	1		05/18/18 10:33	594-20-7	
1,1-Dichloropropene	**<0.49**	ug/L	1.0	0.49	1		05/18/18 10:33	563-58-6	
cis-1,3-Dichloropropene	**<0.13**	ug/L	1.0	0.13	1		05/18/18 10:33	10061-01-5	
trans-1,3-Dichloropropene	**<0.26**	ug/L	1.0	0.26	1		05/18/18 10:33	10061-02-6	
Diisopropyl ether	**<0.12**	ug/L	1.0	0.12	1		05/18/18 10:33	108-20-3	
Ethylbenzene	**<0.30**	ug/L	1.0	0.30	1		05/18/18 10:33	100-41-4	
Hexachloro-1,3-butadiene	**<0.71**	ug/L	1.0	0.71	1		05/18/18 10:33	87-68-3	
2-Hexanone	**<0.46**	ug/L	5.0	0.46	1		05/18/18 10:33	591-78-6	
p-Isopropyltoluene	**<0.31**	ug/L	1.0	0.31	1		05/18/18 10:33	99-87-6	
Methylene Chloride	**<0.97**	ug/L	2.0	0.97	1		05/18/18 10:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.33**	ug/L	5.0	0.33	1		05/18/18 10:33	108-10-1	
Methyl-tert-butyl ether	**<0.21**	ug/L	1.0	0.21	1		05/18/18 10:33	1634-04-4	
Naphthalene	**<0.24**	ug/L	1.0	0.24	1		05/18/18 10:33	91-20-3	
Styrene	**<0.26**	ug/L	1.0	0.26	1		05/18/18 10:33	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.33**	ug/L	1.0	0.33	1		05/18/18 10:33	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.40**	ug/L	1.0	0.40	1		05/18/18 10:33	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: MW-4A **Lab ID: 92384877001** Collected: 05/15/18 11:10 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Tetrachloroethene	**<0.46**	ug/L	1.0	0.46	1		05/18/18 10:33	127-18-4	
Toluene	**<0.26**	ug/L	1.0	0.26	1		05/18/18 10:33	108-88-3	
1,2,3-Trichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/18/18 10:33	87-61-6	
1,2,4-Trichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		05/18/18 10:33	120-82-1	
1,1,1-Trichloroethane	**<0.48**	ug/L	1.0	0.48	1		05/18/18 10:33	71-55-6	
1,1,2-Trichloroethane	**<0.29**	ug/L	1.0	0.29	1		05/18/18 10:33	79-00-5	
Trichloroethene	**<0.47**	ug/L	1.0	0.47	1		05/18/18 10:33	79-01-6	
Trichlorofluoromethane	**<0.20**	ug/L	1.0	0.20	1		05/18/18 10:33	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	1.0	0.41	1		05/18/18 10:33	96-18-4	
Vinyl acetate	**<0.35**	ug/L	2.0	0.35	1		05/18/18 10:33	108-05-4	
Vinyl chloride	**<0.62**	ug/L	1.0	0.62	1		05/18/18 10:33	75-01-4	
Xylene (Total)	**<1.0**	ug/L	1.0	1.0	1		05/18/18 10:33	1330-20-7	
m&p-Xylene	**<0.66**	ug/L	2.0	0.66	1		05/18/18 10:33	179601-23-1	
o-Xylene	**<0.23**	ug/L	1.0	0.23	1		05/18/18 10:33	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		05/18/18 10:33	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-130		1		05/18/18 10:33	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		05/18/18 10:33	2037-26-5	

Sample: MW-6 **Lab ID: 92384877002** Collected: 05/15/18 12:05 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	**<10.0**	ug/L	25.0	10.0	1		05/18/18 10:49	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		05/18/18 10:49	71-43-2	
Bromobenzene	**<0.30**	ug/L	1.0	0.30	1		05/18/18 10:49	108-86-1	
Bromochloromethane	**<0.17**	ug/L	1.0	0.17	1		05/18/18 10:49	74-97-5	
Bromodichloromethane	**<0.18**	ug/L	1.0	0.18	1		05/18/18 10:49	75-27-4	
Bromoform	**<0.26**	ug/L	1.0	0.26	1		05/18/18 10:49	75-25-2	
Bromomethane	**<0.29**	ug/L	2.0	0.29	1		05/18/18 10:49	74-83-9	
2-Butanone (MEK)	**<0.96**	ug/L	5.0	0.96	1		05/18/18 10:49	78-93-3	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		05/18/18 10:49	56-23-5	
Chlorobenzene	**<0.23**	ug/L	1.0	0.23	1		05/18/18 10:49	108-90-7	
Chloroethane	**<0.54**	ug/L	1.0	0.54	1		05/18/18 10:49	75-00-3	
Chloroform	**<0.14**	ug/L	1.0	0.14	1		05/18/18 10:49	67-66-3	
Chloromethane	**<0.11**	ug/L	1.0	0.11	1		05/18/18 10:49	74-87-3	
2-Chlorotoluene	**<0.35**	ug/L	1.0	0.35	1		05/18/18 10:49	95-49-8	
4-Chlorotoluene	**<0.31**	ug/L	1.0	0.31	1		05/18/18 10:49	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.0**	ug/L	2.0	2.0	1		05/18/18 10:49	96-12-8	
Dibromochloromethane	**<0.21**	ug/L	1.0	0.21	1		05/18/18 10:49	124-48-1	
1,2-Dibromoethane (EDB)	**<0.27**	ug/L	1.0	0.27	1		05/18/18 10:49	106-93-4	
Dibromomethane	**<0.21**	ug/L	1.0	0.21	1		05/18/18 10:49	74-95-3	
1,2-Dichlorobenzene	**<0.30**	ug/L	1.0	0.30	1		05/18/18 10:49	95-50-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: MW-6 **Lab ID: 92384877002** Collected: 05/15/18 12:05 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
1,3-Dichlorobenzene	**<0.24**	ug/L	1.0	0.24	1		05/18/18 10:49	541-73-1	
1,4-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/18/18 10:49	106-46-7	
Dichlorodifluoromethane	**<0.21**	ug/L	1.0	0.21	1		05/18/18 10:49	75-71-8	
1,1-Dichloroethane	**<0.32**	ug/L	1.0	0.32	1		05/18/18 10:49	75-34-3	
1,2-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		05/18/18 10:49	107-06-2	
1,1-Dichloroethene	**<0.56**	ug/L	1.0	0.56	1		05/18/18 10:49	75-35-4	
cis-1,2-Dichloroethene	**<0.19**	ug/L	1.0	0.19	1		05/18/18 10:49	156-59-2	
trans-1,2-Dichloroethene	**<0.49**	ug/L	1.0	0.49	1		05/18/18 10:49	156-60-5	
1,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		05/18/18 10:49	78-87-5	
1,3-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		05/18/18 10:49	142-28-9	
2,2-Dichloropropane	**<0.13**	ug/L	1.0	0.13	1		05/18/18 10:49	594-20-7	
1,1-Dichloropropene	**<0.49**	ug/L	1.0	0.49	1		05/18/18 10:49	563-58-6	
cis-1,3-Dichloropropene	**<0.13**	ug/L	1.0	0.13	1		05/18/18 10:49	10061-01-5	
trans-1,3-Dichloropropene	**<0.26**	ug/L	1.0	0.26	1		05/18/18 10:49	10061-02-6	
Diisopropyl ether	**<0.12**	ug/L	1.0	0.12	1		05/18/18 10:49	108-20-3	
Ethylbenzene	**<0.30**	ug/L	1.0	0.30	1		05/18/18 10:49	100-41-4	
Hexachloro-1,3-butadiene	**<0.71**	ug/L	1.0	0.71	1		05/18/18 10:49	87-68-3	
2-Hexanone	**<0.46**	ug/L	5.0	0.46	1		05/18/18 10:49	591-78-6	
p-Isopropyltoluene	**<0.31**	ug/L	1.0	0.31	1		05/18/18 10:49	99-87-6	
Methylene Chloride	**<0.97**	ug/L	2.0	0.97	1		05/18/18 10:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.33**	ug/L	5.0	0.33	1		05/18/18 10:49	108-10-1	
Methyl-tert-butyl ether	**<0.21**	ug/L	1.0	0.21	1		05/18/18 10:49	1634-04-4	
Naphthalene	**<0.24**	ug/L	1.0	0.24	1		05/18/18 10:49	91-20-3	
Styrene	**<0.26**	ug/L	1.0	0.26	1		05/18/18 10:49	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.33**	ug/L	1.0	0.33	1		05/18/18 10:49	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.40**	ug/L	1.0	0.40	1		05/18/18 10:49	79-34-5	
Tetrachloroethene	**<0.46**	ug/L	1.0	0.46	1		05/18/18 10:49	127-18-4	
Toluene	**<0.26**	ug/L	1.0	0.26	1		05/18/18 10:49	108-88-3	
1,2,3-Trichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/18/18 10:49	87-61-6	
1,2,4-Trichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		05/18/18 10:49	120-82-1	
1,1,1-Trichloroethane	**<0.48**	ug/L	1.0	0.48	1		05/18/18 10:49	71-55-6	
1,1,2-Trichloroethane	**<0.29**	ug/L	1.0	0.29	1		05/18/18 10:49	79-00-5	
Trichloroethene	**<0.47**	ug/L	1.0	0.47	1		05/18/18 10:49	79-01-6	
Trichlorofluoromethane	**<0.20**	ug/L	1.0	0.20	1		05/18/18 10:49	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	1.0	0.41	1		05/18/18 10:49	96-18-4	
Vinyl acetate	**<0.35**	ug/L	2.0	0.35	1		05/18/18 10:49	108-05-4	
Vinyl chloride	**<0.62**	ug/L	1.0	0.62	1		05/18/18 10:49	75-01-4	
Xylene (Total)	**<1.0**	ug/L	1.0	1.0	1		05/18/18 10:49	1330-20-7	
m&p-Xylene	**<0.66**	ug/L	2.0	0.66	1		05/18/18 10:49	179601-23-1	
o-Xylene	**<0.23**	ug/L	1.0	0.23	1		05/18/18 10:49	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		05/18/18 10:49	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-130		1		05/18/18 10:49	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		05/18/18 10:49	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: MW-7A **Lab ID: 92384877003** Collected: 05/15/18 09:05 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	**<10.0**	ug/L	25.0	10.0	1		05/18/18 11:05	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		05/18/18 11:05	71-43-2	
Bromobenzene	**<0.30**	ug/L	1.0	0.30	1		05/18/18 11:05	108-86-1	
Bromochloromethane	**<0.17**	ug/L	1.0	0.17	1		05/18/18 11:05	74-97-5	
Bromodichloromethane	**<0.18**	ug/L	1.0	0.18	1		05/18/18 11:05	75-27-4	
Bromoform	**<0.26**	ug/L	1.0	0.26	1		05/18/18 11:05	75-25-2	
Bromomethane	**<0.29**	ug/L	2.0	0.29	1		05/18/18 11:05	74-83-9	
2-Butanone (MEK)	**<0.96**	ug/L	5.0	0.96	1		05/18/18 11:05	78-93-3	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		05/18/18 11:05	56-23-5	
Chlorobenzene	**<0.23**	ug/L	1.0	0.23	1		05/18/18 11:05	108-90-7	
Chloroethane	**<0.54**	ug/L	1.0	0.54	1		05/18/18 11:05	75-00-3	
Chloroform	**<0.14**	ug/L	1.0	0.14	1		05/18/18 11:05	67-66-3	
Chloromethane	**<0.11**	ug/L	1.0	0.11	1		05/18/18 11:05	74-87-3	
2-Chlorotoluene	**<0.35**	ug/L	1.0	0.35	1		05/18/18 11:05	95-49-8	
4-Chlorotoluene	**<0.31**	ug/L	1.0	0.31	1		05/18/18 11:05	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.0**	ug/L	2.0	2.0	1		05/18/18 11:05	96-12-8	
Dibromochloromethane	**<0.21**	ug/L	1.0	0.21	1		05/18/18 11:05	124-48-1	
1,2-Dibromoethane (EDB)	**<0.27**	ug/L	1.0	0.27	1		05/18/18 11:05	106-93-4	
Dibromomethane	**<0.21**	ug/L	1.0	0.21	1		05/18/18 11:05	74-95-3	
1,2-Dichlorobenzene	**<0.30**	ug/L	1.0	0.30	1		05/18/18 11:05	95-50-1	
1,3-Dichlorobenzene	**<0.24**	ug/L	1.0	0.24	1		05/18/18 11:05	541-73-1	
1,4-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/18/18 11:05	106-46-7	
Dichlorodifluoromethane	**<0.21**	ug/L	1.0	0.21	1		05/18/18 11:05	75-71-8	
1,1-Dichloroethane	**<0.32**	ug/L	1.0	0.32	1		05/18/18 11:05	75-34-3	
1,2-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		05/18/18 11:05	107-06-2	
1,1-Dichloroethene	**<0.56**	ug/L	1.0	0.56	1		05/18/18 11:05	75-35-4	
cis-1,2-Dichloroethene	**<0.19**	ug/L	1.0	0.19	1		05/18/18 11:05	156-59-2	
trans-1,2-Dichloroethene	**<0.49**	ug/L	1.0	0.49	1		05/18/18 11:05	156-60-5	
1,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		05/18/18 11:05	78-87-5	
1,3-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		05/18/18 11:05	142-28-9	
2,2-Dichloropropane	**<0.13**	ug/L	1.0	0.13	1		05/18/18 11:05	594-20-7	
1,1-Dichloropropene	**<0.49**	ug/L	1.0	0.49	1		05/18/18 11:05	563-58-6	
cis-1,3-Dichloropropene	**<0.13**	ug/L	1.0	0.13	1		05/18/18 11:05	10061-01-5	
trans-1,3-Dichloropropene	**<0.26**	ug/L	1.0	0.26	1		05/18/18 11:05	10061-02-6	
Diisopropyl ether	**<0.12**	ug/L	1.0	0.12	1		05/18/18 11:05	108-20-3	
Ethylbenzene	**<0.30**	ug/L	1.0	0.30	1		05/18/18 11:05	100-41-4	
Hexachloro-1,3-butadiene	**<0.71**	ug/L	1.0	0.71	1		05/18/18 11:05	87-68-3	
2-Hexanone	**<0.46**	ug/L	5.0	0.46	1		05/18/18 11:05	591-78-6	
p-Isopropyltoluene	**<0.31**	ug/L	1.0	0.31	1		05/18/18 11:05	99-87-6	
Methylene Chloride	**<0.97**	ug/L	2.0	0.97	1		05/18/18 11:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.33**	ug/L	5.0	0.33	1		05/18/18 11:05	108-10-1	
Methyl-tert-butyl ether	**<0.21**	ug/L	1.0	0.21	1		05/18/18 11:05	1634-04-4	
Naphthalene	**<0.24**	ug/L	1.0	0.24	1		05/18/18 11:05	91-20-3	
Styrene	**<0.26**	ug/L	1.0	0.26	1		05/18/18 11:05	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.33**	ug/L	1.0	0.33	1		05/18/18 11:05	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.40**	ug/L	1.0	0.40	1		05/18/18 11:05	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: MW-7A **Lab ID: 92384877003** Collected: 05/15/18 09:05 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Tetrachloroethene	**<0.46**	ug/L	1.0	0.46	1		05/18/18 11:05	127-18-4	
Toluene	**<0.26**	ug/L	1.0	0.26	1		05/18/18 11:05	108-88-3	
1,2,3-Trichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/18/18 11:05	87-61-6	
1,2,4-Trichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		05/18/18 11:05	120-82-1	
1,1,1-Trichloroethane	**<0.48**	ug/L	1.0	0.48	1		05/18/18 11:05	71-55-6	
1,1,2-Trichloroethane	**<0.29**	ug/L	1.0	0.29	1		05/18/18 11:05	79-00-5	
Trichloroethene	**<0.47**	ug/L	1.0	0.47	1		05/18/18 11:05	79-01-6	
Trichlorofluoromethane	**<0.20**	ug/L	1.0	0.20	1		05/18/18 11:05	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	1.0	0.41	1		05/18/18 11:05	96-18-4	
Vinyl acetate	**<0.35**	ug/L	2.0	0.35	1		05/18/18 11:05	108-05-4	
Vinyl chloride	**<0.62**	ug/L	1.0	0.62	1		05/18/18 11:05	75-01-4	
Xylene (Total)	**<1.0**	ug/L	1.0	1.0	1		05/18/18 11:05	1330-20-7	
m&p-Xylene	**<0.66**	ug/L	2.0	0.66	1		05/18/18 11:05	179601-23-1	
o-Xylene	**<0.23**	ug/L	1.0	0.23	1		05/18/18 11:05	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		05/18/18 11:05	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	70-130		1		05/18/18 11:05	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		05/18/18 11:05	2037-26-5	

