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*September 2014 Semi-Annual Progress Report for Groundwater & Surface Water Monitoring,
Woodall Creek Site*

Southern Metal Finishing Company, LLC

*1575 Huber Street, Atlanta, Fulton County, Georgia – HSI #10689 – March 12, 2015 is
complete, identical to the paper copy, and virus free.*

A handwritten signature in black ink, appearing to read "Jerry D. Gaccetta", is positioned above a horizontal line.

Jerry D. Gaccetta, PG, Associate Project Manager

March 12, 2015



Mr. David Reuland
Unit Coordinator
Georgia Department of Natural Resources
Land Protection Division
2 Martin Luther King Jr. Drive, Suite 1054
Atlanta, GA 30334

Re: Notice of Deficiencies First Semi-Annual Report Woodall Creek Site, Atlanta, Fulton County, GA HSI #10689

Dear Mr. Reuland:

Amec Foster Wheeler, Environment & Infrastructure, Inc. (Amec Foster Wheeler) on behalf of Southern Metal Finishing, LLC, is pleased to provide the following Responses to Comments and updated documentation in response to Georgia Environmental Protection Divisions, Notice of Deficiencies dated January 14, 2015 to the September 2014 Semi-Annual Progress Report for the Woodall Creek Site.

Inconsistencies

1. Table 1 shows that well MW-2 on the Daltile Property was dry when sampling was performed in September 2014. The groundwater sampling log indicated that the length of the saturated zone was 3.3 feet. However, a sample could not be taken because the bladder pump repeatedly clogged up with sediment.

Response: A representative sample could not be collected from RPMW-2 due excessive sedimentation in the well. Reported conditions combined with observations and data collected from this well during previous sampling indicate that RPMW-2 requires rehabilitation and/or is set too shallow to adequately monitor groundwater conditions in this area. Amec Foster Wheeler will attempt rehabilitation during the next sampling event. Our plan would allow for adequate lead time for re-equilibration prior to the sampling event. If it's determine the well is not serviceable, provisions for a replacement well will be executed.

2. A footnote on Table 1 shows that underlined bolded designations indicate either damaged or inaccessible wells. Well MW-25 on the Dobbins Property and MW-19 on the Goodstone Property are shown on Table 1 as wells specified for semi-annual sampling. It should be clear on Table 1 whether or not these wells are still viable monitoring wells. If these wells were actually inaccessible, an explanation needs to be offered as to the reason for being inaccessible and whether or not it will be possible to sample in the future. EPD is aware that well MW-14 on the M-West HOA Property was actually damaged and decommissioned as a monitoring well since we gave our permission to discontinue monitoring well.

Correspondence:
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Similarly, most of the wells with a bolded designation indicate that these monitoring wells either could not be found or damaged. Based on the First Semi-Annual Progress Report Baseline Monitoring Report dated June 12, 2014, it appears that these wells could not be found. The footnote should be changed to indicate this.

Response: *Table 1 has been revised to provide more detail regarding the long term viability of monitoring well where samples could not be collected or where monitoring wells were not located. Table 1 has been restructured to include a notation if the well is permanently out of commission, temporarily blocked or rehabilitation is required prior to sampling. Based on a recent site inspections, wells previously not located have been uncovered. Table 1 provides an update to the monitoring wells planned for sampling.*

3. Table 1, indicating the wells proposed for semi-annual sampling show MW-15 on the Dobbins Mini-Warehouse. Since MW-15 on the Macy's Property was actually sampled and there is no well MW-15 on the Dobbins Mini-Warehouse Property as shown in the well inventory in the Baseline Report, it appears there should be a separate row showing the Macy's Property and a corresponding well MW-15 on this property.

Similarly, Well MW-23 is shown on the Dobbins Mini-Warehouse Property as actually being sampled when there is no well MW-23 on that property as shown on the well inventory in the Baseline Report. It appears that this well is actually on the restaurant Supply Property and its designation should be removed from the Dobbins Mini-Warehouse row to the row corresponding to the Restaurant Supply monitoring wells.

To be consistent with Table 2, Table 1 should be modified to show MW-7I as being on the Midtown West Partners Property, not on the M-West HOA Property.

Response: *Based on a recent administrative record search, the location of Dobbins Mini Warehouse monitoring well MW-15 was unknown. Recent site inspections and removal of many of the truck trailers being stored on the property assisted in locating Dobbins wells MW-15, MW-10, and MW-16. Rehabilitation to remove sediment and repair damage to casings at MW-15 will be completed prior to sampling during the upcoming semiannual sampling event. As for monitoring well MW-23, previously associated with the Dobbins Mini Warehouse property, it has been revised to reflect its association with the Restaurant Supply Property.*

4. Table 2 indicates that well SMFMW-5 is proposed as a semi-annual monitoring well. This is inconsistent with Table 1 that does not propose this monitoring well for sampling. Well SMFMW-5 was sampled in September 2014.

Response: *SMFMW-5 was scheduled to be sampled as part of the baseline sampling program, but was not located at that time. While not included as a monitoring well to be sampled semiannually per the Revised CAP, Amec Foster Wheeler located the well during the*

September sampling event and opted to sample it. SMFMW-5 is not included on the list of wells to be monitored semi-annually. Table 2 has been revised accordingly.

5. Monitoring well MW-13 on the M-West HOA Property in Table 1 is designated as one of the wells for semi-annual sampling, but was not monitored. It is unclear whether or not this well should be designated on this property since it is not shown in Table 2 in the inventory of wells. It may be a well corresponding to the Midtown West Partners Property. If this is the case, this well designation needs to be moved to this row in Table 1 and bolded since this well was not monitored and the monitoring well could not be located as indicated in Table 2 of the Baseline Report.

Response: Amec Foster Wheeler agrees that MW-13 is located on the M-West HOA Property. As such, the Well Number has been changed to HOAMW-13. Amec Foster Wheeler has made the changes referenced above to the attached tables.

6. It should be noted that GCAL Lab Sheet 21409251102 for the groundwater sample collected September 24, 2014 shows this sample to be collected at well JPMW-24. There does not appear to be any existing well with this designation. The data from the lab sheet does correspond with data shown for JPMW-21 shown in Tables 3 and 4. In future groundwater investigations, this well should be correctly designated on the Chain of Custody Record. The sampler did insert the appropriate well designation on the Groundwater Sampling Log.

Response: JPMW-24 should be identified as JPMW-21. The document has been revised accordingly.

Missing/Incorrect Information

7. According to GCAL Lab Sheet 21409181201, a groundwater sample was collected from SMFMW-5 on September 17, 2014. According to Table 2, this groundwater well is supposed to be monitored semi-annually. It is not listed on Table 1 for semi-annual monitoring nor was it monitored during the baseline assessment. According to the baseline assessment, it was not found. Monitoring results for well SMFMW-5 should be added to Tables 3 and 4. The isoconcentration map for PCE also needs to include the analytical results for SMFMW-5. The potentiometric map shown in Figure 1 needs to incorporate the groundwater elevation at this monitoring well.

Response: As noted previously, SMFMW-5 was scheduled to be sampled as part of the baseline sampling program, but could not be located at that time. While not included as a monitoring well to be sampled semiannually, Amec Foster Wheeler located the well during the September sampling event and opted to sample it. SMFMW-5 will be removed from the list of wells to be monitored semi-annually. The document has been revised accordingly.

8. According to GCAL Lab Sheet 21409231304, a groundwater sample was taken at the Daltile Property from RPMW-14 on September 24, 2014. According to Table 2, this monitoring well is supposed to be monitored semi-annually. It is listed on Table 1 for semi-annual monitoring and it was monitored during the baseline assessment. Monitoring results for well RPMW-14 should be added to Tables 3 and 4. The isoconcentration maps also need to include the analytical results for RPMW-14. PCE was recorded at 934 µg/L, considerably higher than the 190 µg/L recorded during the March 2014 baseline sampling.

Response: *The information associated with RPMW-14 has been incorporated into the appropriate tables and figures.*

9. According to the corrective action plan, MNA monitoring is supposed to include ferrous iron. This parameter needs to be included in forthcoming groundwater investigations.

Response: *Ferrous iron is measured in the field, documented on the monitoring well field sampling logs (Appendix A) and reported in Table 3. As indicated on the field sampling logs, the concentrations reported were 0.0 ppm as noted on Table 3.*

10. Isoconcentration maps in the groundwater top-of-bedrock and fractured bedrock should be included as maps separate from the shallow aquifer.

Response: *The requested figures have been included in the revised document.*

11. The location of the staff gauges should be shown on the potentiometric map shown in Figure 1. Potentiometric surface elevations should be drawn to tie in the surface water measurements at the staff gauges.

Response: *Acknowledged. See attached revised Figures.*

Other Requirements

12. On future submittals, the electronic certification should be included as part of the compact disc rather than as a separate hard copy.

Response: *Acknowledged.*

13. There should be a discussion of groundwater monitoring wells that could not be purged in strict adherence to the Traditional Multiple Volume Purge described in section 3.2.1 or the "Tubing-in-Screened-Interval Method described in Section 3.2.2 of the Region 4 US EPA SEDS Groundwater Sampling Operating Procedure dated March 6, 2014 (SESDPROC-301-R3).

Response: *Agree. Several wells at the site exhibit behavior that proves problematic to purging*

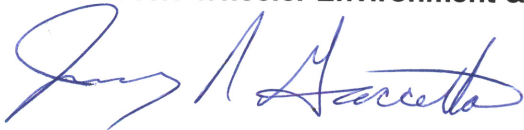
according to these methods. The revised report will contain a section for describing and discussing these situations supported by a tabulated summary of conditions encountered during purging including height of water column, drawdown, and purge volume at each well.

14. What are the plans for replacing monitoring wells that were identified in the CAP for MNA semi-annual monitoring and could either not be located or were damaged during the initial baseline monitoring and the September 2014 monitoring?

Response: *As noted previously, Amec Foster Wheeler completed a subsequent site assessment to assess the situation with monitoring wells that could not be sampled due to temporary or permanent obstruction or could not be located based on field investigations and assessment efforts. With the exception of two monitoring well that has yet to be located, SMFDS-1 and MWHOAMW-13, representative samples are anticipated to be collected from the Revised CAP list of monitoring wells. Table 1 provides a detail of future monitoring well sample locations.*

Sincerely,

Amec Foster Wheeler Environment & Infrastructure, Inc.



Jerry Gaccetta, P.G.

Associate Project Manager



SEPTEMBER 2014 SEMI-ANNUAL PROGRESS REPORT

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1575 Huber Street, Atlanta, Fulton County, Georgia
HSI Number: 10689
Tax Parcel No. 17-0187-LL-059-6

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Presented to:

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Prepared by:

AMEC Environment & Infrastructure, Inc.
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March 12, 2015
AMEC Project No 6122130015



March 12, 2015

Mr. Larry Kloet
Georgia Environmental Protection Division
Land Protection Branch
2 Martin Luther King Jr. Drive
Atlanta, GA 30334

Subject: Revised Progress Report
Results from September 2014 Semi-Annual Groundwater and Surface Water
Sampling Event, Woodall Creek Site, Atlanta, Fulton County, GA HSI #10689

Dear Mr. Kloet:

AMEC Environment & Infrastructure (AMEC), on behalf of Southern Metal Finishing Company (SMF), LLC, is submitting to the Georgia Environmental Protection Division (EPD) this progress report presenting results from the September 2014 semi-annual groundwater Monitored Natural Attenuation sampling event subsequent to the Baseline Groundwater Sampling effort. Pursuant to the approved Corrective Action Plan (CAP), the semi-annual testing events will be provided to EPD in semi-annual and annual progress reports. The first semi-annual progress report, presented here, includes sample location figure, potentiometric maps, current and historic data table, updated progress schedule and transmittal memo. The annual reports will provide a more in depth evaluation of findings and trends from the previous sampling event(s).

The following information provides a summary of the September 2014 semi-annual groundwater and surface water sampling efforts completed to document monitored natural attenuation (MNA) at the Woodall Creek Site (HSI #10689). Field activities were completed in accordance with the requirements of the approved Revised Corrective Action Plan dated 17 December 2013.

Groundwater Sampling

The CAP specifies collection of groundwater samples on a semi-annual basis from a total 44 wells within the monitoring network at the Woodall Creek site. Groundwater sampling for the September 2014 semi-annual event was performed during the period 16 September through 30 September 2014. A site-wide potentiometric water level measuring event was also completed on 24 October 2014. Table 1 presents a summary of the wells sampled during the September 2014 event. Table 2 presents a summary of well construction details for wells utilized during the sampling event. Eleven (11) of the specified wells could not be located, were inaccessible at the time of the sampling event, were damaged, or did not contain water of sufficient quantity to allow for sampling during the September 2014 semi-annual event. Details of observed conditions are presented in Table 2; Sampling logs for the September 2014 semi-annual sampling event are presented in Appendix A.

The CAP specifies collection of groundwater samples utilizing techniques in general accordance with USEPA Region 4 SESDPROC-301-R2. Table 3 presents a summary of observations and conditions encountered at wells sampled during the September 2014 semiannual event. Of the 34 wells sampled during this event, 31 were purged in general accordance with the “*tubing-in-screened interval*” (low-flow) method described in the USEPA procedure. Wells were purged and sampled using primarily low-flow methods with either a bladder pump or peristaltic pump. One (1) shallow well and two (2) fractured bedrock wells exhibited recharge rates which necessitated abandoning low-flow procedures, and implementation of traditional purge methods using sampling equipment that was available at the time of sampling. After making unsuccessful attempts to obtain multiple well volumes at these wells, they were purged to dryness and allowed to recharge for collection of samples. One (1) shallow well (RPMW-2) did not contain or yield water of sufficient quantity or quality to allow collection of a sample (Table 3).