Sample: MW-8A **Lab ID: 92384877004** Collected: 05/15/18 08:55 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	**<10.0**	ug/L	25.0	10.0	1		05/18/18 11:21	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		05/18/18 11:21	71-43-2	
Bromobenzene	**<0.30**	ug/L	1.0	0.30	1		05/18/18 11:21	108-86-1	
Bromochloromethane	**<0.17**	ug/L	1.0	0.17	1		05/18/18 11:21	74-97-5	
Bromodichloromethane	**<0.18**	ug/L	1.0	0.18	1		05/18/18 11:21	75-27-4	
Bromoform	**<0.26**	ug/L	1.0	0.26	1		05/18/18 11:21	75-25-2	
Bromomethane	**<0.29**	ug/L	2.0	0.29	1		05/18/18 11:21	74-83-9	
2-Butanone (MEK)	**<0.96**	ug/L	5.0	0.96	1		05/18/18 11:21	78-93-3	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		05/18/18 11:21	56-23-5	
Chlorobenzene	**<0.23**	ug/L	1.0	0.23	1		05/18/18 11:21	108-90-7	
Chloroethane	**<0.54**	ug/L	1.0	0.54	1		05/18/18 11:21	75-00-3	
Chloroform	**<0.14**	ug/L	1.0	0.14	1		05/18/18 11:21	67-66-3	
Chloromethane	**<0.11**	ug/L	1.0	0.11	1		05/18/18 11:21	74-87-3	
2-Chlorotoluene	**<0.35**	ug/L	1.0	0.35	1		05/18/18 11:21	95-49-8	
4-Chlorotoluene	**<0.31**	ug/L	1.0	0.31	1		05/18/18 11:21	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.0**	ug/L	2.0	2.0	1		05/18/18 11:21	96-12-8	
Dibromochloromethane	**<0.21**	ug/L	1.0	0.21	1		05/18/18 11:21	124-48-1	
1,2-Dibromoethane (EDB)	**<0.27**	ug/L	1.0	0.27	1		05/18/18 11:21	106-93-4	
Dibromomethane	**<0.21**	ug/L	1.0	0.21	1		05/18/18 11:21	74-95-3	
1,2-Dichlorobenzene	**<0.30**	ug/L	1.0	0.30	1		05/18/18 11:21	95-50-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: MW-8A **Lab ID: 92384877004** Collected: 05/15/18 08:55 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
1,3-Dichlorobenzene	**<0.24**	ug/L	1.0	0.24	1		05/18/18 11:21	541-73-1	
1,4-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/18/18 11:21	106-46-7	
Dichlorodifluoromethane	**<0.21**	ug/L	1.0	0.21	1		05/18/18 11:21	75-71-8	
1,1-Dichloroethane	**<0.32**	ug/L	1.0	0.32	1		05/18/18 11:21	75-34-3	
1,2-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		05/18/18 11:21	107-06-2	
1,1-Dichloroethene	**<0.56**	ug/L	1.0	0.56	1		05/18/18 11:21	75-35-4	
cis-1,2-Dichloroethene	**<0.19**	ug/L	1.0	0.19	1		05/18/18 11:21	156-59-2	
trans-1,2-Dichloroethene	**<0.49**	ug/L	1.0	0.49	1		05/18/18 11:21	156-60-5	
1,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		05/18/18 11:21	78-87-5	
1,3-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		05/18/18 11:21	142-28-9	
2,2-Dichloropropane	**<0.13**	ug/L	1.0	0.13	1		05/18/18 11:21	594-20-7	
1,1-Dichloropropene	**<0.49**	ug/L	1.0	0.49	1		05/18/18 11:21	563-58-6	
cis-1,3-Dichloropropene	**<0.13**	ug/L	1.0	0.13	1		05/18/18 11:21	10061-01-5	
trans-1,3-Dichloropropene	**<0.26**	ug/L	1.0	0.26	1		05/18/18 11:21	10061-02-6	
Diisopropyl ether	**<0.12**	ug/L	1.0	0.12	1		05/18/18 11:21	108-20-3	
Ethylbenzene	**<0.30**	ug/L	1.0	0.30	1		05/18/18 11:21	100-41-4	
Hexachloro-1,3-butadiene	**<0.71**	ug/L	1.0	0.71	1		05/18/18 11:21	87-68-3	
2-Hexanone	**<0.46**	ug/L	5.0	0.46	1		05/18/18 11:21	591-78-6	
p-Isopropyltoluene	**<0.31**	ug/L	1.0	0.31	1		05/18/18 11:21	99-87-6	
Methylene Chloride	**<0.97**	ug/L	2.0	0.97	1		05/18/18 11:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.33**	ug/L	5.0	0.33	1		05/18/18 11:21	108-10-1	
Methyl-tert-butyl ether	**<0.21**	ug/L	1.0	0.21	1		05/18/18 11:21	1634-04-4	
Naphthalene	**<0.24**	ug/L	1.0	0.24	1		05/18/18 11:21	91-20-3	
Styrene	**<0.26**	ug/L	1.0	0.26	1		05/18/18 11:21	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.33**	ug/L	1.0	0.33	1		05/18/18 11:21	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.40**	ug/L	1.0	0.40	1		05/18/18 11:21	79-34-5	
Tetrachloroethene	**<0.46**	ug/L	1.0	0.46	1		05/18/18 11:21	127-18-4	
Toluene	**<0.26**	ug/L	1.0	0.26	1		05/18/18 11:21	108-88-3	
1,2,3-Trichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/18/18 11:21	87-61-6	
1,2,4-Trichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		05/18/18 11:21	120-82-1	
1,1,1-Trichloroethane	**<0.48**	ug/L	1.0	0.48	1		05/18/18 11:21	71-55-6	
1,1,2-Trichloroethane	**<0.29**	ug/L	1.0	0.29	1		05/18/18 11:21	79-00-5	
Trichloroethene	**<0.47**	ug/L	1.0	0.47	1		05/18/18 11:21	79-01-6	
Trichlorofluoromethane	**<0.20**	ug/L	1.0	0.20	1		05/18/18 11:21	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	1.0	0.41	1		05/18/18 11:21	96-18-4	
Vinyl acetate	**<0.35**	ug/L	2.0	0.35	1		05/18/18 11:21	108-05-4	
Vinyl chloride	**<0.62**	ug/L	1.0	0.62	1		05/18/18 11:21	75-01-4	
Xylene (Total)	**<1.0**	ug/L	1.0	1.0	1		05/18/18 11:21	1330-20-7	
m&p-Xylene	**<0.66**	ug/L	2.0	0.66	1		05/18/18 11:21	179601-23-1	
o-Xylene	**<0.23**	ug/L	1.0	0.23	1		05/18/18 11:21	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		05/18/18 11:21	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-130		1		05/18/18 11:21	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		05/18/18 11:21	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: MW-10 **Lab ID: 92384877005** Collected: 05/15/18 10:15 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	**<10.0**	ug/L	25.0	10.0	1		05/19/18 07:37	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		05/19/18 07:37	71-43-2	
Bromobenzene	**<0.30**	ug/L	1.0	0.30	1		05/19/18 07:37	108-86-1	
Bromochloromethane	**<0.17**	ug/L	1.0	0.17	1		05/19/18 07:37	74-97-5	
Bromodichloromethane	**<0.18**	ug/L	1.0	0.18	1		05/19/18 07:37	75-27-4	
Bromoform	**<0.26**	ug/L	1.0	0.26	1		05/19/18 07:37	75-25-2	
Bromomethane	**<0.29**	ug/L	2.0	0.29	1		05/19/18 07:37	74-83-9	
2-Butanone (MEK)	**<0.96**	ug/L	5.0	0.96	1		05/19/18 07:37	78-93-3	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		05/19/18 07:37	56-23-5	
Chlorobenzene	**<0.23**	ug/L	1.0	0.23	1		05/19/18 07:37	108-90-7	
Chloroethane	**<0.54**	ug/L	1.0	0.54	1		05/19/18 07:37	75-00-3	
Chloroform	**<0.14**	ug/L	1.0	0.14	1		05/19/18 07:37	67-66-3	
Chloromethane	**<0.11**	ug/L	1.0	0.11	1		05/19/18 07:37	74-87-3	
2-Chlorotoluene	**<0.35**	ug/L	1.0	0.35	1		05/19/18 07:37	95-49-8	
4-Chlorotoluene	**<0.31**	ug/L	1.0	0.31	1		05/19/18 07:37	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.0**	ug/L	2.0	2.0	1		05/19/18 07:37	96-12-8	
Dibromochloromethane	**<0.21**	ug/L	1.0	0.21	1		05/19/18 07:37	124-48-1	
1,2-Dibromoethane (EDB)	**<0.27**	ug/L	1.0	0.27	1		05/19/18 07:37	106-93-4	
Dibromomethane	**0.49J**	ug/L	1.0	0.21	1		05/19/18 07:37	74-95-3	
1,2-Dichlorobenzene	**<0.30**	ug/L	1.0	0.30	1		05/19/18 07:37	95-50-1	
1,3-Dichlorobenzene	**<0.24**	ug/L	1.0	0.24	1		05/19/18 07:37	541-73-1	
1,4-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/19/18 07:37	106-46-7	
Dichlorodifluoromethane	**<0.21**	ug/L	1.0	0.21	1		05/19/18 07:37	75-71-8	
1,1-Dichloroethane	**<0.32**	ug/L	1.0	0.32	1		05/19/18 07:37	75-34-3	
1,2-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		05/19/18 07:37	107-06-2	
1,1-Dichloroethene	**<0.56**	ug/L	1.0	0.56	1		05/19/18 07:37	75-35-4	
cis-1,2-Dichloroethene	**<0.19**	ug/L	1.0	0.19	1		05/19/18 07:37	156-59-2	
trans-1,2-Dichloroethene	**<0.49**	ug/L	1.0	0.49	1		05/19/18 07:37	156-60-5	
1,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		05/19/18 07:37	78-87-5	
1,3-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		05/19/18 07:37	142-28-9	
2,2-Dichloropropane	**<0.13**	ug/L	1.0	0.13	1		05/19/18 07:37	594-20-7	
1,1-Dichloropropene	**<0.49**	ug/L	1.0	0.49	1		05/19/18 07:37	563-58-6	
cis-1,3-Dichloropropene	**<0.13**	ug/L	1.0	0.13	1		05/19/18 07:37	10061-01-5	
trans-1,3-Dichloropropene	**<0.26**	ug/L	1.0	0.26	1		05/19/18 07:37	10061-02-6	
Diisopropyl ether	**<0.12**	ug/L	1.0	0.12	1		05/19/18 07:37	108-20-3	
Ethylbenzene	**<0.30**	ug/L	1.0	0.30	1		05/19/18 07:37	100-41-4	
Hexachloro-1,3-butadiene	**<0.71**	ug/L	1.0	0.71	1		05/19/18 07:37	87-68-3	
2-Hexanone	**<0.46**	ug/L	5.0	0.46	1		05/19/18 07:37	591-78-6	
p-Isopropyltoluene	**<0.31**	ug/L	1.0	0.31	1		05/19/18 07:37	99-87-6	
Methylene Chloride	**<0.97**	ug/L	2.0	0.97	1		05/19/18 07:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.33**	ug/L	5.0	0.33	1		05/19/18 07:37	108-10-1	
Methyl-tert-butyl ether	**<0.21**	ug/L	1.0	0.21	1		05/19/18 07:37	1634-04-4	
Naphthalene	**<0.24**	ug/L	1.0	0.24	1		05/19/18 07:37	91-20-3	
Styrene	**<0.26**	ug/L	1.0	0.26	1		05/19/18 07:37	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.33**	ug/L	1.0	0.33	1		05/19/18 07:37	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.40**	ug/L	1.0	0.40	1		05/19/18 07:37	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: MW-10 **Lab ID: 92384877005** Collected: 05/15/18 10:15 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Tetrachloroethene	**<0.46**	ug/L	1.0	0.46	1		05/19/18 07:37	127-18-4	
Toluene	**<0.26**	ug/L	1.0	0.26	1		05/19/18 07:37	108-88-3	
1,2,3-Trichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/19/18 07:37	87-61-6	
1,2,4-Trichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		05/19/18 07:37	120-82-1	
1,1,1-Trichloroethane	**<0.48**	ug/L	1.0	0.48	1		05/19/18 07:37	71-55-6	
1,1,2-Trichloroethane	**<0.29**	ug/L	1.0	0.29	1		05/19/18 07:37	79-00-5	
Trichloroethene	**<0.47**	ug/L	1.0	0.47	1		05/19/18 07:37	79-01-6	
Trichlorofluoromethane	**0.68J**	ug/L	1.0	0.20	1		05/19/18 07:37	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	1.0	0.41	1		05/19/18 07:37	96-18-4	
Vinyl acetate	**<0.35**	ug/L	2.0	0.35	1		05/19/18 07:37	108-05-4	
Vinyl chloride	**<0.62**	ug/L	1.0	0.62	1		05/19/18 07:37	75-01-4	
Xylene (Total)	**<1.0**	ug/L	1.0	1.0	1		05/19/18 07:37	1330-20-7	
m&p-Xylene	**<0.66**	ug/L	2.0	0.66	1		05/19/18 07:37	179601-23-1	
o-Xylene	**<0.23**	ug/L	1.0	0.23	1		05/19/18 07:37	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		05/19/18 07:37	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		05/19/18 07:37	17060-07-0	
Toluene-d8 (S)	108	%	70-130		1		05/19/18 07:37	2037-26-5	

Sample: MW-11 **Lab ID: 92384877006** Collected: 05/15/18 12:20 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	**<25.0**	ug/L	62.5	25.0	2.5		05/22/18 04:07	67-64-1	
Benzene	**4.6**	ug/L	2.5	0.62	2.5		05/22/18 04:07	71-43-2	
Bromobenzene	**<0.75**	ug/L	2.5	0.75	2.5		05/22/18 04:07	108-86-1	
Bromochloromethane	**<0.42**	ug/L	2.5	0.42	2.5		05/22/18 04:07	74-97-5	
Bromodichloromethane	**<0.45**	ug/L	2.5	0.45	2.5		05/22/18 04:07	75-27-4	
Bromoform	**<0.65**	ug/L	2.5	0.65	2.5		05/22/18 04:07	75-25-2	
Bromomethane	**<0.72**	ug/L	5.0	0.72	2.5		05/22/18 04:07	74-83-9	
2-Butanone (MEK)	**<2.4**	ug/L	12.5	2.4	2.5		05/22/18 04:07	78-93-3	
Carbon tetrachloride	**<0.62**	ug/L	2.5	0.62	2.5		05/22/18 04:07	56-23-5	
Chlorobenzene	**<0.58**	ug/L	2.5	0.58	2.5		05/22/18 04:07	108-90-7	
Chloroethane	**<1.4**	ug/L	2.5	1.4	2.5		05/22/18 04:07	75-00-3	
Chloroform	**0.96J**	ug/L	2.5	0.35	2.5		05/22/18 04:07	67-66-3	B
Chloromethane	**0.79J**	ug/L	2.5	0.28	2.5		05/22/18 04:07	74-87-3	B
2-Chlorotoluene	**<0.88**	ug/L	2.5	0.88	2.5		05/22/18 04:07	95-49-8	
4-Chlorotoluene	**<0.78**	ug/L	2.5	0.78	2.5		05/22/18 04:07	106-43-4	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	5.0	2.5		05/22/18 04:07	96-12-8	
Dibromochloromethane	**<0.52**	ug/L	2.5	0.52	2.5		05/22/18 04:07	124-48-1	
1,2-Dibromoethane (EDB)	**<0.68**	ug/L	2.5	0.68	2.5		05/22/18 04:07	106-93-4	
Dibromomethane	**<0.52**	ug/L	2.5	0.52	2.5		05/22/18 04:07	74-95-3	
1,2-Dichlorobenzene	**<0.75**	ug/L	2.5	0.75	2.5		05/22/18 04:07	95-50-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: MW-11 **Lab ID: 92384877006** Collected: 05/15/18 12:20 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
1,3-Dichlorobenzene	**<0.60**	ug/L	2.5	0.60	2.5		05/22/18 04:07	541-73-1	
1,4-Dichlorobenzene	**<0.82**	ug/L	2.5	0.82	2.5		05/22/18 04:07	106-46-7	
Dichlorodifluoromethane	**<0.52**	ug/L	2.5	0.52	2.5		05/22/18 04:07	75-71-8	
1,1-Dichloroethane	**1.3J**	ug/L	2.5	0.80	2.5		05/22/18 04:07	75-34-3	
1,2-Dichloroethane	**0.69J**	ug/L	2.5	0.60	2.5		05/22/18 04:07	107-06-2	B
1,1-Dichloroethene	**9.1**	ug/L	2.5	1.4	2.5		05/22/18 04:07	75-35-4	
cis-1,2-Dichloroethene	**16.2**	ug/L	2.5	0.48	2.5		05/22/18 04:07	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/L	2.5	1.2	2.5		05/22/18 04:07	156-60-5	
1,2-Dichloropropane	**<0.68**	ug/L	2.5	0.68	2.5		05/22/18 04:07	78-87-5	
1,3-Dichloropropane	**<0.70**	ug/L	2.5	0.70	2.5		05/22/18 04:07	142-28-9	
2,2-Dichloropropane	**<0.32**	ug/L	2.5	0.32	2.5		05/22/18 04:07	594-20-7	
1,1-Dichloropropene	**<1.2**	ug/L	2.5	1.2	2.5		05/22/18 04:07	563-58-6	
cis-1,3-Dichloropropene	**<0.32**	ug/L	2.5	0.32	2.5		05/22/18 04:07	10061-01-5	
trans-1,3-Dichloropropene	**<0.65**	ug/L	2.5	0.65	2.5		05/22/18 04:07	10061-02-6	
Diisopropyl ether	**<0.30**	ug/L	2.5	0.30	2.5		05/22/18 04:07	108-20-3	
Ethylbenzene	**<0.75**	ug/L	2.5	0.75	2.5		05/22/18 04:07	100-41-4	
Hexachloro-1,3-butadiene	**<1.8**	ug/L	2.5	1.8	2.5		05/22/18 04:07	87-68-3	
2-Hexanone	**<1.2**	ug/L	12.5	1.2	2.5		05/22/18 04:07	591-78-6	
p-Isopropyltoluene	**<0.78**	ug/L	2.5	0.78	2.5		05/22/18 04:07	99-87-6	
Methylene Chloride	**<2.4**	ug/L	5.0	2.4	2.5		05/22/18 04:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.82**	ug/L	12.5	0.82	2.5		05/22/18 04:07	108-10-1	
Methyl-tert-butyl ether	**<0.52**	ug/L	2.5	0.52	2.5		05/22/18 04:07	1634-04-4	
Naphthalene	**<0.60**	ug/L	2.5	0.60	2.5		05/22/18 04:07	91-20-3	
Styrene	**<0.65**	ug/L	2.5	0.65	2.5		05/22/18 04:07	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.82**	ug/L	2.5	0.82	2.5		05/22/18 04:07	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	2.5	1.0	2.5		05/22/18 04:07	79-34-5	
Tetrachloroethene	**2.8**	ug/L	2.5	1.2	2.5		05/22/18 04:07	127-18-4	
Toluene	**<0.65**	ug/L	2.5	0.65	2.5		05/22/18 04:07	108-88-3	
1,2,3-Trichlorobenzene	**<0.82**	ug/L	2.5	0.82	2.5		05/22/18 04:07	87-61-6	
1,2,4-Trichlorobenzene	**<0.88**	ug/L	2.5	0.88	2.5		05/22/18 04:07	120-82-1	
1,1,1-Trichloroethane	**<1.2**	ug/L	2.5	1.2	2.5		05/22/18 04:07	71-55-6	
1,1,2-Trichloroethane	**<0.72**	ug/L	2.5	0.72	2.5		05/22/18 04:07	79-00-5	
Trichloroethene	**291**	ug/L	2.5	1.2	2.5		05/22/18 04:07	79-01-6	
Trichlorofluoromethane	**<0.50**	ug/L	2.5	0.50	2.5		05/22/18 04:07	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	2.5	1.0	2.5		05/22/18 04:07	96-18-4	
Vinyl acetate	**<0.88**	ug/L	5.0	0.88	2.5		05/22/18 04:07	108-05-4	
Vinyl chloride	**<1.6**	ug/L	2.5	1.6	2.5		05/22/18 04:07	75-01-4	
Xylene (Total)	**<2.5**	ug/L	2.5	2.5	2.5		05/22/18 04:07	1330-20-7	
m&p-Xylene	**<1.6**	ug/L	5.0	1.6	2.5		05/22/18 04:07	179601-23-1	
o-Xylene	**<0.58**	ug/L	2.5	0.58	2.5		05/22/18 04:07	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	106	%	70-130		2.5		05/22/18 04:07	460-00-4	
1,2-Dichloroethane-d4 (S)	118	%	70-130		2.5		05/22/18 04:07	17060-07-0	
Toluene-d8 (S)	105	%	70-130		2.5		05/22/18 04:07	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: MW-13 **Lab ID: 92384877007** Collected: 05/15/18 10:35 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	**<10.0**	ug/L	25.0	10.0	1		05/19/18 07:55	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		05/19/18 07:55	71-43-2	
Bromobenzene	**<0.30**	ug/L	1.0	0.30	1		05/19/18 07:55	108-86-1	
Bromochloromethane	**<0.17**	ug/L	1.0	0.17	1		05/19/18 07:55	74-97-5	
Bromodichloromethane	**<0.18**	ug/L	1.0	0.18	1		05/19/18 07:55	75-27-4	
Bromoform	**<0.26**	ug/L	1.0	0.26	1		05/19/18 07:55	75-25-2	
Bromomethane	**<0.29**	ug/L	2.0	0.29	1		05/19/18 07:55	74-83-9	
2-Butanone (MEK)	**<0.96**	ug/L	5.0	0.96	1		05/19/18 07:55	78-93-3	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		05/19/18 07:55	56-23-5	
Chlorobenzene	**<0.23**	ug/L	1.0	0.23	1		05/19/18 07:55	108-90-7	
Chloroethane	**<0.54**	ug/L	1.0	0.54	1		05/19/18 07:55	75-00-3	
Chloroform	**<0.14**	ug/L	1.0	0.14	1		05/19/18 07:55	67-66-3	
Chloromethane	**<0.11**	ug/L	1.0	0.11	1		05/19/18 07:55	74-87-3	
2-Chlorotoluene	**<0.35**	ug/L	1.0	0.35	1		05/19/18 07:55	95-49-8	
4-Chlorotoluene	**<0.31**	ug/L	1.0	0.31	1		05/19/18 07:55	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.0**	ug/L	2.0	2.0	1		05/19/18 07:55	96-12-8	
Dibromochloromethane	**<0.21**	ug/L	1.0	0.21	1		05/19/18 07:55	124-48-1	
1,2-Dibromoethane (EDB)	**<0.27**	ug/L	1.0	0.27	1		05/19/18 07:55	106-93-4	
Dibromomethane	**<0.21**	ug/L	1.0	0.21	1		05/19/18 07:55	74-95-3	
1,2-Dichlorobenzene	**<0.30**	ug/L	1.0	0.30	1		05/19/18 07:55	95-50-1	
1,3-Dichlorobenzene	**<0.24**	ug/L	1.0	0.24	1		05/19/18 07:55	541-73-1	
1,4-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/19/18 07:55	106-46-7	
Dichlorodifluoromethane	**<0.21**	ug/L	1.0	0.21	1		05/19/18 07:55	75-71-8	
1,1-Dichloroethane	**<0.32**	ug/L	1.0	0.32	1		05/19/18 07:55	75-34-3	
1,2-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		05/19/18 07:55	107-06-2	
1,1-Dichloroethene	**<0.56**	ug/L	1.0	0.56	1		05/19/18 07:55	75-35-4	
cis-1,2-Dichloroethene	**<0.19**	ug/L	1.0	0.19	1		05/19/18 07:55	156-59-2	
trans-1,2-Dichloroethene	**<0.49**	ug/L	1.0	0.49	1		05/19/18 07:55	156-60-5	
1,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		05/19/18 07:55	78-87-5	
1,3-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		05/19/18 07:55	142-28-9	
2,2-Dichloropropane	**<0.13**	ug/L	1.0	0.13	1		05/19/18 07:55	594-20-7	
1,1-Dichloropropene	**<0.49**	ug/L	1.0	0.49	1		05/19/18 07:55	563-58-6	
cis-1,3-Dichloropropene	**<0.13**	ug/L	1.0	0.13	1		05/19/18 07:55	10061-01-5	
trans-1,3-Dichloropropene	**<0.26**	ug/L	1.0	0.26	1		05/19/18 07:55	10061-02-6	
Diisopropyl ether	**<0.12**	ug/L	1.0	0.12	1		05/19/18 07:55	108-20-3	
Ethylbenzene	**<0.30**	ug/L	1.0	0.30	1		05/19/18 07:55	100-41-4	
Hexachloro-1,3-butadiene	**<0.71**	ug/L	1.0	0.71	1		05/19/18 07:55	87-68-3	
2-Hexanone	**<0.46**	ug/L	5.0	0.46	1		05/19/18 07:55	591-78-6	
p-Isopropyltoluene	**<0.31**	ug/L	1.0	0.31	1		05/19/18 07:55	99-87-6	
Methylene Chloride	**<0.97**	ug/L	2.0	0.97	1		05/19/18 07:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.33**	ug/L	5.0	0.33	1		05/19/18 07:55	108-10-1	
Methyl-tert-butyl ether	**<0.21**	ug/L	1.0	0.21	1		05/19/18 07:55	1634-04-4	
Naphthalene	**<0.24**	ug/L	1.0	0.24	1		05/19/18 07:55	91-20-3	
Styrene	**<0.26**	ug/L	1.0	0.26	1		05/19/18 07:55	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.33**	ug/L	1.0	0.33	1		05/19/18 07:55	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.40**	ug/L	1.0	0.40	1		05/19/18 07:55	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: MW-13 **Lab ID: 92384877007** Collected: 05/15/18 10:35 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Tetrachloroethene	**<0.46**	ug/L	1.0	0.46	1		05/19/18 07:55	127-18-4	
Toluene	**<0.26**	ug/L	1.0	0.26	1		05/19/18 07:55	108-88-3	
1,2,3-Trichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/19/18 07:55	87-61-6	
1,2,4-Trichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		05/19/18 07:55	120-82-1	
1,1,1-Trichloroethane	**<0.48**	ug/L	1.0	0.48	1		05/19/18 07:55	71-55-6	
1,1,2-Trichloroethane	**<0.29**	ug/L	1.0	0.29	1		05/19/18 07:55	79-00-5	
Trichloroethene	**<0.47**	ug/L	1.0	0.47	1		05/19/18 07:55	79-01-6	
Trichlorofluoromethane	**<0.20**	ug/L	1.0	0.20	1		05/19/18 07:55	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	1.0	0.41	1		05/19/18 07:55	96-18-4	
Vinyl acetate	**<0.35**	ug/L	2.0	0.35	1		05/19/18 07:55	108-05-4	
Vinyl chloride	**<0.62**	ug/L	1.0	0.62	1		05/19/18 07:55	75-01-4	
Xylene (Total)	**<1.0**	ug/L	1.0	1.0	1		05/19/18 07:55	1330-20-7	
m&p-Xylene	**<0.66**	ug/L	2.0	0.66	1		05/19/18 07:55	179601-23-1	
o-Xylene	**<0.23**	ug/L	1.0	0.23	1		05/19/18 07:55	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		05/19/18 07:55	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		05/19/18 07:55	17060-07-0	
Toluene-d8 (S)	110	%	70-130		1		05/19/18 07:55	2037-26-5	

Sample: DUP-1 **Lab ID: 92384877008** Collected: 05/15/18 00:00 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	**<25.0**	ug/L	62.5	25.0	2.5		05/22/18 17:44	67-64-1	
Benzene	**5.5**	ug/L	2.5	0.62	2.5		05/22/18 17:44	71-43-2	
Bromobenzene	**<0.75**	ug/L	2.5	0.75	2.5		05/22/18 17:44	108-86-1	
Bromochloromethane	**<0.42**	ug/L	2.5	0.42	2.5		05/22/18 17:44	74-97-5	
Bromodichloromethane	**<0.45**	ug/L	2.5	0.45	2.5		05/22/18 17:44	75-27-4	
Bromoform	**<0.65**	ug/L	2.5	0.65	2.5		05/22/18 17:44	75-25-2	
Bromomethane	**<0.72**	ug/L	5.0	0.72	2.5		05/22/18 17:44	74-83-9	
2-Butanone (MEK)	**<2.4**	ug/L	12.5	2.4	2.5		05/22/18 17:44	78-93-3	
Carbon tetrachloride	**<0.62**	ug/L	2.5	0.62	2.5		05/22/18 17:44	56-23-5	
Chlorobenzene	**<0.58**	ug/L	2.5	0.58	2.5		05/22/18 17:44	108-90-7	
Chloroethane	**<1.4**	ug/L	2.5	1.4	2.5		05/22/18 17:44	75-00-3	
Chloroform	**<0.35**	ug/L	2.5	0.35	2.5		05/22/18 17:44	67-66-3	
Chloromethane	**<0.28**	ug/L	2.5	0.28	2.5		05/22/18 17:44	74-87-3	
2-Chlorotoluene	**<0.88**	ug/L	2.5	0.88	2.5		05/22/18 17:44	95-49-8	
4-Chlorotoluene	**<0.78**	ug/L	2.5	0.78	2.5		05/22/18 17:44	106-43-4	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	5.0	2.5		05/22/18 17:44	96-12-8	
Dibromochloromethane	**<0.52**	ug/L	2.5	0.52	2.5		05/22/18 17:44	124-48-1	
1,2-Dibromoethane (EDB)	**<0.68**	ug/L	2.5	0.68	2.5		05/22/18 17:44	106-93-4	
Dibromomethane	**<0.52**	ug/L	2.5	0.52	2.5		05/22/18 17:44	74-95-3	
1,2-Dichlorobenzene	**<0.75**	ug/L	2.5	0.75	2.5		05/22/18 17:44	95-50-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: DUP-1 **Lab ID: 92384877008** Collected: 05/15/18 00:00 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
1,3-Dichlorobenzene	**<0.60**	ug/L	2.5	0.60	2.5		05/22/18 17:44	541-73-1	
1,4-Dichlorobenzene	**<0.82**	ug/L	2.5	0.82	2.5		05/22/18 17:44	106-46-7	
Dichlorodifluoromethane	**<0.52**	ug/L	2.5	0.52	2.5		05/22/18 17:44	75-71-8	
1,1-Dichloroethane	**1.2J**	ug/L	2.5	0.80	2.5		05/22/18 17:44	75-34-3	
1,2-Dichloroethane	**<0.60**	ug/L	2.5	0.60	2.5		05/22/18 17:44	107-06-2	
1,1-Dichloroethene	**7.2**	ug/L	2.5	1.4	2.5		05/22/18 17:44	75-35-4	
cis-1,2-Dichloroethene	**9.5**	ug/L	2.5	0.48	2.5		05/22/18 17:44	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/L	2.5	1.2	2.5		05/22/18 17:44	156-60-5	
1,2-Dichloropropane	**<0.68**	ug/L	2.5	0.68	2.5		05/22/18 17:44	78-87-5	
1,3-Dichloropropane	**<0.70**	ug/L	2.5	0.70	2.5		05/22/18 17:44	142-28-9	
2,2-Dichloropropane	**<0.32**	ug/L	2.5	0.32	2.5		05/22/18 17:44	594-20-7	
1,1-Dichloropropene	**<1.2**	ug/L	2.5	1.2	2.5		05/22/18 17:44	563-58-6	
cis-1,3-Dichloropropene	**<0.32**	ug/L	2.5	0.32	2.5		05/22/18 17:44	10061-01-5	
trans-1,3-Dichloropropene	**<0.65**	ug/L	2.5	0.65	2.5		05/22/18 17:44	10061-02-6	
Diisopropyl ether	**<0.30**	ug/L	2.5	0.30	2.5		05/22/18 17:44	108-20-3	
Ethylbenzene	**<0.75**	ug/L	2.5	0.75	2.5		05/22/18 17:44	100-41-4	
Hexachloro-1,3-butadiene	**<1.8**	ug/L	2.5	1.8	2.5		05/22/18 17:44	87-68-3	
2-Hexanone	**<1.2**	ug/L	12.5	1.2	2.5		05/22/18 17:44	591-78-6	
p-Isopropyltoluene	**<0.78**	ug/L	2.5	0.78	2.5		05/22/18 17:44	99-87-6	
Methylene Chloride	**<2.4**	ug/L	5.0	2.4	2.5		05/22/18 17:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.82**	ug/L	12.5	0.82	2.5		05/22/18 17:44	108-10-1	
Methyl-tert-butyl ether	**<0.52**	ug/L	2.5	0.52	2.5		05/22/18 17:44	1634-04-4	
Naphthalene	**<0.60**	ug/L	2.5	0.60	2.5		05/22/18 17:44	91-20-3	
Styrene	**<0.65**	ug/L	2.5	0.65	2.5		05/22/18 17:44	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.82**	ug/L	2.5	0.82	2.5		05/22/18 17:44	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	2.5	1.0	2.5		05/22/18 17:44	79-34-5	
Tetrachloroethene	**2.5J**	ug/L	2.5	1.2	2.5		05/22/18 17:44	127-18-4	
Toluene	**<0.65**	ug/L	2.5	0.65	2.5		05/22/18 17:44	108-88-3	
1,2,3-Trichlorobenzene	**<0.82**	ug/L	2.5	0.82	2.5		05/22/18 17:44	87-61-6	
1,2,4-Trichlorobenzene	**<0.88**	ug/L	2.5	0.88	2.5		05/22/18 17:44	120-82-1	
1,1,1-Trichloroethane	**<1.2**	ug/L	2.5	1.2	2.5		05/22/18 17:44	71-55-6	
1,1,2-Trichloroethane	**<0.72**	ug/L	2.5	0.72	2.5		05/22/18 17:44	79-00-5	
Trichloroethene	**292**	ug/L	2.5	1.2	2.5		05/22/18 17:44	79-01-6	
Trichlorofluoromethane	**<0.50**	ug/L	2.5	0.50	2.5		05/22/18 17:44	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	2.5	1.0	2.5		05/22/18 17:44	96-18-4	
Vinyl acetate	**<0.88**	ug/L	5.0	0.88	2.5		05/22/18 17:44	108-05-4	
Vinyl chloride	**<1.6**	ug/L	2.5	1.6	2.5		05/22/18 17:44	75-01-4	
Xylene (Total)	**<2.5**	ug/L	2.5	2.5	2.5		05/22/18 17:44	1330-20-7	
m&p-Xylene	**<1.6**	ug/L	5.0	1.6	2.5		05/22/18 17:44	179601-23-1	
o-Xylene	**<0.58**	ug/L	2.5	0.58	2.5		05/22/18 17:44	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		2.5		05/22/18 17:44	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	70-130		2.5		05/22/18 17:44	17060-07-0	
Toluene-d8 (S)	115	%	70-130		2.5		05/22/18 17:44	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: TRIP BLANK **Lab ID: 92384877009** Collected: 05/15/18 00:00 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	**<10.0**	ug/L	25.0	10.0	1		05/19/18 04:39	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		05/19/18 04:39	71-43-2	
Bromobenzene	**<0.30**	ug/L	1.0	0.30	1		05/19/18 04:39	108-86-1	
Bromochloromethane	**<0.17**	ug/L	1.0	0.17	1		05/19/18 04:39	74-97-5	
Bromodichloromethane	**<0.18**	ug/L	1.0	0.18	1		05/19/18 04:39	75-27-4	
Bromoform	**<0.26**	ug/L	1.0	0.26	1		05/19/18 04:39	75-25-2	
Bromomethane	**<0.29**	ug/L	2.0	0.29	1		05/19/18 04:39	74-83-9	
2-Butanone (MEK)	**<0.96**	ug/L	5.0	0.96	1		05/19/18 04:39	78-93-3	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		05/19/18 04:39	56-23-5	
Chlorobenzene	**<0.23**	ug/L	1.0	0.23	1		05/19/18 04:39	108-90-7	
Chloroethane	**<0.54**	ug/L	1.0	0.54	1		05/19/18 04:39	75-00-3	
Chloroform	**<0.14**	ug/L	1.0	0.14	1		05/19/18 04:39	67-66-3	
Chloromethane	**<0.11**	ug/L	1.0	0.11	1		05/19/18 04:39	74-87-3	
2-Chlorotoluene	**<0.35**	ug/L	1.0	0.35	1		05/19/18 04:39	95-49-8	
4-Chlorotoluene	**<0.31**	ug/L	1.0	0.31	1		05/19/18 04:39	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.0**	ug/L	2.0	2.0	1		05/19/18 04:39	96-12-8	
Dibromochloromethane	**<0.21**	ug/L	1.0	0.21	1		05/19/18 04:39	124-48-1	
1,2-Dibromoethane (EDB)	**<0.27**	ug/L	1.0	0.27	1		05/19/18 04:39	106-93-4	
Dibromomethane	**<0.21**	ug/L	1.0	0.21	1		05/19/18 04:39	74-95-3	
1,2-Dichlorobenzene	**<0.30**	ug/L	1.0	0.30	1		05/19/18 04:39	95-50-1	
1,3-Dichlorobenzene	**<0.24**	ug/L	1.0	0.24	1		05/19/18 04:39	541-73-1	
1,4-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/19/18 04:39	106-46-7	
Dichlorodifluoromethane	**<0.21**	ug/L	1.0	0.21	1		05/19/18 04:39	75-71-8	
1,1-Dichloroethane	**<0.32**	ug/L	1.0	0.32	1		05/19/18 04:39	75-34-3	
1,2-Dichloroethane	**0.27J**	ug/L	1.0	0.24	1		05/19/18 04:39	107-06-2	
1,1-Dichloroethene	**<0.56**	ug/L	1.0	0.56	1		05/19/18 04:39	75-35-4	
cis-1,2-Dichloroethene	**<0.19**	ug/L	1.0	0.19	1		05/19/18 04:39	156-59-2	
trans-1,2-Dichloroethene	**<0.49**	ug/L	1.0	0.49	1		05/19/18 04:39	156-60-5	
1,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		05/19/18 04:39	78-87-5	
1,3-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		05/19/18 04:39	142-28-9	
2,2-Dichloropropane	**<0.13**	ug/L	1.0	0.13	1		05/19/18 04:39	594-20-7	
1,1-Dichloropropene	**<0.49**	ug/L	1.0	0.49	1		05/19/18 04:39	563-58-6	
cis-1,3-Dichloropropene	**<0.13**	ug/L	1.0	0.13	1		05/19/18 04:39	10061-01-5	
trans-1,3-Dichloropropene	**<0.26**	ug/L	1.0	0.26	1		05/19/18 04:39	10061-02-6	
Diisopropyl ether	**<0.12**	ug/L	1.0	0.12	1		05/19/18 04:39	108-20-3	
Ethylbenzene	**<0.30**	ug/L	1.0	0.30	1		05/19/18 04:39	100-41-4	
Hexachloro-1,3-butadiene	**<0.71**	ug/L	1.0	0.71	1		05/19/18 04:39	87-68-3	
2-Hexanone	**<0.46**	ug/L	5.0	0.46	1		05/19/18 04:39	591-78-6	
p-Isopropyltoluene	**<0.31**	ug/L	1.0	0.31	1		05/19/18 04:39	99-87-6	
Methylene Chloride	**<0.97**	ug/L	2.0	0.97	1		05/19/18 04:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.33**	ug/L	5.0	0.33	1		05/19/18 04:39	108-10-1	
Methyl-tert-butyl ether	**<0.21**	ug/L	1.0	0.21	1		05/19/18 04:39	1634-04-4	
Naphthalene	**<0.24**	ug/L	1.0	0.24	1		05/19/18 04:39	91-20-3	
Styrene	**<0.26**	ug/L	1.0	0.26	1		05/19/18 04:39	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.33**	ug/L	1.0	0.33	1		05/19/18 04:39	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.40**	ug/L	1.0	0.40	1		05/19/18 04:39	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Sample: TRIP BLANK **Lab ID: 92384877009** Collected: 05/15/18 00:00 Received: 05/16/18 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Tetrachloroethene	**<0.46**	ug/L	1.0	0.46	1		05/19/18 04:39	127-18-4	
Toluene	**<0.26**	ug/L	1.0	0.26	1		05/19/18 04:39	108-88-3	
1,2,3-Trichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		05/19/18 04:39	87-61-6	
1,2,4-Trichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		05/19/18 04:39	120-82-1	
1,1,1-Trichloroethane	**<0.48**	ug/L	1.0	0.48	1		05/19/18 04:39	71-55-6	
1,1,2-Trichloroethane	**<0.29**	ug/L	1.0	0.29	1		05/19/18 04:39	79-00-5	
Trichloroethene	**<0.47**	ug/L	1.0	0.47	1		05/19/18 04:39	79-01-6	
Trichlorofluoromethane	**<0.20**	ug/L	1.0	0.20	1		05/19/18 04:39	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	1.0	0.41	1		05/19/18 04:39	96-18-4	
Vinyl acetate	**<0.35**	ug/L	2.0	0.35	1		05/19/18 04:39	108-05-4	
Vinyl chloride	**<0.62**	ug/L	1.0	0.62	1		05/19/18 04:39	75-01-4	
Xylene (Total)	**<1.0**	ug/L	1.0	1.0	1		05/19/18 04:39	1330-20-7	
m&p-Xylene	**<0.66**	ug/L	2.0	0.66	1		05/19/18 04:39	179601-23-1	
o-Xylene	**<0.23**	ug/L	1.0	0.23	1		05/19/18 04:39	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		05/19/18 04:39	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	70-130		1		05/19/18 04:39	17060-07-0	
Toluene-d8 (S)	110	%	70-130		1		05/19/18 04:39	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