Purge water generated from each monitoring well was containerized into a USDOT approved 55-gallon steel drums and staged at the site pending profiling for off-site disposal. Groundwater samples were shipped under chain-of-custody protocols to Gulf Coast Analytical Laboratories (GCAL) of Baton Rouge, Louisiana. Groundwater samples collected during this event were analyzed for nitrate, sulfate and chloride by EPA method 9056A; methane, ethane and ethene by EPA method RSK-175; VOCs by EPA method 8260B and total organic carbon by EPA method 9060A. A sample aliquot was collected directly from the peristaltic pump for field determination of ferrous iron by the 1, 10-phenanthroline method (Hach Method 8146).

For quality assurance/quality control (QA/QC) purposes, duplicate (DUP), equipment blank, and matrix spike/matrix spike duplicate (MS/MSD) samples were collected during the event. Additionally, trip blank and temperature blank samples accompanied each shipment of samples.

Surface Water Sampling

Surface water samples were collected from established sampling points within Woodall Creek on 13 October 2014. Sample aliquots were collected by using a decontaminated Teflon scoop, in general accordance with the guidance provided in the USEPA’s SESDPROC-201-R3 dated February 28, 2013. Surface water samples were collected taking care to minimize turbidity in the surface water during sample collection. Surface water samples were shipped under chain-of-custody protocols to Gulf Coast Analytical Laboratories (GCAL) of Baton Rouge, Louisiana, for analysis of VOCs by EPA method 8260B.

Synoptic Potentiometric Groundwater Elevation Survey

At the conclusion of the monitoring well sampling effort, a synoptic groundwater level measuring event was performed across the Site. On 24 October 2014, AMEC field personnel collected depth to water and total depth of well measurements in each of the located wells. In addition, surface water elevations were collected from the three staff gauges along Woodall Creek. Table 1 provides a summary of the groundwater and staff gauge elevations measured during this event. A potentiometric map for the shallow water-bearing zone is presented as Figure 1 and indicates groundwater within the water table aquifer flows from east to west across the site, ultimately discharging to Woodall Creek.

Groundwater Sampling Results

Table 4 summarizes analytical results from the September 2014 semi-annual groundwater sampling event. The laboratory analytical data packages for the September 2014 semi-annual event are contained in Appendix B. A chronological presentation of historical concentrations of PCE-related compounds appears in Table 5. In general, data presented in Table 5 indicates a continual overall decrease in concentrations of tetrachloroethene (PCE), trichloroethene (TCE), and cis-1,2 Dichloroethene (DCE) across the site.

Figures 2 through 10 depict distribution for PCE, TCE and cis-1,2 DCE in the shallow, intermediate and deep water bearing zones. Plume configurations shown for the shallow water bearing zone are updated versions of plume depictions presented in the Baseline Sampling Report for the Woodall Creek Site, dated 12 June 2014. It should be noted contouring for the current PCE, TCE and DCE concentrations utilizes baseline results from wells not sampled during this semi-annual event to provide contouring control and help improve overall accuracy of the plume configuration. The overall decrease in detected concentrations of PCE and TCE since the last sampling event are reflected in the reduced areal extent of the plumes depicted on these figures. Given the overall decreasing trend in groundwater concentrations, it seems likely that the enclosed plume depictions present an over-estimate of VOC concentrations in some areas.

Surface Water Sampling Results

The October 2014 surface water samples were collected from stream sample points 1, 6, and 9 through 19, and PB (Figure 1). Table 6 summarizes the laboratory analytical data for the October 2014 surface water sampling event. Laboratory analytical reports for surface water samples are presented in Appendix B.

In accordance with the approved CAP, AMEC has determined the annual average stream flow for Woodall Creek at the Defoors Ferry USGS Gage and then normalized measured in-stream VOC sampling results to the annual average stream flow condition.

AMEC calculated the 30-year moving average utilizing the USGS continuous stream flow record for Woodall Creek at Defoors Ferry began in 2006 in combination with the nearby Peachtree Creek USGS Gage which began continuous operation in 1958 and can, therefore, be used as a reference or index station for record extension and augmentation of the short-term record available for the Woodall Creek Defoors Ferry Gage. Based on the below information, the calculated annual average flow for Woodall Creek at Defoors Ferry Gage is 3.92 cubic feet per second (CFS).

Woodall Creek Gage 2006 – 2012

- Sum of the Annual Average Flow – 20.68 cfs
- Number of records – 7
- Average Annual Flow $20.68 \text{ cfs} / 7 = 2.95 \text{ cfs}$

Peachtree Creek Gage – 2006 - 2012

- Sum of Annual Average Flow – 693.4 cfs
- Number of Records – 7
- Average Annual Flow $99.06 \text{ cfs} / 7 = 14.15 \text{ cfs}$

Peachtree Creek Gage 1983 – 2012

- Sum of Annual Average Flow – 3953 cfs
- Number of Records – 30
- Average Annual Flow $3953 \text{ cfs} / 30 = 131.77 \text{ cfs}$

Information obtained from the USGS Surface Water Annual Statistics was provided in Appendix E of the Baseline Sampling Report. The long-term annual average flow Woodall Creek Gage adjusted to the 30 year base period for Peachtree Creek Gage is therefore calculated as:

- $(2.95 / 99.06) * 131.77 = 3.92 \text{ cfs}$

The stream flow in Woodall Creek, as measured at the Defoors Ferry Gage on 13 October 2014 was 0.53 cfs (Appendix C). Normalized surface water analytical results for the Woodall Creek surface water samples were derived by multiplying the actual analytical sample results by the ratio of the concurrent instantaneous stream flow recorded at the Woodall Creek USGS Gage for the specific time of surface water sampling (0.53 cfs) to the annual average stream-flow determined for the Woodall Creek Gage based on the above methodology for annual average stream flow. Table 7 presents a historical summary of concentrations of PCE-related compounds from sampling locations established on Woodall Creek. The actual and flow-normalized surface water analytical results are presented on Table 7 along with historical surface water concentrations. Results from the two (2) most recent (2014) sampling events appear as raw analytical results and a normalized concentration. The normalized concentration is calculated to account for mean daily flow within Woodall Creek determined by USGS on the day samples were collected. Results for samples collected during the current event indicate all (normalized) detected concentrations of PCE to be below the In-Stream Water Quality criteria of 3.3 ppb for this constituent.

Status of Monitoring Network

General - It is noteworthy that well SMFMW-5 was scheduled for sampling during the Baseline sampling event but could not be located at that time. This well was subsequently located during the semi-annual event in September 2014, and a sample collected to complete the Baseline data set. This well will not be sampled during subsequent semi-annual events.