QC Batch: 411270 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92384877001, 92384877002, 92384877003, 92384877004

METHOD BLANK: 2281746 Matrix: Water
Associated Lab Samples: 92384877001, 92384877002, 92384877003, 92384877004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.33	1.0	0.33	05/18/18 06:14	
1,1,1-Trichloroethane	ug/L	<0.48	1.0	0.48	05/18/18 06:14	
1,1,2,2-Tetrachloroethane	ug/L	<0.40	1.0	0.40	05/18/18 06:14	
1,1,2-Trichloroethane	ug/L	<0.29	1.0	0.29	05/18/18 06:14	
1,1-Dichloroethane	ug/L	<0.32	1.0	0.32	05/18/18 06:14	
1,1-Dichloroethene	ug/L	<0.56	1.0	0.56	05/18/18 06:14	
1,1-Dichloropropene	ug/L	<0.49	1.0	0.49	05/18/18 06:14	
1,2,3-Trichlorobenzene	ug/L	<0.33	1.0	0.33	05/18/18 06:14	
1,2,3-Trichloropropane	ug/L	<0.41	1.0	0.41	05/18/18 06:14	
1,2,4-Trichlorobenzene	ug/L	<0.35	1.0	0.35	05/18/18 06:14	
1,2-Dibromo-3-chloropropane	ug/L	<2.0	2.0	2.0	05/18/18 06:14	
1,2-Dibromoethane (EDB)	ug/L	<0.27	1.0	0.27	05/18/18 06:14	
1,2-Dichlorobenzene	ug/L	<0.30	1.0	0.30	05/18/18 06:14	
1,2-Dichloroethane	ug/L	<0.24	1.0	0.24	05/18/18 06:14	
1,2-Dichloropropane	ug/L	<0.27	1.0	0.27	05/18/18 06:14	
1,3-Dichlorobenzene	ug/L	<0.24	1.0	0.24	05/18/18 06:14	
1,3-Dichloropropane	ug/L	<0.28	1.0	0.28	05/18/18 06:14	
1,4-Dichlorobenzene	ug/L	<0.33	1.0	0.33	05/18/18 06:14	
2,2-Dichloropropane	ug/L	<0.13	1.0	0.13	05/18/18 06:14	
2-Butanone (MEK)	ug/L	<0.96	5.0	0.96	05/18/18 06:14	
2-Chlorotoluene	ug/L	<0.35	1.0	0.35	05/18/18 06:14	
2-Hexanone	ug/L	<0.46	5.0	0.46	05/18/18 06:14	
4-Chlorotoluene	ug/L	<0.31	1.0	0.31	05/18/18 06:14	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.33	5.0	0.33	05/18/18 06:14	
Acetone	ug/L	<10.0	25.0	10.0	05/18/18 06:14	
Benzene	ug/L	<0.25	1.0	0.25	05/18/18 06:14	
Bromobenzene	ug/L	<0.30	1.0	0.30	05/18/18 06:14	
Bromochloromethane	ug/L	<0.17	1.0	0.17	05/18/18 06:14	
Bromodichloromethane	ug/L	<0.18	1.0	0.18	05/18/18 06:14	
Bromoform	ug/L	<0.26	1.0	0.26	05/18/18 06:14	
Bromomethane	ug/L	<0.29	2.0	0.29	05/18/18 06:14	
Carbon tetrachloride	ug/L	<0.25	1.0	0.25	05/18/18 06:14	
Chlorobenzene	ug/L	<0.23	1.0	0.23	05/18/18 06:14	
Chloroethane	ug/L	<0.54	1.0	0.54	05/18/18 06:14	
Chloroform	ug/L	0.49J	1.0	0.14	05/18/18 06:14	
Chloromethane	ug/L	<0.11	1.0	0.11	05/18/18 06:14	
cis-1,2-Dichloroethene	ug/L	<0.19	1.0	0.19	05/18/18 06:14	
cis-1,3-Dichloropropene	ug/L	<0.13	1.0	0.13	05/18/18 06:14	
Dibromochloromethane	ug/L	<0.21	1.0	0.21	05/18/18 06:14	
Dibromomethane	ug/L	<0.21	1.0	0.21	05/18/18 06:14	
Dichlorodifluoromethane	ug/L	<0.21	1.0	0.21	05/18/18 06:14	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

METHOD BLANK: 2281746 Matrix: Water
Associated Lab Samples: 92384877001, 92384877002, 92384877003, 92384877004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Diisopropyl ether	ug/L	<0.12	1.0	0.12	05/18/18 06:14	
Ethylbenzene	ug/L	<0.30	1.0	0.30	05/18/18 06:14	
Hexachloro-1,3-butadiene	ug/L	<0.71	1.0	0.71	05/18/18 06:14	
m&p-Xylene	ug/L	<0.66	2.0	0.66	05/18/18 06:14	
Methyl-tert-butyl ether	ug/L	<0.21	1.0	0.21	05/18/18 06:14	
Methylene Chloride	ug/L	<0.97	2.0	0.97	05/18/18 06:14	
Naphthalene	ug/L	<0.24	1.0	0.24	05/18/18 06:14	
o-Xylene	ug/L	<0.23	1.0	0.23	05/18/18 06:14	
p-Isopropyltoluene	ug/L	<0.31	1.0	0.31	05/18/18 06:14	
Styrene	ug/L	<0.26	1.0	0.26	05/18/18 06:14	
Tetrachloroethene	ug/L	<0.46	1.0	0.46	05/18/18 06:14	
Toluene	ug/L	<0.26	1.0	0.26	05/18/18 06:14	
trans-1,2-Dichloroethene	ug/L	<0.49	1.0	0.49	05/18/18 06:14	
trans-1,3-Dichloropropene	ug/L	<0.26	1.0	0.26	05/18/18 06:14	
Trichloroethene	ug/L	<0.47	1.0	0.47	05/18/18 06:14	
Trichlorofluoromethane	ug/L	<0.20	1.0	0.20	05/18/18 06:14	
Vinyl acetate	ug/L	<0.35	2.0	0.35	05/18/18 06:14	
Vinyl chloride	ug/L	<0.62	1.0	0.62	05/18/18 06:14	
Xylene (Total)	ug/L	<1.0	1.0	1.0	05/18/18 06:14	
1,2-Dichloroethane-d4 (S)	%	90	70-130		05/18/18 06:14	
4-Bromofluorobenzene (S)	%	99	70-130		05/18/18 06:14	
Toluene-d8 (S)	%	100	70-130		05/18/18 06:14	

LABORATORY CONTROL SAMPLE: 2281747

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	47.4	95	80-125	
1,1,1-Trichloroethane	ug/L	50	43.0	86	71-129	
1,1,2,2-Tetrachloroethane	ug/L	50	46.3	93	79-124	
1,1,2-Trichloroethane	ug/L	50	46.7	93	85-125	
1,1-Dichloroethane	ug/L	50	41.3	83	73-126	
1,1-Dichloroethene	ug/L	50	43.7	87	66-135	
1,1-Dichloropropene	ug/L	50	42.8	86	74-135	
1,2,3-Trichlorobenzene	ug/L	50	49.2	98	73-135	
1,2,3-Trichloropropane	ug/L	50	47.6	95	75-130	
1,2,4-Trichlorobenzene	ug/L	50	48.0	96	75-134	
1,2-Dibromo-3-chloropropane	ug/L	50	51.3	103	71-133	
1,2-Dibromoethane (EDB)	ug/L	50	47.4	95	83-124	
1,2-Dichlorobenzene	ug/L	50	45.0	90	80-133	
1,2-Dichloroethane	ug/L	50	41.4	83	67-128	
1,2-Dichloropropane	ug/L	50	45.7	91	75-132	
1,3-Dichlorobenzene	ug/L	50	44.4	89	77-130	
1,3-Dichloropropane	ug/L	50	47.4	95	76-131	
1,4-Dichlorobenzene	ug/L	50	43.5	87	78-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

LABORATORY CONTROL SAMPLE: 2281747

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,2-Dichloropropane	ug/L	50	39.0	78	40-160	
2-Butanone (MEK)	ug/L	100	84.5	84	61-144	
2-Chlorotoluene	ug/L	50	42.7	85	74-132	
2-Hexanone	ug/L	100	88.9	89	68-143	
4-Chlorotoluene	ug/L	50	43.7	87	76-133	
4-Methyl-2-pentanone (MIBK)	ug/L	100	85.5	86	72-135	
Acetone	ug/L	100	84.7	85	48-146	
Benzene	ug/L	50	45.0	90	80-125	
Bromobenzene	ug/L	50	44.7	89	75-125	
Bromochloromethane	ug/L	50	45.9	92	71-125	
Bromodichloromethane	ug/L	50	46.8	94	78-124	
Bromoform	ug/L	50	53.6	107	71-128	
Bromomethane	ug/L	50	36.1	72	40-160	
Carbon tetrachloride	ug/L	50	44.6	89	69-131	
Chlorobenzene	ug/L	50	45.2	90	81-122	
Chloroethane	ug/L	50	34.5	69	39-148	
Chloroform	ug/L	50	42.4	85	73-127	
Chloromethane	ug/L	50	33.4	67	44-146	
cis-1,2-Dichloroethene	ug/L	50	43.3	87	74-124	
cis-1,3-Dichloropropene	ug/L	50	46.8	94	72-132	
Dibromochloromethane	ug/L	50	50.0	100	78-125	
Dibromomethane	ug/L	50	48.8	98	82-120	
Dichlorodifluoromethane	ug/L	50	39.9	80	34-157	
Diisopropyl ether	ug/L	50	42.0	84	69-135	
Ethylbenzene	ug/L	50	45.1	90	79-121	
Hexachloro-1,3-butadiene	ug/L	50	46.2	92	72-131	
m&p-Xylene	ug/L	100	90.6	91	81-124	
Methyl-tert-butyl ether	ug/L	50	43.9	88	74-131	
Methylene Chloride	ug/L	50	40.4	81	64-133	
Naphthalene	ug/L	50	49.3	99	73-133	
o-Xylene	ug/L	50	46.2	92	79-131	
p-Isopropyltoluene	ug/L	50	45.0	90	80-131	
Styrene	ug/L	50	46.8	94	84-126	
Tetrachloroethene	ug/L	50	39.3	79	78-122	
Toluene	ug/L	50	43.7	87	80-121	
trans-1,2-Dichloroethene	ug/L	50	42.4	85	71-127	
trans-1,3-Dichloropropene	ug/L	50	46.5	93	69-141	
Trichloroethene	ug/L	50	45.2	90	78-122	
Trichlorofluoromethane	ug/L	50	43.7	87	53-137	
Vinyl acetate	ug/L	100	74.8	75	40-160	
Vinyl chloride	ug/L	50	43.8	88	50-150	
Xylene (Total)	ug/L	150	137	91	81-126	
1,2-Dichloroethane-d4 (S)	%			94	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			98	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

MATRIX SPIKE SAMPLE: 2281748

Parameter	Units	92384402002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	21.1	105	70-130	
1,1,1-Trichloroethane	ug/L	ND	20	20.7	104	70-130	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20.8	104	70-130	
1,1,2-Trichloroethane	ug/L	ND	20	21.1	106	70-130	
1,1-Dichloroethane	ug/L	ND	20	19.5	98	70-130	
1,1-Dichloroethene	ug/L	ND	20	22.0	110	70-166	
1,1-Dichloropropene	ug/L	ND	20	20.8	104	70-130	
1,2,3-Trichlorobenzene	ug/L	ND	20	20.5	102	70-130	
1,2,3-Trichloropropane	ug/L	ND	20	20.0	100	70-130	
1,2,4-Trichlorobenzene	ug/L	ND	20	20.8	104	70-130	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20.1	101	70-130	
1,2-Dibromoethane (EDB)	ug/L	ND	20	21.0	105	70-130	
1,2-Dichlorobenzene	ug/L	ND	20	19.9	100	70-130	
1,2-Dichloroethane	ug/L	ND	20	19.1	95	70-130	
1,2-Dichloropropane	ug/L	ND	20	21.5	108	70-130	
1,3-Dichlorobenzene	ug/L	ND	20	19.8	99	70-130	
1,3-Dichloropropane	ug/L	ND	20	21.3	106	70-130	
1,4-Dichlorobenzene	ug/L	ND	20	19.4	97	70-130	
2,2-Dichloropropane	ug/L	ND	20	16.2	81	70-130	
2-Butanone (MEK)	ug/L	ND	40	37.8	94	70-130	
2-Chlorotoluene	ug/L	ND	20	19.5	98	70-130	
2-Hexanone	ug/L	ND	40	37.2	93	70-130	
4-Chlorotoluene	ug/L	ND	20	19.8	99	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	37.2	93	70-130	
Acetone	ug/L	ND	40	43.5	109	70-130	
Benzene	ug/L	ND	20	21.6	108	70-148	
Bromobenzene	ug/L	ND	20	20.2	101	70-130	
Bromochloromethane	ug/L	ND	20	20.8	104	70-130	
Bromodichloromethane	ug/L	ND	20	21.0	105	70-130	
Bromoform	ug/L	ND	20	21.0	105	70-130	
Bromomethane	ug/L	ND	20	13.8	69	70-130	M1
Carbon tetrachloride	ug/L	ND	20	21.7	109	70-130	
Chlorobenzene	ug/L	ND	20	20.8	104	70-146	
Chloroethane	ug/L	ND	20	18.8	94	70-130	
Chloroform	ug/L	ND	20	19.4	97	70-130	
Chloromethane	ug/L	ND	20	17.2	86	70-130	
cis-1,2-Dichloroethene	ug/L	ND	20	20.2	101	70-130	
cis-1,3-Dichloropropene	ug/L	ND	20	20.0	100	70-130	
Dibromochloromethane	ug/L	ND	20	20.8	104	70-130	
Dibromomethane	ug/L	ND	20	21.9	110	70-130	
Dichlorodifluoromethane	ug/L	ND	20	20.6	103	70-130	
Diisopropyl ether	ug/L	ND	20	18.9	94	70-130	
Ethylbenzene	ug/L	ND	20	21.0	105	70-130	
Hexachloro-1,3-butadiene	ug/L	ND	20	21.1	106	70-130	
m&p-Xylene	ug/L	ND	40	42.2	106	70-130	
Methyl-tert-butyl ether	ug/L	ND	20	19.6	98	70-130	
Methylene Chloride	ug/L	ND	20	14.6	73	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

MATRIX SPIKE SAMPLE: 2281748

Parameter	Units	92384402002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/L	ND	20	19.5	98	70-130	
o-Xylene	ug/L	ND	20	21.1	105	70-130	
p-Isopropyltoluene	ug/L	ND	20	20.7	104	70-130	
Styrene	ug/L	ND	20	20.8	104	70-130	
Tetrachloroethene	ug/L	ND	20	18.5	92	70-130	
Toluene	ug/L	ND	20	21.0	105	70-155	
trans-1,2-Dichloroethene	ug/L	ND	20	20.8	104	70-130	
trans-1,3-Dichloropropene	ug/L	ND	20	20.4	102	70-130	
Trichloroethene	ug/L	ND	20	22.0	110	69-151	
Trichlorofluoromethane	ug/L	ND	20	23.0	115	70-130	
Vinyl acetate	ug/L	ND	40	27.7	69	70-130	M1
Vinyl chloride	ug/L	ND	20	22.7	114	70-130	
Xylene (Total)	ug/L	ND	60	63.3	105	70-130	
1,2-Dichloroethane-d4 (S)	%				93	70-130	
4-Bromofluorobenzene (S)	%				101	70-130	
Toluene-d8 (S)	%				101	70-130	