The following wells specified for sampling under the CAP were previously thought lost (destroyed or covered) and were not sampled during the September 2014 event, but have been located and determined to be accessible and intact:

- DPWMW-10
- DPWMW-15
- DPWMW-16
- MTWMW-1
- HOAMW-6

These wells will be incorporated into future synoptic water level measurement and, where applicable, into future groundwater sampling. These wells will be inspected and redeveloped prior to sampling to determine usability.

The following wells were not accessible due to physical obstructions to access during the September 2014 semi-annual sampling event.

- DPMW-25
- GPMW-19

It is anticipated access to these wells can be obtained during future semi-annual sampling events.

SMFDS-1 – Could not be located during the Baseline and September 2014 sampling events. Pavement in the vicinity of the historical location of this well suggests excavation work during which this well may have been destroyed. Wells DPMW-2I and DPMW-4I are located in areas that are near to and down-gradient from the historical location of SMFDS-1 and should provide sufficient coverage for monitoring water within the intermediate zone at this site. It is recommend this well be removed from the semi-annual monitoring program.

MTWMW-2 – This well could not be located during the Baseline or September 2014 sampling events, but was subsequently found and determined to be non-serviceable. Well MTWMW-4 is located less than 100 feet from MTWMW-2 in an area that is approximately cross-gradient and appears suitable as an alternate monitoring point. It is recommend deleting MTWMW-2 and adding MTWMW-4 to the semi-annual monitoring program.

RPMW-2 – Sampling of this well during the September 2014 event was prevented by a water column of insufficient quantity and presence of excessive sediment. This well will be inspected and redeveloped prior to the next semi-annual sampling event.

HOAMW-13 – Historical location information indicates this monitoring point lies within a floodplain area on the west side of Woodall Creek (Figure 1). The area is currently heavily vegetated, and attempts to locate this well during recent field activities have proved fruitless. Potentiometric data collected to date indicates groundwater flowing south west beneath the site discharges to Woodall Creek. The creek therefore presents a hydrologic barrier to groundwater flow between this locale and the balance of the site east of Woodall Creek. Groundwater at HOAMW-13 may be impacted by groundwater contamination emanating from the Square D property, making any detections of VOCs in samples collected from this well inconclusive with respect to the Woodall Creek site. It is therefore recommend deletion of HOAMW-13 from the semi-annual monitoring program.

HOAMW-14 – Well has been damaged beyond repair and is no longer suitable for use as a monitoring point. Recent field activities at the site identified a previously unknown well on property apparently owned by the M-West HOA. The well is situated approximately 300 feet north of HOAMW-6 and 25 feet west from the southwest corner of the northernmost building on the Goodstone property (MW-x, Figure 1). The casing has been measured to an approximate depth of 20 feet below grade, with depth to water measured at approximately 14 feet. The location of MW-x appears suitable to provide information that will help delineate extent of groundwater contamination along the north edge of the VOC plume in this part of the site. HOAMW-14 will be abandoned and incorporation of MW-x into the semi-annual monitoring program, following favorable results from inspection and, if necessary,

rehabilitation of the well. A formal identifier will be assigned to this well once the construction, condition and location coordinates are established.

Schedule

An updated Corrective Action Plan Schedule is provided as Figure 11. The next semi-annual sampling event is currently scheduled to take place during March 2015. The 2015 Annual Report for this site is currently scheduled for submittal in June 2015.

Summary of Findings

Sampling during the September 2014 event was completed in accordance with the approved CAP. An overall reduction in VOC concentrations is indicated through comparison of groundwater quality data from this event with results from the Baseline event. Furthermore, comparison with historical data indicate significant decreases during the last four years. Surface water concentrations (when normalized for stream flow) do not indicate exceedances of in-stream water quality standards for any of the principal COCs for the Woodall Creek Site.

Current status of wells as described herein prompts the following recommendations and requests for changes to the monitoring network under the CAP for this site;

- Deletion of wells SMFDS-1 and HOAMW-13 from the semi-annual monitoring program;
- Replace sampling damaged monitoring well MTWMW-2 with the adjacent monitoring well MTWMW-4;
- Proper abandonment of damaged well HOAMW-14;
- Addition of one (1) existing well (MW-x) into the monitoring network as an alternate sampling point to (damaged) HOAMW-14 which is scheduled for abandonment.

Please contact us if you have any questions regarding results from this sampling event.

Sincerely,

AMEC Environment & Infrastructure, Inc.



Jerry D. Gaccetta, P.G.

Associate Project Manager

cc: Mr. James McClatchey
Mr. W. Scott Laseter
Mr. Larry Neal

Enclosures:

Certification Page

Tables

Table 1 – Wells Specified for Semi-Annual Sampling, Woodall Creek Site, Atlanta, Georgia

Table 2 - Monitoring Well Construction and Water Levels, First Semi-Annual Sampling Event

Table 3 - Summary of Well Purging during First Semi-Annual Sampling Event (September 2014)

Table 4 - Summary of Groundwater Analytical Results, First Semi-Annual Sampling Event (September 2014)

Table 5 - Summary of Current and Historical Site-Wide Groundwater Quality Results

Table 6 - Summary of Surface Water Analytical Results, First Semi-Annual Sampling Event (October, 2014)

Table 7 - Historical Summary of Surface Water Quality Data

Figures

Figure 1 - Potentiometric Surface for Shallow Water-Bearing Zone, October 2014

Figure 2 - PCE Isoconcentration Map, Shallow Water-Bearing Zone, September 2014

Figure 3 - PCE Isoconcentration Map, Intermediate Water-Bearing Zone, September 2014

Figure 4 - PCE Isoconcentration Map, Fractured Bedrock Water-Bearing Zone, September 2014

Figure 5 - TCE Isoconcentration Map, Shallow Water-Bearing Zone, September 2014

Figure 6 - TCE Isoconcentration Map, Intermediate Water- Bearing Zone, September 2014

Figure 7 - TCE Isoconcentration Map, Fractured Bedrock Water-Bearing Zone, September 2014

Figure 8 - cis-1,2 Isoconcentration Map, Shallow Water Bearing Zone, September 2014

Figure 9 - cis-1,2 Isoconcentration Map, Intermediate Water-Bearing Zone, September 2014

Figure 10 - cis-1,2 Isoconcentration Map, Fractured Bedrock Water-Bearing Zone, September 2014

Figure 11 - Updated Corrective Action Project Schedule

Appendices

Appendix A - Groundwater Sampling Logs

Appendix B - Laboratory Certification, Chain of Custody Documentation, Analytical Reports

Appendix C - Defoors Ferry Gage Data for 13 October 2014

GROUNDWATER SCIENTIST STATEMENT

I certify that I am a qualified groundwater scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences of 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 judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared in conjunction with others working under my direction.