SAMPLE DUPLICATE: 2281749

Parameter	Units	92384402003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	<0.33		30	
1,1,1-Trichloroethane	ug/L	ND	<0.48		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	<0.40		30	
1,1,2-Trichloroethane	ug/L	ND	<0.29		30	
1,1-Dichloroethane	ug/L	ND	<0.32		30	
1,1-Dichloroethene	ug/L	ND	<0.56		30	
1,1-Dichloropropene	ug/L	ND	<0.49		30	
1,2,3-Trichlorobenzene	ug/L	ND	<0.33		30	
1,2,3-Trichloropropane	ug/L	ND	<0.41		30	
1,2,4-Trichlorobenzene	ug/L	ND	<0.35		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	<2.0		30	
1,2-Dibromoethane (EDB)	ug/L	ND	<0.27		30	
1,2-Dichlorobenzene	ug/L	ND	<0.30		30	
1,2-Dichloroethane	ug/L	ND	<0.24		30	
1,2-Dichloropropane	ug/L	ND	<0.27		30	
1,3-Dichlorobenzene	ug/L	ND	<0.24		30	
1,3-Dichloropropane	ug/L	ND	<0.28		30	
1,4-Dichlorobenzene	ug/L	ND	<0.33		30	
2,2-Dichloropropane	ug/L	ND	<0.13		30	
2-Butanone (MEK)	ug/L	ND	<0.96		30	
2-Chlorotoluene	ug/L	ND	<0.35		30	
2-Hexanone	ug/L	ND	<0.46		30	
4-Chlorotoluene	ug/L	ND	<0.31		30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	<0.33		30	
Acetone	ug/L	ND	<10.0		30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

SAMPLE DUPLICATE: 2281749

Parameter	Units	92384402003 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	ND	<0.25		30	
Bromobenzene	ug/L	ND	<0.30		30	
Bromochloromethane	ug/L	ND	<0.17		30	
Bromodichloromethane	ug/L	ND	<0.18		30	
Bromoform	ug/L	ND	<0.26		30	
Bromomethane	ug/L	ND	<0.29		30	
Carbon tetrachloride	ug/L	ND	<0.25		30	
Chlorobenzene	ug/L	ND	<0.23		30	
Chloroethane	ug/L	ND	<0.54		30	
Chloroform	ug/L	ND	<0.14		30	
Chloromethane	ug/L	ND	<0.11		30	
cis-1,2-Dichloroethene	ug/L	ND	<0.19		30	
cis-1,3-Dichloropropene	ug/L	ND	<0.13		30	
Dibromochloromethane	ug/L	ND	<0.21		30	
Dibromomethane	ug/L	ND	<0.21		30	
Dichlorodifluoromethane	ug/L	ND	<0.21		30	
Diisopropyl ether	ug/L	ND	<0.12		30	
Ethylbenzene	ug/L	ND	<0.30		30	
Hexachloro-1,3-butadiene	ug/L	ND	<0.71		30	
m&p-Xylene	ug/L	ND	<0.66		30	
Methyl-tert-butyl ether	ug/L	ND	<0.21		30	
Methylene Chloride	ug/L	ND	<0.97		30	
Naphthalene	ug/L	ND	<0.24		30	
o-Xylene	ug/L	ND	<0.23		30	
p-Isopropyltoluene	ug/L	ND	<0.31		30	
Styrene	ug/L	ND	<0.26		30	
Tetrachloroethene	ug/L	ND	<0.46		30	
Toluene	ug/L	ND	<0.26		30	
trans-1,2-Dichloroethene	ug/L	ND	<0.49		30	
trans-1,3-Dichloropropene	ug/L	ND	<0.26		30	
Trichloroethene	ug/L	ND	<0.47		30	
Trichlorofluoromethane	ug/L	ND	<0.20		30	
Vinyl acetate	ug/L	ND	<0.35		30	
Vinyl chloride	ug/L	ND	<0.62		30	
Xylene (Total)	ug/L	ND	<1.0		30	
1,2-Dichloroethane-d4 (S)	%	93	94	1		
4-Bromofluorobenzene (S)	%	98	98	1		
Toluene-d8 (S)	%	102	102	0		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

QC Batch: 411402 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92384877005, 92384877007, 92384877009

METHOD BLANK: 2282519 Matrix: Water
Associated Lab Samples: 92384877005, 92384877007, 92384877009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.33	1.0	0.33	05/19/18 04:04	
1,1,1-Trichloroethane	ug/L	<0.48	1.0	0.48	05/19/18 04:04	
1,1,2,2-Tetrachloroethane	ug/L	<0.40	1.0	0.40	05/19/18 04:04	
1,1,2-Trichloroethane	ug/L	<0.29	1.0	0.29	05/19/18 04:04	
1,1-Dichloroethane	ug/L	<0.32	1.0	0.32	05/19/18 04:04	
1,1-Dichloroethene	ug/L	<0.56	1.0	0.56	05/19/18 04:04	
1,1-Dichloropropene	ug/L	<0.49	1.0	0.49	05/19/18 04:04	
1,2,3-Trichlorobenzene	ug/L	<0.33	1.0	0.33	05/19/18 04:04	
1,2,3-Trichloropropane	ug/L	<0.41	1.0	0.41	05/19/18 04:04	
1,2,4-Trichlorobenzene	ug/L	<0.35	1.0	0.35	05/19/18 04:04	
1,2-Dibromo-3-chloropropane	ug/L	<2.0	2.0	2.0	05/19/18 04:04	
1,2-Dibromoethane (EDB)	ug/L	<0.27	1.0	0.27	05/19/18 04:04	
1,2-Dichlorobenzene	ug/L	<0.30	1.0	0.30	05/19/18 04:04	
1,2-Dichloroethane	ug/L	<0.24	1.0	0.24	05/19/18 04:04	
1,2-Dichloropropane	ug/L	<0.27	1.0	0.27	05/19/18 04:04	
1,3-Dichlorobenzene	ug/L	<0.24	1.0	0.24	05/19/18 04:04	
1,3-Dichloropropane	ug/L	<0.28	1.0	0.28	05/19/18 04:04	
1,4-Dichlorobenzene	ug/L	<0.33	1.0	0.33	05/19/18 04:04	
2,2-Dichloropropane	ug/L	<0.13	1.0	0.13	05/19/18 04:04	
2-Butanone (MEK)	ug/L	<0.96	5.0	0.96	05/19/18 04:04	
2-Chlorotoluene	ug/L	<0.35	1.0	0.35	05/19/18 04:04	
2-Hexanone	ug/L	<0.46	5.0	0.46	05/19/18 04:04	
4-Chlorotoluene	ug/L	<0.31	1.0	0.31	05/19/18 04:04	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.33	5.0	0.33	05/19/18 04:04	
Acetone	ug/L	<10.0	25.0	10.0	05/19/18 04:04	
Benzene	ug/L	<0.25	1.0	0.25	05/19/18 04:04	
Bromobenzene	ug/L	<0.30	1.0	0.30	05/19/18 04:04	
Bromochloromethane	ug/L	<0.17	1.0	0.17	05/19/18 04:04	
Bromodichloromethane	ug/L	<0.18	1.0	0.18	05/19/18 04:04	
Bromoform	ug/L	<0.26	1.0	0.26	05/19/18 04:04	
Bromomethane	ug/L	0.35J	2.0	0.29	05/19/18 04:04	
Carbon tetrachloride	ug/L	<0.25	1.0	0.25	05/19/18 04:04	
Chlorobenzene	ug/L	<0.23	1.0	0.23	05/19/18 04:04	
Chloroethane	ug/L	<0.54	1.0	0.54	05/19/18 04:04	
Chloroform	ug/L	<0.14	1.0	0.14	05/19/18 04:04	
Chloromethane	ug/L	<0.11	1.0	0.11	05/19/18 04:04	
cis-1,2-Dichloroethene	ug/L	<0.19	1.0	0.19	05/19/18 04:04	
cis-1,3-Dichloropropene	ug/L	<0.13	1.0	0.13	05/19/18 04:04	
Dibromochloromethane	ug/L	<0.21	1.0	0.21	05/19/18 04:04	
Dibromomethane	ug/L	<0.21	1.0	0.21	05/19/18 04:04	
Dichlorodifluoromethane	ug/L	<0.21	1.0	0.21	05/19/18 04:04	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

METHOD BLANK: 2282519 Matrix: Water
Associated Lab Samples: 92384877005, 92384877007, 92384877009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Diisopropyl ether	ug/L	<0.12	1.0	0.12	05/19/18 04:04	
Ethylbenzene	ug/L	<0.30	1.0	0.30	05/19/18 04:04	
Hexachloro-1,3-butadiene	ug/L	<0.71	1.0	0.71	05/19/18 04:04	
m&p-Xylene	ug/L	<0.66	2.0	0.66	05/19/18 04:04	
Methyl-tert-butyl ether	ug/L	<0.21	1.0	0.21	05/19/18 04:04	
Methylene Chloride	ug/L	<0.97	2.0	0.97	05/19/18 04:04	
Naphthalene	ug/L	<0.24	1.0	0.24	05/19/18 04:04	
o-Xylene	ug/L	<0.23	1.0	0.23	05/19/18 04:04	
p-Isopropyltoluene	ug/L	<0.31	1.0	0.31	05/19/18 04:04	
Styrene	ug/L	<0.26	1.0	0.26	05/19/18 04:04	
Tetrachloroethene	ug/L	<0.46	1.0	0.46	05/19/18 04:04	
Toluene	ug/L	<0.26	1.0	0.26	05/19/18 04:04	
trans-1,2-Dichloroethene	ug/L	<0.49	1.0	0.49	05/19/18 04:04	
trans-1,3-Dichloropropene	ug/L	<0.26	1.0	0.26	05/19/18 04:04	
Trichloroethene	ug/L	<0.47	1.0	0.47	05/19/18 04:04	
Trichlorofluoromethane	ug/L	<0.20	1.0	0.20	05/19/18 04:04	
Vinyl acetate	ug/L	<0.35	2.0	0.35	05/19/18 04:04	
Vinyl chloride	ug/L	<0.62	1.0	0.62	05/19/18 04:04	
Xylene (Total)	ug/L	<1.0	1.0	1.0	05/19/18 04:04	
1,2-Dichloroethane-d4 (S)	%	108	70-130		05/19/18 04:04	
4-Bromofluorobenzene (S)	%	103	70-130		05/19/18 04:04	
Toluene-d8 (S)	%	106	70-130		05/19/18 04:04	

LABORATORY CONTROL SAMPLE: 2282520

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.4	103	80-125	
1,1,1-Trichloroethane	ug/L	50	49.3	99	71-129	
1,1,2,2-Tetrachloroethane	ug/L	50	48.5	97	79-124	
1,1,2-Trichloroethane	ug/L	50	52.9	106	85-125	
1,1-Dichloroethane	ug/L	50	50.4	101	73-126	
1,1-Dichloroethene	ug/L	50	54.6	109	66-135	
1,1-Dichloropropene	ug/L	50	53.9	108	74-135	
1,2,3-Trichlorobenzene	ug/L	50	46.0	92	73-135	
1,2,3-Trichloropropane	ug/L	50	50.3	101	75-130	
1,2,4-Trichlorobenzene	ug/L	50	46.8	94	75-134	
1,2-Dibromo-3-chloropropane	ug/L	50	49.9	100	71-133	
1,2-Dibromoethane (EDB)	ug/L	50	52.4	105	83-124	
1,2-Dichlorobenzene	ug/L	50	47.6	95	80-133	
1,2-Dichloroethane	ug/L	50	50.0	100	67-128	
1,2-Dichloropropane	ug/L	50	53.2	106	75-132	
1,3-Dichlorobenzene	ug/L	50	47.0	94	77-130	
1,3-Dichloropropane	ug/L	50	54.2	108	76-131	
1,4-Dichlorobenzene	ug/L	50	46.7	93	78-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

LABORATORY CONTROL SAMPLE: 2282520

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,2-Dichloropropane	ug/L	50	45.0	90	40-160	
2-Butanone (MEK)	ug/L	100	111	111	61-144	
2-Chlorotoluene	ug/L	50	47.8	96	74-132	
2-Hexanone	ug/L	100	102	102	68-143	
4-Chlorotoluene	ug/L	50	47.7	95	76-133	
4-Methyl-2-pentanone (MIBK)	ug/L	100	99.0	99	72-135	
Acetone	ug/L	100	105	105	48-146	
Benzene	ug/L	50	52.4	105	80-125	
Bromobenzene	ug/L	50	46.9	94	75-125	
Bromochloromethane	ug/L	50	48.6	97	71-125	
Bromodichloromethane	ug/L	50	50.5	101	78-124	
Bromoform	ug/L	50	43.2	86	71-128	
Bromomethane	ug/L	50	41.2	82	40-160	
Carbon tetrachloride	ug/L	50	48.7	97	69-131	
Chlorobenzene	ug/L	50	48.3	97	81-122	
Chloroethane	ug/L	50	41.1	82	39-148	
Chloroform	ug/L	50	55.4	111	73-127	
Chloromethane	ug/L	50	43.0	86	44-146	
cis-1,2-Dichloroethene	ug/L	50	51.1	102	74-124	
cis-1,3-Dichloropropene	ug/L	50	53.1	106	72-132	
Dibromochloromethane	ug/L	50	53.8	108	78-125	
Dibromomethane	ug/L	50	48.0	96	82-120	
Dichlorodifluoromethane	ug/L	50	45.9	92	34-157	
Diisopropyl ether	ug/L	50	54.0	108	69-135	
Ethylbenzene	ug/L	50	48.0	96	79-121	
Hexachloro-1,3-butadiene	ug/L	50	44.4	89	72-131	
m&p-Xylene	ug/L	100	100	100	81-124	
Methyl-tert-butyl ether	ug/L	50	54.1	108	74-131	
Methylene Chloride	ug/L	50	55.1	110	64-133	
Naphthalene	ug/L	50	48.1	96	73-133	
o-Xylene	ug/L	50	49.8	100	79-131	
p-Isopropyltoluene	ug/L	50	46.4	93	80-131	
Styrene	ug/L	50	49.0	98	84-126	
Tetrachloroethene	ug/L	50	44.5	89	78-122	
Toluene	ug/L	50	47.8	96	80-121	
trans-1,2-Dichloroethene	ug/L	50	50.3	101	71-127	
trans-1,3-Dichloropropene	ug/L	50	53.8	108	69-141	
Trichloroethene	ug/L	50	50.8	102	78-122	
Trichlorofluoromethane	ug/L	50	62.2	124	53-137	
Vinyl acetate	ug/L	100	74.1	74	40-160	
Vinyl chloride	ug/L	50	48.1	96	50-150	
Xylene (Total)	ug/L	150	150	100	81-126	
1,2-Dichloroethane-d4 (S)	%			105	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			96	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2282770 2282771

Parameter	Units	92384539009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	100	100	111	115	111	115	70-130	3	30	
1,1,1-Trichloroethane	ug/L	ND	100	100	124	122	124	122	70-130	2	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	100	100	115	115	115	115	70-130	0	30	
1,1,2-Trichloroethane	ug/L	ND	100	100	116	114	116	114	70-130	2	30	
1,1-Dichloroethane	ug/L	ND	100	100	122	122	122	122	70-130	0	30	
1,1-Dichloroethene	ug/L	ND	100	100	130	128	130	128	70-166	2	30	
1,1-Dichloropropene	ug/L	ND	100	100	134	130	134	130	70-130	3	30	M1
1,2,3-Trichlorobenzene	ug/L	ND	100	100	107	109	107	109	70-130	1	30	
1,2,3-Trichloropropane	ug/L	ND	100	100	113	114	113	114	70-130	1	30	
1,2,4-Trichlorobenzene	ug/L	ND	100	100	112	111	112	111	70-130	1	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	100	100	110	109	110	109	70-130	1	30	
1,2-Dibromoethane (EDB)	ug/L	ND	100	100	112	115	112	115	70-130	3	30	
1,2-Dichlorobenzene	ug/L	ND	100	100	110	110	110	110	70-130	0	30	
1,2-Dichloroethane	ug/L	ND	100	100	115	114	115	114	70-130	1	30	
1,2-Dichloropropane	ug/L	ND	100	100	125	123	125	123	70-130	1	30	
1,3-Dichlorobenzene	ug/L	ND	100	100	106	103	106	103	70-130	3	30	
1,3-Dichloropropane	ug/L	ND	100	100	119	121	119	121	70-130	1	30	
1,4-Dichlorobenzene	ug/L	ND	100	100	106	105	106	105	70-130	1	30	
2,2-Dichloropropane	ug/L	ND	100	100	93.7	100	94	100	70-130	7	30	
2-Butanone (MEK)	ug/L	ND	200	200	260	290	130	145	70-130	11	30	M1
2-Chlorotoluene	ug/L	ND	100	100	108	105	108	105	70-130	3	30	
2-Hexanone	ug/L	ND	200	200	212	222	106	111	70-130	5	30	
4-Chlorotoluene	ug/L	ND	100	100	109	109	109	109	70-130	0	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	200	200	213	219	106	109	70-130	3	30	
Acetone	ug/L	ND	200	200	248	205	124	103	70-130	19	30	
Benzene	ug/L	184	100	100	301	308	116	124	70-148	2	30	
Bromobenzene	ug/L	ND	100	100	106	104	106	104	70-130	1	30	
Bromochloromethane	ug/L	ND	100	100	112	109	112	109	70-130	2	30	
Bromodichloromethane	ug/L	ND	100	100	116	115	116	115	70-130	1	30	
Bromoform	ug/L	ND	100	100	99.6	102	100	102	70-130	2	30	
Bromomethane	ug/L	ND	100	100	81.5	90.7	82	91	70-130	11	30	
Carbon tetrachloride	ug/L	ND	100	100	112	116	112	116	70-130	4	30	
Chlorobenzene	ug/L	ND	100	100	109	112	109	112	70-146	3	30	
Chloroethane	ug/L	ND	100	100	109	90.7	109	91	70-130	18	30	
Chloroform	ug/L	ND	100	100	126	125	126	125	70-130	0	30	
Chloromethane	ug/L	ND	100	100	114	115	114	115	70-130	1	30	
cis-1,2-Dichloroethene	ug/L	ND	100	100	121	119	119	117	70-130	2	30	
cis-1,3-Dichloropropene	ug/L	ND	100	100	112	113	112	113	70-130	1	30	
Dibromochloromethane	ug/L	ND	100	100	112	117	112	117	70-130	4	30	
Dibromomethane	ug/L	ND	100	100	109	107	109	107	70-130	2	30	
Dichlorodifluoromethane	ug/L	ND	100	100	118	116	118	116	70-130	2	30	
Diisopropyl ether	ug/L	ND	100	100	118	117	118	117	70-130	0	30	
Ethylbenzene	ug/L	901	100	100	1040	1090	137	187	70-130	5	30	E
Hexachloro-1,3-butadiene	ug/L	ND	100	100	110	108	110	108	70-130	2	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2282770 2282771

Parameter	Units	92384539009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
m&p-Xylene	ug/L	735	200	200	982	1020	123	145	70-130	4	30	M1
Methyl-tert-butyl ether	ug/L	ND	100	100	122	122	122	122	70-130	0	30	
Methylene Chloride	ug/L	ND	100	100	115	115	115	115	70-130	0	30	
Naphthalene	ug/L	199	100	100	314	318	115	119	70-130	1	30	
o-Xylene	ug/L	10.8	100	100	122	125	111	115	70-130	3	30	
p-Isopropyltoluene	ug/L	ND	100	100	117	118	117	118	70-130	1	30	
Styrene	ug/L	ND	100	100	108	112	108	112	70-130	3	30	
Tetrachloroethene	ug/L	ND	100	100	99.8	105	100	105	70-130	5	30	
Toluene	ug/L	18.1	100	100	126	126	108	108	70-155	0	30	
trans-1,2-Dichloroethene	ug/L	ND	100	100	120	122	120	122	70-130	2	30	
trans-1,3-Dichloropropene	ug/L	ND	100	100	112	111	112	111	70-130	1	30	
Trichloroethene	ug/L	ND	100	100	112	114	112	114	69-151	1	30	
Trichlorofluoromethane	ug/L	ND	100	100	131	130	131	130	70-130	1	30	M1
Vinyl acetate	ug/L	ND	200	200	237	232	118	116	70-130	2	30	
Vinyl chloride	ug/L	ND	100	100	121	124	121	124	70-130	2	30	
Xylene (Total)	ug/L	746	300	300	1100	1150	119	135	70-130	4	30	MS
1,2-Dichloroethane-d4 (S)	%						106	105	70-130			
4-Bromofluorobenzene (S)	%						102	104	70-130			
Toluene-d8 (S)	%						99	99	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

QC Batch: 411688 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92384877006

METHOD BLANK: 2284004 Matrix: Water
Associated Lab Samples: 92384877006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.33	1.0	0.33	05/21/18 20:17	
1,1,1-Trichloroethane	ug/L	<0.48	1.0	0.48	05/21/18 20:17	
1,1,2,2-Tetrachloroethane	ug/L	<0.40	1.0	0.40	05/21/18 20:17	
1,1,2-Trichloroethane	ug/L	<0.29	1.0	0.29	05/21/18 20:17	
1,1-Dichloroethane	ug/L	<0.32	1.0	0.32	05/21/18 20:17	
1,1-Dichloroethene	ug/L	<0.56	1.0	0.56	05/21/18 20:17	
1,1-Dichloropropene	ug/L	<0.49	1.0	0.49	05/21/18 20:17	
1,2,3-Trichlorobenzene	ug/L	<0.33	1.0	0.33	05/21/18 20:17	
1,2,3-Trichloropropane	ug/L	<0.41	1.0	0.41	05/21/18 20:17	
1,2,4-Trichlorobenzene	ug/L	<0.35	1.0	0.35	05/21/18 20:17	
1,2-Dibromo-3-chloropropane	ug/L	<2.0	2.0	2.0	05/21/18 20:17	
1,2-Dibromoethane (EDB)	ug/L	<0.27	1.0	0.27	05/21/18 20:17	
1,2-Dichlorobenzene	ug/L	<0.30	1.0	0.30	05/21/18 20:17	
1,2-Dichloroethane	ug/L	0.25J	1.0	0.24	05/21/18 20:17	
1,2-Dichloropropane	ug/L	<0.27	1.0	0.27	05/21/18 20:17	
1,3-Dichlorobenzene	ug/L	<0.24	1.0	0.24	05/21/18 20:17	
1,3-Dichloropropane	ug/L	<0.28	1.0	0.28	05/21/18 20:17	
1,4-Dichlorobenzene	ug/L	<0.33	1.0	0.33	05/21/18 20:17	
2,2-Dichloropropane	ug/L	<0.13	1.0	0.13	05/21/18 20:17	
2-Butanone (MEK)	ug/L	<0.96	5.0	0.96	05/21/18 20:17	
2-Chlorotoluene	ug/L	<0.35	1.0	0.35	05/21/18 20:17	
2-Hexanone	ug/L	<0.46	5.0	0.46	05/21/18 20:17	
4-Chlorotoluene	ug/L	<0.31	1.0	0.31	05/21/18 20:17	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.33	5.0	0.33	05/21/18 20:17	
Acetone	ug/L	<10.0	25.0	10.0	05/21/18 20:17	
Benzene	ug/L	<0.25	1.0	0.25	05/21/18 20:17	
Bromobenzene	ug/L	<0.30	1.0	0.30	05/21/18 20:17	
Bromochloromethane	ug/L	<0.17	1.0	0.17	05/21/18 20:17	
Bromodichloromethane	ug/L	<0.18	1.0	0.18	05/21/18 20:17	
Bromoform	ug/L	<0.26	1.0	0.26	05/21/18 20:17	
Bromomethane	ug/L	0.66J	2.0	0.29	05/21/18 20:17	
Carbon tetrachloride	ug/L	<0.25	1.0	0.25	05/21/18 20:17	
Chlorobenzene	ug/L	<0.23	1.0	0.23	05/21/18 20:17	
Chloroethane	ug/L	<0.54	1.0	0.54	05/21/18 20:17	
Chloroform	ug/L	0.80J	1.0	0.14	05/21/18 20:17	
Chloromethane	ug/L	0.30J	1.0	0.11	05/21/18 20:17	
cis-1,2-Dichloroethene	ug/L	<0.19	1.0	0.19	05/21/18 20:17	
cis-1,3-Dichloropropene	ug/L	<0.13	1.0	0.13	05/21/18 20:17	
Dibromochloromethane	ug/L	<0.21	1.0	0.21	05/21/18 20:17	
Dibromomethane	ug/L	<0.21	1.0	0.21	05/21/18 20:17	
Dichlorodifluoromethane	ug/L	<0.21	1.0	0.21	05/21/18 20:17	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

METHOD BLANK: 2284004 Matrix: Water
Associated Lab Samples: 92384877006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Diisopropyl ether	ug/L	<0.12	1.0	0.12	05/21/18 20:17	
Ethylbenzene	ug/L	<0.30	1.0	0.30	05/21/18 20:17	
Hexachloro-1,3-butadiene	ug/L	<0.71	1.0	0.71	05/21/18 20:17	
m&p-Xylene	ug/L	<0.66	2.0	0.66	05/21/18 20:17	
Methyl-tert-butyl ether	ug/L	<0.21	1.0	0.21	05/21/18 20:17	
Methylene Chloride	ug/L	<0.97	2.0	0.97	05/21/18 20:17	
Naphthalene	ug/L	<0.24	1.0	0.24	05/21/18 20:17	
o-Xylene	ug/L	<0.23	1.0	0.23	05/21/18 20:17	
p-Isopropyltoluene	ug/L	<0.31	1.0	0.31	05/21/18 20:17	
Styrene	ug/L	<0.26	1.0	0.26	05/21/18 20:17	
Tetrachloroethene	ug/L	<0.46	1.0	0.46	05/21/18 20:17	
Toluene	ug/L	<0.26	1.0	0.26	05/21/18 20:17	
trans-1,2-Dichloroethene	ug/L	<0.49	1.0	0.49	05/21/18 20:17	
trans-1,3-Dichloropropene	ug/L	<0.26	1.0	0.26	05/21/18 20:17	
Trichloroethene	ug/L	<0.47	1.0	0.47	05/21/18 20:17	
Trichlorofluoromethane	ug/L	<0.20	1.0	0.20	05/21/18 20:17	
Vinyl acetate	ug/L	<0.35	2.0	0.35	05/21/18 20:17	
Vinyl chloride	ug/L	<0.62	1.0	0.62	05/21/18 20:17	
Xylene (Total)	ug/L	<1.0	1.0	1.0	05/21/18 20:17	
1,2-Dichloroethane-d4 (S)	%	124	70-130		05/21/18 20:17	
4-Bromofluorobenzene (S)	%	106	70-130		05/21/18 20:17	
Toluene-d8 (S)	%	108	70-130		05/21/18 20:17	

LABORATORY CONTROL SAMPLE: 2284005

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	54.6	109	80-125	
1,1,1-Trichloroethane	ug/L	50	58.0	116	71-129	
1,1,2,2-Tetrachloroethane	ug/L	50	51.3	103	79-124	
1,1,2-Trichloroethane	ug/L	50	52.7	105	85-125	
1,1-Dichloroethane	ug/L	50	53.5	107	73-126	
1,1-Dichloroethene	ug/L	50	57.0	114	66-135	
1,1-Dichloropropene	ug/L	50	59.2	118	74-135	
1,2,3-Trichlorobenzene	ug/L	50	49.5	99	73-135	
1,2,3-Trichloropropane	ug/L	50	53.4	107	75-130	
1,2,4-Trichlorobenzene	ug/L	50	52.3	105	75-134	
1,2-Dibromo-3-chloropropane	ug/L	50	45.6	91	71-133	
1,2-Dibromoethane (EDB)	ug/L	50	51.8	104	83-124	
1,2-Dichlorobenzene	ug/L	50	50.5	101	80-133	
1,2-Dichloroethane	ug/L	50	56.3	113	67-128	
1,2-Dichloropropane	ug/L	50	54.2	108	75-132	
1,3-Dichlorobenzene	ug/L	50	51.5	103	77-130	
1,3-Dichloropropane	ug/L	50	55.5	111	76-131	
1,4-Dichlorobenzene	ug/L	50	51.1	102	78-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

LABORATORY CONTROL SAMPLE: 2284005

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,2-Dichloropropane	ug/L	50	56.8	114	40-160	
2-Butanone (MEK)	ug/L	100	122	122	61-144	
2-Chlorotoluene	ug/L	50	54.3	109	74-132	
2-Hexanone	ug/L	100	114	114	68-143	
4-Chlorotoluene	ug/L	50	55.2	110	76-133	
4-Methyl-2-pentanone (MIBK)	ug/L	100	115	115	72-135	
Acetone	ug/L	100	110	110	48-146	
Benzene	ug/L	50	53.4	107	80-125	
Bromobenzene	ug/L	50	50.7	101	75-125	
Bromochloromethane	ug/L	50	51.1	102	71-125	
Bromodichloromethane	ug/L	50	54.4	109	78-124	
Bromoform	ug/L	50	37.7	75	71-128	
Bromomethane	ug/L	50	50.9	102	40-160	
Carbon tetrachloride	ug/L	50	56.3	113	69-131	
Chlorobenzene	ug/L	50	50.9	102	81-122	
Chloroethane	ug/L	50	41.2	82	39-148	
Chloroform	ug/L	50	52.1	104	73-127	
Chloromethane	ug/L	50	40.6	81	44-146	
cis-1,2-Dichloroethene	ug/L	50	55.6	111	74-124	
cis-1,3-Dichloropropene	ug/L	50	56.0	112	72-132	
Dibromochloromethane	ug/L	50	50.0	100	78-125	
Dibromomethane	ug/L	50	48.7	97	82-120	
Dichlorodifluoromethane	ug/L	50	51.0	102	34-157	
Diisopropyl ether	ug/L	50	58.7	117	69-135	
Ethylbenzene	ug/L	50	53.7	107	79-121	
Hexachloro-1,3-butadiene	ug/L	50	51.3	103	72-131	
m&p-Xylene	ug/L	100	109	109	81-124	
Methyl-tert-butyl ether	ug/L	50	57.8	116	74-131	
Methylene Chloride	ug/L	50	52.9	106	64-133	
Naphthalene	ug/L	50	50.3	101	73-133	
o-Xylene	ug/L	50	54.2	108	79-131	
p-Isopropyltoluene	ug/L	50	56.9	114	80-131	
Styrene	ug/L	50	51.9	104	84-126	
Tetrachloroethene	ug/L	50	49.1	98	78-122	
Toluene	ug/L	50	50.7	101	80-121	
trans-1,2-Dichloroethene	ug/L	50	54.6	109	71-127	
trans-1,3-Dichloropropene	ug/L	50	56.1	112	69-141	
Trichloroethene	ug/L	50	52.6	105	78-122	
Trichlorofluoromethane	ug/L	50	48.5	97	53-137	
Vinyl acetate	ug/L	100	126	126	40-160	
Vinyl chloride	ug/L	50	52.2	104	50-150	
Xylene (Total)	ug/L	150	163	109	81-126	
1,2-Dichloroethane-d4 (S)	%			109	70-130	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			102	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2284371 2284372

Parameter	Units	92384889007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	800	800	818	829	102	104	70-130	1	30	
1,1,1-Trichloroethane	ug/L	121	800	800	1090	1110	122	123	70-130	1	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	800	800	815	812	102	102	70-130	0	30	
1,1,2-Trichloroethane	ug/L	ND	800	800	858	859	107	107	70-130	0	30	
1,1-Dichloroethane	ug/L	ND	800	800	888	944	111	118	70-130	6	30	
1,1-Dichloroethene	ug/L	ND	800	800	1080	1110	135	138	70-166	3	30	
1,1-Dichloropropene	ug/L	ND	800	800	1020	1010	128	126	70-130	1	30	
1,2,3-Trichlorobenzene	ug/L	ND	800	800	710	747	89	93	70-130	5	30	
1,2,3-Trichloropropane	ug/L	ND	800	800	858	847	107	106	70-130	1	30	
1,2,4-Trichlorobenzene	ug/L	ND	800	800	752	778	94	97	70-130	3	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	800	800	651	647	81	81	70-130	1	30	
1,2-Dibromoethane (EDB)	ug/L	ND	800	800	797	818	100	102	70-130	3	30	
1,2-Dichlorobenzene	ug/L	ND	800	800	809	810	101	101	70-130	0	30	
1,2-Dichloroethane	ug/L	ND	800	800	952	934	119	117	70-130	2	30	
1,2-Dichloropropane	ug/L	ND	800	800	911	932	114	116	70-130	2	30	
1,3-Dichlorobenzene	ug/L	ND	800	800	814	813	102	102	70-130	0	30	
1,3-Dichloropropane	ug/L	ND	800	800	876	885	109	111	70-130	1	30	
1,4-Dichlorobenzene	ug/L	ND	800	800	810	804	101	100	70-130	1	30	
2,2-Dichloropropane	ug/L	ND	800	800	796	829	100	104	70-130	4	30	
2-Butanone (MEK)	ug/L	ND	1600	1600	2040	1980	127	124	70-130	3	30	
2-Chlorotoluene	ug/L	ND	800	800	860	869	107	109	70-130	1	30	
2-Hexanone	ug/L	ND	1600	1600	1830	1830	114	115	70-130	0	30	
4-Chlorotoluene	ug/L	ND	800	800	861	863	108	108	70-130	0	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	1600	1600	1870	1870	117	117	70-130	0	30	
Acetone	ug/L	ND	1600	1600	2000	2020	125	127	70-130	1	30	
Benzene	ug/L	ND	800	800	898	918	112	115	70-148	2	30	
Bromobenzene	ug/L	ND	800	800	806	818	101	102	70-130	1	30	
Bromochloromethane	ug/L	ND	800	800	911	890	114	111	70-130	2	30	
Bromodichloromethane	ug/L	ND	800	800	867	877	108	110	70-130	1	30	
Bromoform	ug/L	ND	800	800	703	691	88	86	70-130	2	30	
Bromomethane	ug/L	ND	800	800	496	586	62	73	70-130	17	30	M1
Carbon tetrachloride	ug/L	ND	800	800	947	936	118	117	70-130	1	30	
Chlorobenzene	ug/L	ND	800	800	848	844	106	105	70-146	0	30	
Chloroethane	ug/L	ND	800	800	824	852	103	106	70-130	3	30	
Chloroform	ug/L	ND	800	800	850	922	106	115	70-130	8	30	
Chloromethane	ug/L	4.6J	800	800	674	668	84	83	70-130	1	30	
cis-1,2-Dichloroethene	ug/L	ND	800	800	969	962	121	120	70-130	1	30	
cis-1,3-Dichloropropene	ug/L	ND	800	800	810	839	101	105	70-130	3	30	
Dibromochloromethane	ug/L	ND	800	800	773	798	97	100	70-130	3	30	
Dibromomethane	ug/L	ND	800	800	807	818	101	102	70-130	1	30	
Dichlorodifluoromethane	ug/L	ND	800	800	845	834	106	104	70-130	1	30	
Diisopropyl ether	ug/L	ND	800	800	975	966	122	121	70-130	1	30	
Ethylbenzene	ug/L	ND	800	800	900	908	112	113	70-130	1	30	
Hexachloro-1,3-butadiene	ug/L	ND	800	800	782	763	98	95	70-130	2	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2284371 2284372

Parameter	Units	92384889007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
m&p-Xylene	ug/L	ND	1600	1600	1800	1870	113	117	70-130	4	30	
Methyl-tert-butyl ether	ug/L	ND	800	800	950	938	119	117	70-130	1	30	
Methylene Chloride	ug/L	ND	800	800	883	888	110	111	70-130	1	30	
Naphthalene	ug/L	ND	800	800	692	725	87	91	70-130	5	30	
o-Xylene	ug/L	ND	800	800	869	891	109	111	70-130	3	30	
p-Isopropyltoluene	ug/L	ND	800	800	891	882	111	110	70-130	1	30	
Styrene	ug/L	ND	800	800	839	855	105	107	70-130	2	30	
Tetrachloroethene	ug/L	43.7	800	800	836	849	99	101	70-130	2	30	
Toluene	ug/L	ND	800	800	848	865	106	108	70-155	2	30	
trans-1,2-Dichloroethene	ug/L	ND	800	800	958	971	120	121	70-130	1	30	
trans-1,3-Dichloropropene	ug/L	ND	800	800	845	843	106	105	70-130	0	30	
Trichloroethene	ug/L	4250	800	800	5320	5370	133	140	69-151	1	30	
Trichlorofluoromethane	ug/L	ND	800	800	959	971	120	121	70-130	1	30	
Vinyl acetate	ug/L	ND	1600	1600	2080	2080	130	130	70-130	0	30	
Vinyl chloride	ug/L	ND	800	800	949	964	119	120	70-130	2	30	
Xylene (Total)	ug/L	ND	2400	2400	2670	2760	111	115	70-130	3	30	
1,2-Dichloroethane-d4 (S)	%						123	110	70-130			
4-Bromofluorobenzene (S)	%						102	105	70-130			
Toluene-d8 (S)	%						101	101	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