Mr. Andrew Smits, P.E.
Georgia Registration No. 1874



TABLES

Table 1. Wells Specified for Semi-Annual Sampling, Woodall Creek Site, Atlanta, Georgia

Well Number	Date of Construction	Water-Bearing Zone Monitoring Interval	Total Well Depth (ft)	CAP Semi-Annual Sampling Location	Sept 2014 Semi-Annual Sampling Event	March 2015 Annual Sampling Event	Remarks
SOUTHERN METAL FINISHING PROPERTY WELLS							
SMFMW-2	10/4/2000	Shallow	29	✓	✓	✓	
SMFMW-5	10/5/2000	Shallow	25	X	✓	-	Could not be located during Baseline event; subsequently found and sampled during Sept 2014 event. Not specified as a CAP Well, therefore no further sampling is anticipated at this monitoring well location.
SMFMW-18	7/19/2004	Shallow	30	✓	✓	✓	
SMFPI-1	3/24/2008	Shallow	35	✓	✓	✓	
SMFDS-1	5/10/2002	Intermediate	37	✓	X	✓	Could not be located during Baseline or Sept 2014 events. Recent excavation work in the area may have destroyed this well. Nearby wells DPMW-2I and DPMW-4I provide sufficient coverage for monitoring the Intermediate zone in this area. Recommend deletion of this well from the monitoring program.
SMFDR-2	6/4/2002	Bedrock	42	✓	✓	✓	
SMFDR-3	6/4/2002	Bedrock	53.5	✓	✓	✓	
SMFMW-1D	8/3/2004	Bedrock	96.5	✓	✓	✓	
MACY'S PROPERTY WELLS							
MPMW-15	ND	Shallow	18.1	X	✓	-	Not specified as CAP Well. No further sampling anticipated at this location.
DOBBINS PROPERTY WELLS							
DPMW-2S	4/9/2004	Shallow	24.3	✓	✓	✓	
DPMW-2I	4/13/2004	Intermediate	50	✓	✓	✓	
DPMW-3S	4/6/2004	Shallow	30	✓	✓	✓	
DPMW-10	ND	Shallow	51.3	✓	X	✓	Could not be located during Baseline and Sept 2014 events, but subsequently found and will be inspected and rehabilitated prior to next sampling event.
DPMW-15	ND	Intermediate	86.7	✓	X	✓	Could not be located during Baseline and Sept 2014 events, but subsequently found and will be inspected and rehabilitated prior to next sampling event.
DPMW-16	ND	Bedrock	96.8	✓	X	✓	Could not be located during Baseline and Sept 2014 events, but subsequently found and will be inspected and rehabilitated prior to next sampling event.
DPMW-25	10/27/2010	Shallow	50	✓	X	✓	Access obstructed during Sept 2014 Event; Obstruction subsequently removed.
DPMW-27	10/27/2010	Shallow	50	✓	✓	✓	
RESTAURANT SUPPLY (FORMER JODACO PROPERTY) WELLS							
JPMW-16	3/24/2010	Shallow	50	✓	✓	✓	
JPMW-17	3/24/2010	Shallow	50	✓	✓	✓	
JPMW-21	6/10/2010	Shallow	39	✓	✓	✓	
JPMW-22	6/10/2010	Shallow	50	✓	✓	✓	
JPMW-23	6/10/2010	Shallow	49	✓	✓	✓	
JPBRW-1	ND	Bedrock	164.5	✓	✓	✓	
DALTILE (FORMER REYNOLDS PROPERTY) WELLS							
RPMW-2	Unknown	Shallow	29	✓	X	✓	Sampling prevented by lack of sufficient water column and presence of excessive sediment. To be inspected and rehabilitated prior to next sampling event.
RPMW-14	3/24/2010	Shallow	50	✓	✓	✓	
RPMW-15	3/24/2010	Shallow	50	✓	✓	✓	
RPMW-24	6/10/2010	Shallow	50	✓	✓	✓	
GOODSTONE PROPERTY WELLS (1494 & 1510 ELLSWORTH INDUSTRIAL BLVD.)							
GPMW-11	7/30/2009	Shallow	39	✓	✓	✓	
GPMW-18	3/26/2010	Shallow	40	✓	✓	✓	
GPMW-19	3/26/2010	Shallow	36.5	✓	X	✓	Well location is within a gated alley and was inaccessible during Sept 2014 event. New property owner has been informed of need to access this area during future events.
GPMW-20	6/10/2010	Shallow	40	✓	✓	✓	

Table 1. Wells Specified for Semi-Annual Sampling, Woodall Creek Site, Atlanta, Georgia (Continued)

Well Number	Date of Construction	Water-Bearing Zone Monitoring Interval	Total Well Depth (ft)	CAP Semiannual Sampling Location	Sept 2014 Semiannual Sampling Event	March 2015 Annual Sampling Event	Notes
M-WEST HOA (FORMER ABC SUPPLY PROPERTY) WELLS							
HOAMW-3	7/9/2008	Shallow	40	✓	✓	✓	
HOAMW-5	10/31/2008	Shallow	35	✓	✓	✓	
HOAMW-5I	2/19/2014	Intermediate	38	✓	✓	✓	
HOAMW-6	1/8/2009	Shallow	36	✓	X	✓	Well has been located, requires redevelopment.
HOAMW-14	2/18/2014	Shallow	41	✓	X	✓ (alternate)	Well permanently out of service and requires abandonment. <i>A previously unknown well (MW-x) has been identified as a potential alternate (see Figure 1).</i>
HOAMW-13	7/29/2009	Shallow	11	✓	X	-	Monitoring well cannot be found due to heavy vegetation. Location is hydrologically isolated from site by Woodall Creek and may be impacted by contamination emanating from Square D property. Recommend deletion from monitoring program (See Figure 1).
MIDTOWN WEST (FORMER M-WEST LOTS/ABC SUPPLY PROPERTY) WELLS							
MTWMW-1	7/9/2008	Shallow	40	✓	X	✓	Well has been located, requires redevelopment.
MTWMW-2	7/9/2008	Shallow	39	✓	X	✓ (alternate)	Could not be located during Baseline event, but subsequently found and determined to be non-serviceable. Recommend utilizing existing MTWMW-4 as alternate monitoring point (see Figure 1).
MTWMW-7	1/8/2009	Shallow	40	✓	✓	✓	
MTWMW-7I	2/19/2014	Intermediate	30	✓	✓	✓	
MTWMW-8	3/19/2009	Shallow	40	✓	✓	✓	
MTWMW-9	3/19/2009	Shallow	35.5	✓	✓	✓	
MTWMW-10	3/19/2009	Shallow	35.5	✓	✓	✓	
MTWMW-12	7/29/2009	Shallow	38.0	✓	✓	✓	

Notes:

- ✓ well utilized during indicated event
- X well not utilized during indicated event
- no further sampling recommended at this location

Table 2.
Monitoring Well Construction and Water Levels, First Semi-Annual Sampling Event
Woodall Creek Site
Atlanta, Fulton County, Georgia
(Page 1 of 3)