QC Batch: 411796 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92384877008

METHOD BLANK: 2284482 Matrix: Water
Associated Lab Samples: 92384877008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.33	1.0	0.33	05/22/18 09:07	
1,1,1-Trichloroethane	ug/L	<0.48	1.0	0.48	05/22/18 09:07	
1,1,2,2-Tetrachloroethane	ug/L	<0.40	1.0	0.40	05/22/18 09:07	
1,1,2-Trichloroethane	ug/L	<0.29	1.0	0.29	05/22/18 09:07	
1,1-Dichloroethane	ug/L	<0.32	1.0	0.32	05/22/18 09:07	
1,1-Dichloroethene	ug/L	<0.56	1.0	0.56	05/22/18 09:07	
1,1-Dichloropropene	ug/L	<0.49	1.0	0.49	05/22/18 09:07	
1,2,3-Trichlorobenzene	ug/L	<0.33	1.0	0.33	05/22/18 09:07	
1,2,3-Trichloropropane	ug/L	<0.41	1.0	0.41	05/22/18 09:07	
1,2,4-Trichlorobenzene	ug/L	<0.35	1.0	0.35	05/22/18 09:07	
1,2-Dibromo-3-chloropropane	ug/L	<2.0	2.0	2.0	05/22/18 09:07	
1,2-Dibromoethane (EDB)	ug/L	<0.27	1.0	0.27	05/22/18 09:07	
1,2-Dichlorobenzene	ug/L	<0.30	1.0	0.30	05/22/18 09:07	
1,2-Dichloroethane	ug/L	<0.24	1.0	0.24	05/22/18 09:07	
1,2-Dichloropropane	ug/L	<0.27	1.0	0.27	05/22/18 09:07	
1,3-Dichlorobenzene	ug/L	<0.24	1.0	0.24	05/22/18 09:07	
1,3-Dichloropropane	ug/L	<0.28	1.0	0.28	05/22/18 09:07	
1,4-Dichlorobenzene	ug/L	<0.33	1.0	0.33	05/22/18 09:07	
2,2-Dichloropropane	ug/L	<0.13	1.0	0.13	05/22/18 09:07	
2-Butanone (MEK)	ug/L	<0.96	5.0	0.96	05/22/18 09:07	
2-Chlorotoluene	ug/L	<0.35	1.0	0.35	05/22/18 09:07	
2-Hexanone	ug/L	<0.46	5.0	0.46	05/22/18 09:07	
4-Chlorotoluene	ug/L	<0.31	1.0	0.31	05/22/18 09:07	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.33	5.0	0.33	05/22/18 09:07	
Acetone	ug/L	<10.0	25.0	10.0	05/22/18 09:07	
Benzene	ug/L	<0.25	1.0	0.25	05/22/18 09:07	
Bromobenzene	ug/L	<0.30	1.0	0.30	05/22/18 09:07	
Bromochloromethane	ug/L	<0.17	1.0	0.17	05/22/18 09:07	
Bromodichloromethane	ug/L	<0.18	1.0	0.18	05/22/18 09:07	
Bromoform	ug/L	<0.26	1.0	0.26	05/22/18 09:07	
Bromomethane	ug/L	<0.29	2.0	0.29	05/22/18 09:07	
Carbon tetrachloride	ug/L	<0.25	1.0	0.25	05/22/18 09:07	
Chlorobenzene	ug/L	<0.23	1.0	0.23	05/22/18 09:07	
Chloroethane	ug/L	<0.54	1.0	0.54	05/22/18 09:07	
Chloroform	ug/L	<0.14	1.0	0.14	05/22/18 09:07	
Chloromethane	ug/L	<0.11	1.0	0.11	05/22/18 09:07	
cis-1,2-Dichloroethene	ug/L	<0.19	1.0	0.19	05/22/18 09:07	
cis-1,3-Dichloropropene	ug/L	<0.13	1.0	0.13	05/22/18 09:07	
Dibromochloromethane	ug/L	<0.21	1.0	0.21	05/22/18 09:07	
Dibromomethane	ug/L	<0.21	1.0	0.21	05/22/18 09:07	
Dichlorodifluoromethane	ug/L	<0.21	1.0	0.21	05/22/18 09:07	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

METHOD BLANK: 2284482 Matrix: Water
Associated Lab Samples: 92384877008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Diisopropyl ether	ug/L	<0.12	1.0	0.12	05/22/18 09:07	
Ethylbenzene	ug/L	<0.30	1.0	0.30	05/22/18 09:07	
Hexachloro-1,3-butadiene	ug/L	<0.71	1.0	0.71	05/22/18 09:07	
m&p-Xylene	ug/L	<0.66	2.0	0.66	05/22/18 09:07	
Methyl-tert-butyl ether	ug/L	<0.21	1.0	0.21	05/22/18 09:07	
Methylene Chloride	ug/L	<0.97	2.0	0.97	05/22/18 09:07	
Naphthalene	ug/L	<0.24	1.0	0.24	05/22/18 09:07	
o-Xylene	ug/L	<0.23	1.0	0.23	05/22/18 09:07	
p-Isopropyltoluene	ug/L	<0.31	1.0	0.31	05/22/18 09:07	
Styrene	ug/L	<0.26	1.0	0.26	05/22/18 09:07	
Tetrachloroethene	ug/L	<0.46	1.0	0.46	05/22/18 09:07	
Toluene	ug/L	<0.26	1.0	0.26	05/22/18 09:07	
trans-1,2-Dichloroethene	ug/L	<0.49	1.0	0.49	05/22/18 09:07	
trans-1,3-Dichloropropene	ug/L	<0.26	1.0	0.26	05/22/18 09:07	
Trichloroethene	ug/L	<0.47	1.0	0.47	05/22/18 09:07	
Trichlorofluoromethane	ug/L	<0.20	1.0	0.20	05/22/18 09:07	
Vinyl acetate	ug/L	<0.35	2.0	0.35	05/22/18 09:07	
Vinyl chloride	ug/L	<0.62	1.0	0.62	05/22/18 09:07	
Xylene (Total)	ug/L	<1.0	1.0	1.0	05/22/18 09:07	
1,2-Dichloroethane-d4 (S)	%	88	70-130		05/22/18 09:07	
4-Bromofluorobenzene (S)	%	104	70-130		05/22/18 09:07	
Toluene-d8 (S)	%	114	70-130		05/22/18 09:07	

LABORATORY CONTROL SAMPLE: 2284483

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	48.6	97	80-125	
1,1,1-Trichloroethane	ug/L	50	52.5	105	71-129	
1,1,2,2-Tetrachloroethane	ug/L	50	44.7	89	79-124	
1,1,2-Trichloroethane	ug/L	50	50.1	100	85-125	
1,1-Dichloroethane	ug/L	50	45.4	91	73-126	
1,1-Dichloroethene	ug/L	50	49.1	98	66-135	
1,1-Dichloropropene	ug/L	50	49.1	98	74-135	
1,2,3-Trichlorobenzene	ug/L	50	49.7	99	73-135	
1,2,3-Trichloropropane	ug/L	50	47.5	95	75-130	
1,2,4-Trichlorobenzene	ug/L	50	49.1	98	75-134	
1,2-Dibromo-3-chloropropane	ug/L	50	49.1	98	71-133	
1,2-Dibromoethane (EDB)	ug/L	50	51.1	102	83-124	
1,2-Dichlorobenzene	ug/L	50	48.9	98	80-133	
1,2-Dichloroethane	ug/L	50	50.2	100	67-128	
1,2-Dichloropropane	ug/L	50	51.8	104	75-132	
1,3-Dichlorobenzene	ug/L	50	47.1	94	77-130	
1,3-Dichloropropane	ug/L	50	51.5	103	76-131	
1,4-Dichlorobenzene	ug/L	50	47.6	95	78-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

LABORATORY CONTROL SAMPLE: 2284483

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,2-Dichloropropane	ug/L	50	43.0	86	40-160	
2-Butanone (MEK)	ug/L	100	91.4	91	61-144	
2-Chlorotoluene	ug/L	50	46.2	92	74-132	
2-Hexanone	ug/L	100	84.9	85	68-143	
4-Chlorotoluene	ug/L	50	45.9	92	76-133	
4-Methyl-2-pentanone (MIBK)	ug/L	100	89.8	90	72-135	
Acetone	ug/L	100	101	101	48-146	
Benzene	ug/L	50	50.1	100	80-125	
Bromobenzene	ug/L	50	48.9	98	75-125	
Bromochloromethane	ug/L	50	51.2	102	71-125	
Bromodichloromethane	ug/L	50	49.1	98	78-124	
Bromoform	ug/L	50	48.1	96	71-128	
Bromomethane	ug/L	50	39.2	78	40-160	
Carbon tetrachloride	ug/L	50	48.2	96	69-131	
Chlorobenzene	ug/L	50	45.5	91	81-122	
Chloroethane	ug/L	50	34.1	68	39-148	
Chloroform	ug/L	50	49.0	98	73-127	
Chloromethane	ug/L	50	37.9	76	44-146	
cis-1,2-Dichloroethene	ug/L	50	47.3	95	74-124	
cis-1,3-Dichloropropene	ug/L	50	50.6	101	72-132	
Dibromochloromethane	ug/L	50	50.5	101	78-125	
Dibromomethane	ug/L	50	49.6	99	82-120	
Dichlorodifluoromethane	ug/L	50	42.7	85	34-157	
Diisopropyl ether	ug/L	50	44.4	89	69-135	
Ethylbenzene	ug/L	50	44.9	90	79-121	
Hexachloro-1,3-butadiene	ug/L	50	45.3	91	72-131	
m&p-Xylene	ug/L	100	89.8	90	81-124	
Methyl-tert-butyl ether	ug/L	50	44.7	89	74-131	
Methylene Chloride	ug/L	50	48.3	97	64-133	
Naphthalene	ug/L	50	49.2	98	73-133	
o-Xylene	ug/L	50	46.0	92	79-131	
p-Isopropyltoluene	ug/L	50	46.5	93	80-131	
Styrene	ug/L	50	44.3	89	84-126	
Tetrachloroethene	ug/L	50	44.6	89	78-122	
Toluene	ug/L	50	48.6	97	80-121	
trans-1,2-Dichloroethene	ug/L	50	46.5	93	71-127	
trans-1,3-Dichloropropene	ug/L	50	48.9	98	69-141	
Trichloroethene	ug/L	50	53.1	106	78-122	
Trichlorofluoromethane	ug/L	50	42.5	85	53-137	
Vinyl acetate	ug/L	100	79.4	79	40-160	
Vinyl chloride	ug/L	50	45.6	91	50-150	
Xylene (Total)	ug/L	150	136	90	81-126	
1,2-Dichloroethane-d4 (S)	%			102	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			96	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2284484 2284485

Parameter	Units	92385480001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	400	400	438	520	110	130	70-130	17	30	
1,1,1-Trichloroethane	ug/L	ND	400	400	474	553	118	138	70-130	16	30	M1
1,1,2,2-Tetrachloroethane	ug/L	ND	400	400	410	482	102	120	70-130	16	30	
1,1,2-Trichloroethane	ug/L	ND	400	400	433	525	108	131	70-130	19	30	M1
1,1-Dichloroethane	ug/L	ND	400	400	407	461	102	115	70-130	12	30	
1,1-Dichloroethene	ug/L	ND	400	400	473	528	118	132	70-166	11	30	
1,1-Dichloropropene	ug/L	ND	400	400	424	526	106	131	70-130	22	30	M1
1,2,3-Trichlorobenzene	ug/L	ND	400	400	410	486	103	121	70-130	17	30	
1,2,3-Trichloropropane	ug/L	ND	400	400	442	500	111	125	70-130	12	30	
1,2,4-Trichlorobenzene	ug/L	ND	400	400	424	461	106	115	70-130	8	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	400	400	426	505	106	126	70-130	17	30	
1,2-Dibromoethane (EDB)	ug/L	ND	400	400	444	519	111	130	70-130	15	30	
1,2-Dichlorobenzene	ug/L	ND	400	400	418	495	105	124	70-130	17	30	
1,2-Dichloroethane	ug/L	ND	400	400	439	503	110	126	70-130	14	30	
1,2-Dichloropropane	ug/L	ND	400	400	448	550	112	137	70-130	20	30	M1
1,3-Dichlorobenzene	ug/L	ND	400	400	414	486	103	122	70-130	16	30	
1,3-Dichloropropane	ug/L	ND	400	400	442	537	110	134	70-130	20	30	M1
1,4-Dichlorobenzene	ug/L	ND	400	400	413	486	103	121	70-130	16	30	
2,2-Dichloropropane	ug/L	ND	400	400	400	472	100	118	70-130	17	30	
2-Butanone (MEK)	ug/L	211	800	800	896	1050	86	105	70-130	16	30	
2-Chlorotoluene	ug/L	ND	400	400	413	478	103	120	70-130	15	30	
2-Hexanone	ug/L	ND	800	800	792	938	99	117	70-130	17	30	
4-Chlorotoluene	ug/L	ND	400	400	415	485	104	121	70-130	15	30	
4-Methyl-2-pentanone (MIBK)	ug/L	1490	800	800	2330	2490	105	124	70-130	6	30	
Acetone	ug/L	12700	800	800	15600	15200	355	304	70-130	3	30	E,M1
Benzene	ug/L	ND	400	400	454	538	113	135	70-148	17	30	
Bromobenzene	ug/L	ND	400	400	419	495	105	124	70-130	17	30	
Bromochloromethane	ug/L	ND	400	400	425	524	106	131	70-130	21	30	M1
Bromodichloromethane	ug/L	ND	400	400	444	516	111	129	70-130	15	30	
Bromoform	ug/L	ND	400	400	404	475	101	119	70-130	16	30	
Bromomethane	ug/L	ND	400	400	343	404	86	101	70-130	16	30	
Carbon tetrachloride	ug/L	ND	400	400	442	534	110	133	70-130	19	30	M1
Chlorobenzene	ug/L	9.19J	400	400	436	493	107	121	70-146	12	30	
Chloroethane	ug/L	ND	400	400	380	400	95	100	70-130	5	30	
Chloroform	ug/L	ND	400	400	419	531	105	133	70-130	24	30	M1
Chloromethane	ug/L	ND	400	400	355	390	89	97	70-130	9	30	
cis-1,2-Dichloroethene	ug/L	ND	400	400	441	508	110	127	70-130	14	30	
cis-1,3-Dichloropropene	ug/L	ND	400	400	455	537	114	134	70-130	17	30	M1
Dibromochloromethane	ug/L	ND	400	400	426	501	107	125	70-130	16	30	
Dibromomethane	ug/L	ND	400	400	452	523	113	131	70-130	15	30	M1
Dichlorodifluoromethane	ug/L	ND	400	400	361	398	90	100	70-130	10	30	
Diisopropyl ether	ug/L	ND	400	400	397	473	99	118	70-130	17	30	
Ethylbenzene	ug/L	6.78J	400	400	437	480	107	118	70-130	9	30	
Hexachloro-1,3-butadiene	ug/L	ND	400	400	401	458	100	115	70-130	13	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2284484 2284485

Parameter	Units	92385480001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
m&p-Xylene	ug/L	55.1	800	800	912	1030	107	122	70-130	12	30	
Methyl-tert-butyl ether	ug/L	ND	400	400	399	464	100	116	70-130	15	30	
Methylene Chloride	ug/L	ND	400	400	444	497	111	124	70-130	11	30	
Naphthalene	ug/L	ND	400	400	411	496	103	124	70-130	19	30	
o-Xylene	ug/L	13.3J	400	400	440	508	107	124	70-130	14	30	
p-Isopropyltoluene	ug/L	ND	400	400	417	480	104	120	70-130	14	30	
Styrene	ug/L	ND	400	400	426	475	107	119	70-130	11	30	
Tetrachloroethene	ug/L	ND	400	400	434	488	109	122	70-130	12	30	
Toluene	ug/L	610	400	400	1070	1120	115	128	70-155	5	30	
trans-1,2-Dichloroethene	ug/L	ND	400	400	413	474	103	119	70-130	14	30	
trans-1,3-Dichloropropene	ug/L	ND	400	400	431	510	108	128	70-130	17	30	
Trichloroethene	ug/L	ND	400	400	470	569	118	142	69-151	19	30	
Trichlorofluoromethane	ug/L	ND	400	400	446	492	112	123	70-130	10	30	
Vinyl acetate	ug/L	ND	800	800	864	1050	108	131	70-130	19	30	M1
Vinyl chloride	ug/L	ND	400	400	411	462	103	115	70-130	12	30	
Xylene (Total)	ug/L	55.1	1200	1200	1350	1540	108	124	70-130	13	30	
1,2-Dichloroethane-d4 (S)	%						101	100	70-130			
4-Bromofluorobenzene (S)	%						97	93	70-130			
Toluene-d8 (S)	%						102	100	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CMC ATHENS, GA 510507-002.04
Pace Project No.: 92384877

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92384877001	**MW-4A**	EPA 8260	411270		
92384877002	**MW-6**	EPA 8260	411270		
92384877003	**MW-7A**	EPA 8260	411270		
92384877004	**MW-8A**	EPA 8260	411270		
92384877005	**MW-10**	EPA 8260	411402		
92384877006	**MW-11**	EPA 8260	411688		
92384877007	**MW-13**	EPA 8260	411402		
92384877008	**DUP-1**	EPA 8260	411796		
92384877009	**TRIP BLANK**	EPA 8260	411402		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt

WO# : 92384877

92384877

Client Name: APEX **Project #:**

Courier: ☐ Commercial ☐ Fed Ex ☑ Pace ☐ UPS ☐ USPS ☐ Other:____ ☐ Client

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Date/Initials Person Examining Contents: JW 5/16/18

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☐ IR Gun ID: 92T040 **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp (°C): 4.0 **Correction Factor:** Add/Subtract (°C) +0.4

Cooler Temp Corrected (°C): 4.4

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☐ N/A	10.
Trip Blank Present?	☑ Yes	☐ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☑ Yes	☐ No	☐ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: TC **Date:** 5/16/18

Project Manager SRF Review: TC **Date:** 5/16/18

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottle**

Project # **WO# : 92384877**

PM: RWC **Due Date: 05/23/18**

CLIENT: 92-APEX MOOR

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1	\						\	\			\					3									\	\			
2	\						\	\			\					3									\	\			
3	\						\	\			\					3									\	\			
4	\						\	\			\					3									\	\			
5	\						\	\			\					3									\	\			
6	\						\	\			\					3									\	\			
7	\						\	\			\					3									\	\			
8	\						\	\			\					3									\	\			
9	\						\	\			\					2									\	\			
10	\						\	\			\														\	\			
11	\						\	\			\														\	\			
12	\						\	\			\														\	\			