Well Number	Date of Construction	Reference Point Elevation (ft msl)	Total Well Depth (ft)	Type of Well	Water-Bearing Zone Monitoring Interval	Well Casing Length (ft)*	Well Screen Length (ft)	Depth to Water (ft TOC)	Water Level (ft msl)	Well Serviceable
SOUTHERN METAL FINISHING PROPERTY WELLS										
SMFMW-1	10/4/2000	899.16	25	Type II	Shallow	10	15	17.71	881.45	Yes
SMFMW-2	10/4/2000	901.25	29	Type II	Shallow	14	15	18.57	882.68	Yes
SMFMW-3	10/4/2000	900.29	26	Type II	Shallow	11	15	17.76	882.53	Yes
SMFMW-4	10/5/2000	899.78	24	Type II	Shallow	9	15	16.69	883.09	Yes
SMFMW-5	10/5/2000	899.63	25	Type II	Shallow	10	15	14.56	885.07	Yes
SMFMW-6	10/19/2000	901.17	24	Type II	Shallow	9	15	15.92	885.25	Yes
SMFMW-7	10/19/2000	906.35	26	Type II	Shallow	11	15	18.90	887.45	Yes
SMFMW-8	10/19/2000	899.85	23.5	Type II	Shallow	8.5	15	ND	-	No ¹
SMFMW-9	11/10/2000	903.78	27	Type II	Shallow	12	15	17.58	886.20	Yes
SMFMW-10	11/10/2000	903.90	27	Type II	Shallow	12	15	ND	-	No ²
SMFMW-11	11/10/2000	908.47	20	Type II	Shallow	10	10	18.72	889.75	Yes
SMFMW-12	1/29/2001	894.60	20.5	Type II	Shallow	10	10.5	15.43	879.17	Yes
SMFMW-13	1/29/2001	895.45	28	Type II	Shallow	13	15	18.88	876.57	Yes
SMFMW-14	1/29/2001	894.94	18.5	Type II	Shallow	8	10.5	12.80	882.14	Yes
SMFMW-15	5/4/2001	895.89	18.5	Type II	Shallow	8	10.5	ND	-	No ³
SMFMW-16	5/4/2001	898.27	18.5	Type II	Shallow	8	10.5	ND	-	No ³
SMFMW-17	7/19/2004	904.50	30	Type II	Shallow	20	10	17.61	886.89	Yes
SMFMW-18	7/19/2004	911.61	30	Type II	Shallow	20	10	22.51	889.10	Yes
SMFPI-1	3/24/2008	ND	35	Type II	Shallow	25	10	16.65	-	Yes
SMFDS-1	5/10/2002	906.19	37	Type III	Intermediate (Top of Bedrock)	28 (34.5)	2.5		906.19	Yes
SMFDS-2	5/10/2002	894.54	31	Type III	Intermediate (Top of Bedrock)	20 (28.5)	2.5		894.54	Yes
SMFDS-3	5/10/2002	900.04	37.5	Type III	Intermediate (Top of Bedrock)	15 (35)	2.5	16.76	883.28	Yes
SMFDR-1	8/3/2002	906.16	49	Type III	Fractured Bedrock	39 (44)	5	18.81	887.35	Yes
SMFDR-2	6/4/2002	894.65	42	Type III	Fractured Bedrock	33 (39.5)	2.5	12.89	881.76	Yes
SMFDR-3	6/4/2002	899.90	53.5	Type III	Fractured Bedrock	39 (51)	2.5	16.77	883.13	Yes
SMFMW-1D	8/3/2004	900.97	96.5	Type III	Fractured Bedrock	53 (65) (88)	Open Hole from 88 to 96.5	19.94	881.03	Yes
MACY'S PROPERTY WELLS										
MPMW-15	ND	896.40	18.1	Type II	Shallow	8.1	10	15	881	Yes
MPMW-16	ND	898.41	18.6	Type II	Shallow	8.6	10	ND	-	No ³
MPMW-19	5/6/2005	ND	30	Type II	Shallow	15	15	14	-	Yes
DOBBINS PROPERTY WELLS										
DPMW-1	ND	895.65	35	Type II	Shallow	25	10	ND	-	No ³
DPMW-1S	4/6/2004	895.99	25.5	Type II	Shallow	15.5	10	22	874	Yes
DPMW-2	ND	896.14	30	Type II	Shallow	20	10	ND	-	No ³
DPMW-2S	4/9/2004	895.29	24.3	Type II	Shallow	14.3	10	17	878	Yes

Table 2.
Monitoring Well Construction and Water Levels, First Semi-Annual Sampling Event
Woodall Creek Site
Atlanta, Fulton County, Georgia
(Page 2 of 3)

Well Number	Date of Construction	Reference Point Elevation (ft msl)	Total Well Depth (ft)	Type of Well	Water-Bearing Zone Monitoring Interval	Well Casing Length (ft)*	Well Screen Length (ft)	Depth to Water (ft TOC)	Water Level (ft msl)	Well Serviceable
DPMW-2I	4/13/2004	895.71	50	Type III	Intermediate (Top of Bedrock)	30 (40)	10	19	877	Yes
DPMW-3S	4/6/2004	895.61	30	Type II	Shallow	20	10	28	868	Yes
DPMW-3I	4/9/2004	895.67	50	Type III	Intermediate (Top of Bedrock)	30 (40)	10	23	873	Yes
DPMW-4S	4/13/2004	895.80	25.2	Type II	Shallow	15.2	10	19	877	Yes
DPMW-4I	4/16/2004	895.57	50	Type III	Intermediate (Top of Bedrock)	30 (40)	10	19	876	Yes
DPMW-5S	8/4/2004	ND	35	Type II	Shallow	25	10	ND	-	No ³
DPMW-9	ND	895.10	50	Type II	Shallow	40	10	ND	-	No ³
DPMW-10	ND	896.14	51.3	Type II	Shallow	41.3	10	ND	-	No ³
DPMW-14	ND	895.98	50	Type II	Shallow	40	10	ND	-	No ³
DPMW-15	ND	ND	86.7	Type II	Intermediate (Top of Bedrock)	76.7	10	ND	-	No ³
DPMW-16	ND	896.71	96.8	Type III	Fractured Bedrock	Unknown	Open Hole from 89 to 96.8	ND	-	No ³
DPMW-25	10/27/2010	895.58	50	Type II	Shallow	30	20	40	856	Yes
DPMW-26	10/27/2010	897.11	50	Type II	Shallow	30	20	37	860	Yes
DPMW-27	10/27/2010	901.30	50	Type II	Shallow	30	20	41	861	Yes
DPMW-28	10/27/2010	896.25	50	Type II	Shallow	30	20	38	859	Yes
RESTAURANT SUPPLY (FORMER JODACO PROPERTY) WELLS										
JPMW-16	3/24/2010	864.63	50	Type II	Shallow	20	30	22.42	842.21	Yes
JPMW-17	3/24/2010	864.52	50	Type II	Shallow	20	30	16.81	847.71	Yes
JPMW-21	6/10/2010	858.70	39	Type II	Shallow	9	30	8.60	850.10	Yes
JPMW-22	6/10/2010	866.76	50	Type II	Shallow	20	30	13.51	853.25	Yes
JPMW-23	6/10/2010	866.71	49	Type II	Shallow	19	30	11.90	854.81	Yes
JPBRW-1	ND	864.52	164.5	Type III	Fractured Bedrock	Unknown	Open Hole from 147.5 to 164.5	32.20	832.32	Yes
DALTILE (FORMER REYNOLDS PROPERTY) WELLS										
RPMW-1	Unknown	853.39	20	Unknown	Shallow	Unknown	Unknown	15.00	838.39	Yes
RPMW-2	Unknown	871.62	29	Unknown	Shallow	Unknown	Unknown	26.30	845.32	Yes
RPMW-14	3/24/2010	861.23	50	Type II	Shallow	25	25	26.65	834.58	Yes
RPMW-15	3/24/2010	861.44	50	Type II	Shallow	20	30	22.07	839.37	Yes
RPMW-24	6/10/2010	865.29	50	Type II	Shallow	20	30	17.76	847.53	Yes
GOOSTONE PROPERTY WELLS (1494 & 1510 ELLSWORTH INDUSTRIAL BLVD.)										
GPMW-11	7/30/2009	847.92	39	Type II	Shallow	14	25	13.40	834.52	Yes
GPMW-18	3/26/2010	846.48	40	Type II	Shallow	10	30	11.32	835.16	Yes
GPMW-19	3/26/2010	841.86	36.5	Type II	Shallow	11.5	25	ND	-	No ²
GPMW-20	6/10/2010	848.27	40	Type II	Shallow	10	30	12.15	836.12	Yes
M-WEST HOA (FORMER ABC SUPPLY PROPERTY) WELLS										
HOAMW-3	7/9/2008	840.98	40	Type II	Shallow	10	30	17.00	823.98	Yes
HOAMW-5	10/31/2008	841.06	35	Type II	Shallow	10	25	18.35	822.71	Yes
HOAMW-5I	2/19/2014	843.89	38	Type III	Intermediate	33 (33)	5	21.25	822.64	Yes