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	APEX Companies - NC	Report To:	Katie Schwarz	Attention:	Emily.Cuttle@apexcos.com
Address:	10610 Metromont Parkway	Copy To:	Grant Watkins	Company Name:	
Charlotte, NC 28269				Address:	
Email:	katie.schwarz@apexcos.com	Purchase Order #:		Pace Quote:	
Phone:	704-799-6390 Fax	Project Name:	CMC Athens, GA 510507-002.04	Pace Project Manager:	trey.carter@pacelabs.com,
Requested Due Date:	Std.	Project #:		Pace Profile #:	8490-1

Regulatory Agency	
State / Location	GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	8260 VOCs Full List	8260 - Trip Blank	Residual Chlorine (Y/N)	92384877
1	MW-4A	WT	G			5/15/18	1110		3				X					X	X			001
2	MW-6						1205											X	X			002
3	MW-7A						0905											X	X			003
4	MW-8A						0855											X	X			004
5	MW-10						1015											X	X			005
6	MW-11						1220											X	X			006
7	MW-13				1035		1020											X	X			007
8	DUP-1						—											X	X			008
9	TRIP BLANK		—			—	—		2											X		009
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Katie Schwarz/APEX				5/16/18	1205				
		5/16/18	1205		5/16/18	1205	4	Y	N	Y

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Katie Schwarz					
SIGNATURE of SAMPLER:	Katie Schwarz	DATE Signed: 5/15/18				

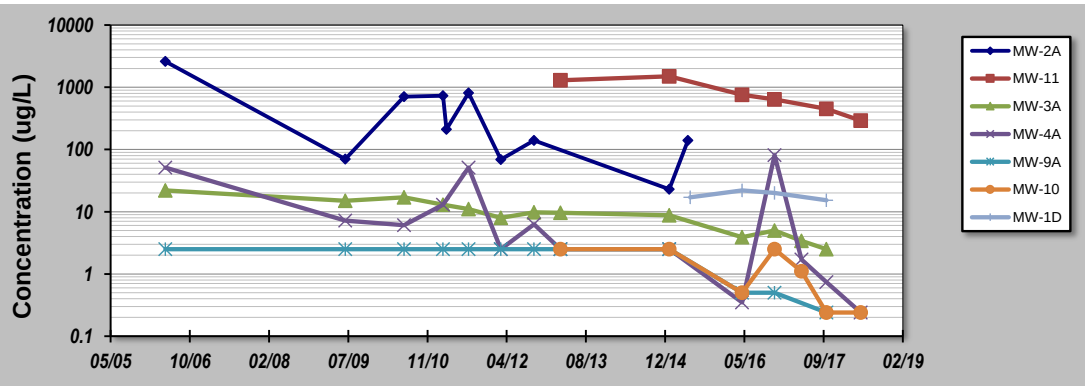
APPENDIX D

MANN-KENDALL OUTPUT SHEETS

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Jun-18	Job ID:	510507-002.05
Facility Name:	CMC (Former Loef)-Athens, GA	Constituent:	TCE
Conducted By:	Apex Companies	Concentration Units:	ug/L

Sampling Point ID:	MW-2A	MW-11	MW-3A	MW-4A	MW-9A	MW-10	MW-1D
Sampling Event	Sampling Date	TCE CONCENTRATION (ug/L)						
1	5/9/2006	2600		22	51	2.5		
2	6/17/2009	70		15	7.2	2.5		
3	6/24/2010	710		17	6.1	2.5		
4	2/24/2011	730		13	13	2.5		
5	3/18/2011	210						
6	8/4/2011	810		11	51	2.5		
7	2/24/2012	69		8	2.5	2.5		
8	9/20/2012	140		9.8	6.3	2.5		
9	3/7/2013		1300	9.6	2.5	2.5	2.5	
10	1/22/2015	23	1500	8.8	2.5	2.5	2.5	
11	5/20/2015	140						
12	6/3/2015							17
13	4/26/2016		760	3.9	0.35	0.5	0.5	22
14	11/17/2016		640	5	81	0.5	2.5	20
15	5/5/2017			3.4	1.7		1.1	
16	10/10/2017		450	2.5	0.74	0.24	0.24	15.3
17	5/15/2018		291		0.24		0.24	
18								
19								
20								
Coefficient of Variation:		1.42	0.58	0.58	1.58	0.48	0.80	0.16
Mann-Kendall Statistic (S):		-18	-13	-68	-49	-29	-13	-2
Confidence Factor:		93.4%	99.2%	>99.9%	99.7%	97.4%	96.5%	62.5%
Concentration Trend:		Prob. Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Stable



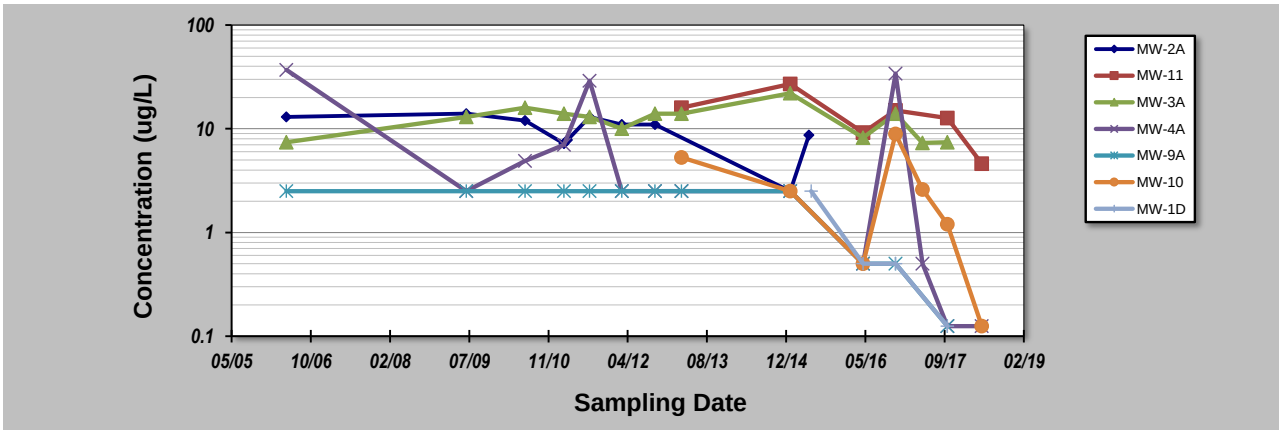
Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Jun-18	Job ID:	510507-002.05
Facility Name:	CMC (Former Loef)-Athens, GA	Constituent:	Benzene
Conducted By:	Apex Companies	Concentration Units:	ug/L

Sampling Point ID:	MW-2A	MW-11	MW-3A	MW-4A	MW-9A	MW-10	MW-1D
Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	5/9/2006	13		7.4	37	2.5		
2	6/17/2009	14		13	2.5	2.5		
3	6/24/2010	12		16	4.9	2.5		
4	2/24/2011	7.2		14	7	2.5		
5	3/18/2011	7.8						
6	8/4/2011	13		13	29	2.5		
7	2/24/2012	11		10	2.5	2.5		
8	9/20/2012	11		14	2.5	2.5		
9	3/7/2013		16	14	2.5	2.5	5.3	
10	1/22/2015	2.5	27	22	2.5	2.5	2.5	
11	5/20/2015	8.7						
12	6/3/2015							2.5
13	4/26/2016		9.2	8.2	0.5	0.5	0.5	0.5
14	11/17/2016		15	14	34	0.5	8.9	0.5
15	5/5/2017			7.3	0.5		2.6	
16	10/10/2017		12.7	7.4	0.125	0.125	1.2	0.125
17	5/15/2018		4.6		0.125		0.125	
18								
19								
20								
Coefficient of Variation:		0.35	0.54	0.34	1.50	0.49	1.03	1.19
Mann-Kendall Statistic (S):		-19	-9	-10	-49	-29	-9	-5
Confidence Factor:		94.6%	93.2%	70.5%	99.7%	97.4%	88.1%	89.6%
Concentration Trend:		Prob. Decreasing	Prob. Decreasing	Stable	Decreasing	Decreasing	No Trend	No Trend



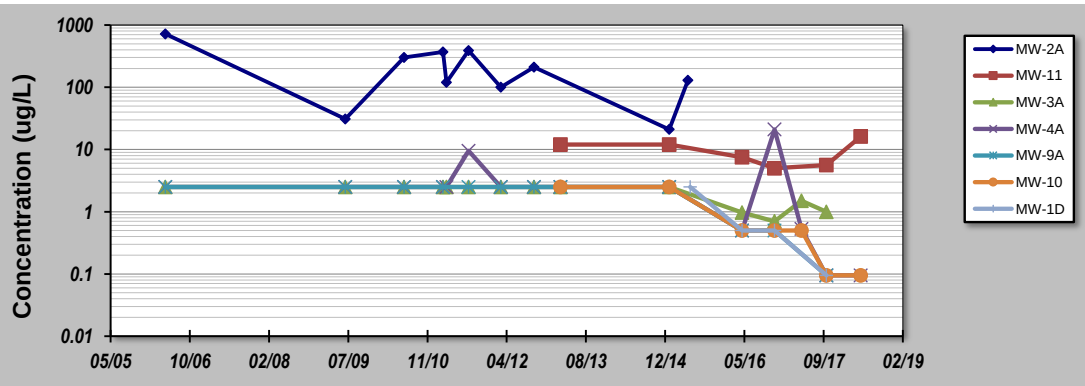
Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Jun-18	Job ID:	510507-002.05
Facility Name:	CMC (Former Loef)-Athens, GA	Constituent:	Cis 1,2-DCE
Conducted By:	Apex Companies	Concentration Units:	ug/L

Sampling Point ID:	MW-2A	MW-11	MW-3A	MW-4A	MW-9A	MW-10	MW-1D
Sampling Event	Sampling Date	CIS 1,2-DCE CONCENTRATION (ug/L)						
1	5/9/2006	720		2.5	2.5	2.5		
2	6/17/2009	31		2.5	2.5	2.5		
3	6/24/2010	300		2.5	2.5	2.5		
4	2/24/2011	370		2.5	2.5	2.5		
5	3/18/2011	120		2.5	2.5			
6	8/4/2011	390		2.5	9.5	2.5		
7	2/24/2012	100		2.5	2.5	2.5		
8	9/20/2012	210		2.5	2.5	2.5		
9	3/7/2013		12	2.5	2.5	2.5	2.5	
10	1/22/2015	21	12	2.5	2.5	2.5	2.5	
11	5/20/2015	130						
12	6/3/2015							2.5
13	4/26/2016		7.5	0.97	0.5	0.5	0.5	0.5
14	11/17/2016		5	0.70	21	0.5	0.5	0.5
15	5/5/2017			1.5	0.53		0.5	
16	10/10/2017		5.6	1.0	0.095	0.095	0.095	0.095
17	5/15/2018		16.2		0.095		0.095	
18								
19								
20								
Coefficient of Variation:		0.89	0.45	0.34	1.46	0.49	1.12	1.21
Mann-Kendall Statistic (S):		-13	-2	-38	-34	-29	-16	-5
Confidence Factor:		85.4%	57.0%	97.9%	94.9%	97.4%	99.0%	89.6%
Concentration Trend:		Stable	Stable	Decreasing	Prob. Decreasing	Decreasing	Decreasing	No Trend



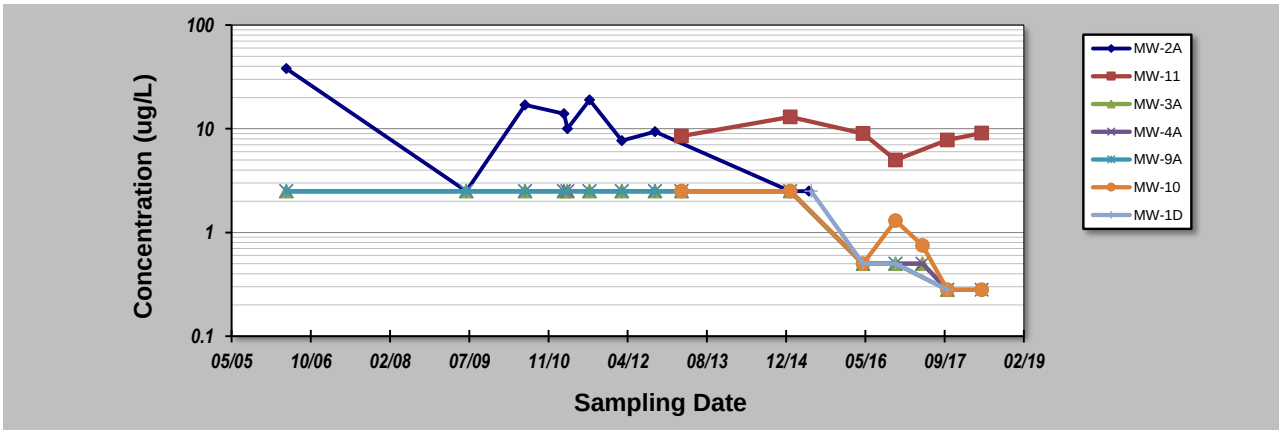
Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Jun-18	Job ID:	510507-002.05
Facility Name:	CMC (Former Loef)-Athens, GA	Constituent:	1,1-DCE
Conducted By:	Apex Companies	Concentration Units:	ug/L

Sampling Point ID:		MW-2A	MW-11	MW-3A	MW-4A	MW-9A	MW-10	MW-1D
Sampling Event	Sampling Date	1,1-DCE CONCENTRATION (ug/L)						
1	5/9/2006	38		2.5	2.5	2.5		
2	6/17/2009	2.5		2.5	2.5	2.5		
3	6/24/2010	17		2.5	2.5	2.5		
4	2/24/2011	14		2.5	2.5	2.5		
5	3/18/2011	10		2.5	2.5			
6	8/4/2011	19		2.5	2.5	2.5		
7	2/24/2012	7.7		2.5	2.5	2.5		
8	9/20/2012	9.4		2.5	2.5	2.5		
9	3/7/2013		8.5	2.5	2.5	2.5	2.5	
10	1/22/2015	2.5	13	2.5	2.5	2.5	2.5	
11	5/20/2015	2.5						
12	6/3/2015							2.5
13	4/26/2016		9	0.5	0.5	0.5	0.5	0.5
14	11/17/2016		5	0.5	0.5	0.5	1.3	0.5
15	5/5/2017			0.5	0.5		0.75	
16	10/10/2017		7.8	0.28	0.28	0.28	0.28	0.28
17	5/15/2018		9.1		0.28		0.28	
18								
19								
20								
Coefficient of Variation:		0.88	0.30	0.50	0.57	0.47	0.85	1.10
Mann-Kendall Statistic (S):		-22	-1	-43	-56	-29	-15	-5
Confidence Factor:		97.1%	50.0%	99.0%	99.8%	97.4%	98.5%	89.6%
Concentration Trend:		Decreasing	Stable	Decreasing	Decreasing	Decreasing	Decreasing	No Trend



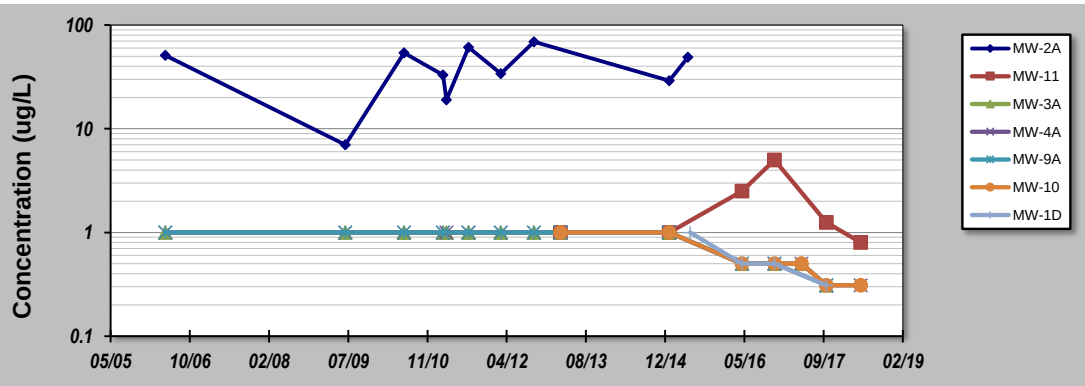
Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Jun-18	Job ID:	510507-002.05
Facility Name:	CMC (Former Loef)-Athens, GA	Constituent:	Vinyl Chloride
Conducted By:	Apex Companies	Concentration Units:	ug/L

Sampling Point ID:	MW-2A	MW-11	MW-3A	MW-4A	MW-9A	MW-10	MW-1D
Sampling Event	Sampling Date	VINYL CHLORIDE CONCENTRATION (ug/L)						
1	5/9/2006	51		1	1	1		
2	6/17/2009	7		1	1	1		
3	6/24/2010	54		1	1	1		
4	2/24/2011	33		1	1	1		
5	3/18/2011	19		1	1			
6	8/4/2011	61		1	1	1		
7	2/24/2012	34		1	1	1		
8	9/20/2012	69		1	1	1		
9	3/7/2013		1	1	1	1	1	
10	1/22/2015	29	1	1	1	1	1	
11	5/20/2015	49						
12	6/3/2015							1
13	4/26/2016		2.5	0.5	0.5	0.5	0.5	0.5
14	11/17/2016		5	0.5	0.5	0.5	0.5	0.5
15	5/5/2017			0.5	0.5		0.5	
16	10/10/2017		1.25	0.31	0.31	0.31	0.31	0.31
17	5/15/2018		0.8		0.31		0.31	
18								
19								
20								
Coefficient of Variation:		0.48	0.84	0.31	0.35	0.30	0.50	0.51
Mann-Kendall Statistic (S):		7	0	-43	-56	-29	-16	-5
Confidence Factor:		70.0%	39.3%	99.0%	99.8%	97.4%	99.0%	89.6%
Concentration Trend:		No Trend	Stable	Decreasing	Decreasing	Decreasing	Decreasing	Stable



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

APPENDIX E

SUMMARY OF HOURS INVOICED

APPENDIX E

Monthly Summary and Description of Georgia Professional Geologist Hours
February 2018 through July 2018
Former Loef Facility
Athens, Georgia
VRP Site No. 802705980

Kathleen Roush, P.G. (Georgia PG Registration No. 1799)		
Monthly Period	**Total Hours**	**Description of VRP Work**
July 2018	4.00	Conference calls with client. Discussions with project manager. Reviewed draft and certified final 8th Progress Report.

Note: Georgia Professional Geologist hours from January 2018 were recorded in the 7th Progress Report submitted to GA-EPD.