Table 2.
Monitoring Well Construction and Water Levels, First Semi-Annual Sampling Event
Woodall Creek Site
Atlanta, Fulton County, Georgia
(Page 3 of 3)

Well Number	Date of Construction	Reference Point Elevation (ft msl)	Total Well Depth (ft)	Type of Well	Water-Bearing Zone Monitoring Interval	Well Casing Length (ft)*	Well Screen Length (ft)	Depth to Water (ft TOC)	Water Level (ft msl)	Well Serviceable
HOAMW-6	1/8/2009	841.10	36	Type II	Shallow	11	25	ND	-	No ³
HOAMW-13	7/29/2009	ND	11	Type II	Shallow	6	5	ND	-	No ³
HOAMW-14	2/18/2014	857.36	41	Type II	Shallow	26	15	ND	-	No ¹
MIDTOWN WEST (FORMER M-WEST LOTS/ABC SUPPLY PROPERTY) WELLS										
MTWMW-1	7/9/2008	841.33	40	Type II	Shallow	10	30	ND	-	No ³
MTWMW-2	7/9/2008	839.37	39	Type II	Shallow	9	30	ND	-	No ³
MTWMW-4	10/31/2008	840.01	36	Type II	Shallow	11	25	13.70	826.31	Yes
MTWMW-7	1/8/2009	844.41	40	Type II	Shallow	15	25	15.71	828.70	Yes
MTWMW-7I	2/19/2014	844.59	30	Type III	Intermediate (Top of Bedrock)	23 (25)	5	16.00	828.59	Yes
MTWMW-8	3/19/2009	846.95	40	Type II	Shallow	15	25	15.50	831.45	Yes
MTWMW-9	3/19/2009	848.45	35.5	Type II	Shallow	15.5	20	15.90	832.55	Yes
MTWMW-10	3/19/2009	849.43	35.5	Type II	Shallow	15.5	20	15.95	833.48	Yes
MTWMW-12	7/29/2009	845.66	38.0	Type II	Shallow	13.0	25	14.79	830.87	Yes
GLIDDEN PROPERTY WELLS										
AKZMW-3	ND	893.77	35	Type II	Shallow	25	10	ND	-	No ²
AKZMW-4	ND	890.12	27	Type II	Shallow	17	10	12.97	877.15	Yes
AKZMW-5	ND	905.05	30	Type II	Shallow	20	10	ND	-	No ³
AKZMW-6	ND	899.36	23	Type II	Shallow	13	10	12.97	886.39	Yes
AKZMW-7	ND	897.80	23	Type II	Shallow	13	10	12.71	885.09	Yes
AKZMW-8	ND	894.89	23	Type II	Shallow	13	10	12.90	881.99	Yes
AKZMW-17	ND	901.46	57.5	Type II	Intermediate (Top of Bedrock)	37.5	20	ND	-	No ³
AKZMW-18	ND	901.44	25.5	Type II	Shallow	10.5	15	ND	-	No ³
AKZMW-19	ND	901.04	25	Type II	Shallow	15	10	ND	-	No ³
AKZMW-20	ND	899.60	24.7	Type II	Shallow	14.7	10	ND	-	No ³
WOODALL CREEK GAUGES⁵										
Staff Gauge 1	-	832.48	-	-	Surface Water	-	-	ND	<832.48	-
Staff Gauge 2	-	823.36	-	-	Surface Water	-	-	2.96	820.40	-
Staff Gauge 3	-	821.21	-	-	Surface Water	-	-	3.15	818.06	-

Notes:

*For Type III wells: outer casing depth (inner casing depth)

Elevations are relative to the National Geodetic Vertical Datum of 1929 (mean sea level).

ND - No Data/TOC elevation not determined/surveyed

Source: Peachtree Environmental, LLC, December 2011 Woodall Creek CAP Addendum

¹ - Well Destroyed

² - Well Obstructed by on-site activities

³ - Well Not Found

⁴ - Insufficient water column

⁵ - Depth-to-water measurement is stream depth (ft) at the gauging point at the time of sampling. "ND" indicates stream level below gauging point at time of sampling.

Table 3. Summary of Well Purging during First Semi-Annual Sampling Event (September 2014)

Well Number	Monitoring Interval	Total Well Depth (ft)	CAP Semi-Annual Sampling Location	Sample Collected	Water Column Sept 2014 (ft)	Total Drawdown (ft)	Purging Remarks
SOUTHERN METAL FINISHING PROPERTY							
SMFMW-2	Shallow	29	✓	✓	11.04	0.14	Low-Flow purging
SMFMW-5	Shallow	25	x	✓	12.30	0.15	Low-Flow purging
SMFMW-18	Shallow	30	✓	✓	7.80	0.20	Low-Flow purging
SMFPI-1	Shallow	35	✓	✓	18.71	0.15	Low-Flow purging
SMFDR-2	Bedrock	42	✓	✓	30.20	>0.32	drawdown during purging exceeded low-flow conditions; purged to dryness and allowed to recharge prior to sampling
SMFDR-3	Bedrock	53.5	✓	✓	53.50	>0.32	drawdown during purging exceeded low-flow conditions; purged to dryness and allowed to recharge prior to sampling
SMFMW-1D	Bedrock	96.5	✓	✓	78.16	0.11	Low-Flow purging
MACY'S PROPERTY							
MPMW-15	Shallow	18.1	x	✓	2.90	0.00	Low-Flow purging
DOBBINS PROPERTY							
DPMW-2S	Shallow	24.3	✓	✓	7.58	0.28	Low-Flow purging
DPMW-2I	Intermediate	50	✓	✓	31.60	0.30	Low-Flow purging
DPMW-3S	Shallow	30	✓	✓	2.70	1.50	minimal water column present at time of sampling; pumped dry and allowed to recharge prior to sampling
DPMW-27	Shallow	50	✓	✓	9.61	0.11	Low-Flow purging
RESTAURANT SUPPLY (FORMER JODACO PROPERTY)							
JPMW-16	Shallow	50	✓	✓	28.40	0.16	Low-Flow purging
JPMW-17	Shallow	50	✓	✓	33.71	0.21	Low-Flow purging
JPMW-21	Shallow	39	✓	✓	30.30	0.10	Low-Flow purging
JPMW-22	Shallow	50	✓	✓	36.60	0.11	Low-Flow purging
JPMW-23	Shallow	49	✓	✓	37.36	0.20	Low-Flow purging
JPBRW-1	Bedrock	164.5	✓	✓	133.00	0.32	Low-Flow purging
DALTILE (FORMER REYNOLDS PROPERTY)							
RPMW-2	Shallow	29	✓	x	3.30	-	Excessive sediment within water column prevented sampling
RPMW-14	Shallow	50	✓	✓	23.65	0.25	Low-Flow purging
RPMW-15	Shallow	50	✓	✓	28.37	0.07	Low-Flow purging
RPMW-24	Shallow	50	✓	✓	32.60	0.00	Low-Flow purging
GOODSTONE PROPERTY (1494 & 1510 ELLSWORTH INDUSTRIAL BLVD.)							
GPMW-11	Shallow	39	✓	✓	26.06	0.31	Low-Flow purging
GPMW-18	Shallow	40	✓	✓	29.06	0.06	Low-Flow purging
GPMW-20	Shallow	40	✓	✓	28.15	0.08	Low-Flow purging

Table 3. Summary of Well Purging during First Semi-Annual Sampling Event (September 2014) (Continued)

Well Number	Monitoring Interval	Total Well Depth (ft)	CAP Semi-Annual Sampling Location	Sample Collected	Water Column Sept 2014 (ft)	Total Drawdown (ft)	Purging Remarks
M-WEST HOA (FORMER ABC SUPPLY PROPERTY)							
HOAMW-3	Shallow	40	✓	✓	23.00	0.16	Low-Flow purging
HOAMW-5	Shallow	35	✓	✓	16.55	0.19	Low-Flow purging
HOAMW-5I	Intermediate	38	✓	✓	19.35	0.06	Low-Flow purging
MIDTOWN WEST (FORMER M-WEST LOTS/ABC SUPPLY PROPERTY)							
MTWMW-7	Shallow	40	✓	✓	24.20	0.19	Low-Flow purging
MTWMW-7I	Intermediate	30	✓	✓	14.00	0.21	Low-Flow purging
MTWMW-8	Shallow	40	✓	✓	24.60	0.20	Low-Flow purging
MTWMW-9	Shallow	35.5	✓	✓	19.72	0.10	Low-Flow purging
MTWMW-10	Shallow	35.5	✓	✓	19.90	0.15	Low-Flow purging
MTWMW-12	Shallow	38.0	✓	✓	23.45	0.10	Low-Flow purging

Notes:

- ✓ well utilized during indicated event
- X well not utilized during indicated event
- no further sampling recommended at this location

Table 4. Summary of Groundwater Analytical Results, First Semi-Annual Sampling Event (September 2014), Woodall Creek Site, Atlanta, Fulton County, Georgia

1 of 4

Well Designation			DPMW-27	DPMW-2I	DPMW-2S	DPMW-3S	GPMW-11	GPMW-18	GPMW-20	HOAMW-3	HOAMW-5	HOAMW-5I	JPBRW-1	JPMW-16	JPMW-17	JPMW-21	JPMW-22	JPMW-23	MPMW-15	MTWMW-08	
Property Location			Dobbins Property	Dobbins Property	Dobbins Property	Dobbins Property	Goodstone	Goodstone	Goodstone	M-West HOA	M-West HOA	M-West HOA	Restaurant Supply	Restaurant Supply	Restaurant Supply	Restaurant Supply	Restaurant Supply	Restaurant Supply	Macys Property	Midtown West Partners	
Sample Collection Date	Unit		23-Sep-14	23-Sep-14	23-Sep-14	18-Sep-14	19-Sep-14	22-Sep-14	22-Sep-14	29-Sep-14	29-Sep-14	29-Sep-14	26-Sep-14	26-Sep-14	26-Sep-14	24-Sep-14	29-Sep-14	22-Sep-14	18-Sep-14	29-Sep-14	
Type 1 RRS																					
VOCs																					
1,1-Dichloroethene	ug/L	7	0.416 U	2.14	J	0.208 U	0.208 U	0.208 U	1.09 J	0.208 U	0.416 U	0.416 U	0.416 U	1.04 U	1.04 U	0.208 U	0.326 J	1.33 J	1.07 J	0.208 U	2.08 U
Acetone	ug/L	4000	0.387 U	0.193 U	U	0.193 U	0.193 U	0.193 U	0.387 U	0.193 U	0.387 U	0.387 U	0.387 U	0.967 U	0.967 U	0.193 U	0.193 U	0.193 U	0.193 U	1.93 U	
Benzene	ug/L	5	0.222 U	0.111 U	U	0.111 U	0.111 U	0.111 U	0.222 U	0.111 U	0.222 U	0.222 U	0.222 U	0.555 U	0.555 U	0.111 U	0.111 U	4.63 J	0.673 J	0.111 U	1.11 U
Chloroform	ug/L	80	2.10 J	0.694	J	0.155 U	0.155 U	0.551 J	3.10 J	0.155 U	13.1 J	4.21 J	4.30 J	0.775 U	7.1 J	1.24 J	10.2	1.92 J	1.54 J	0.155 U	1.55 U
cis-1,2-Dichloroethene	ug/L	70	40.4	5.15		0.365 J	0.103 U	0.103 U	156	5.3	73.1	107	111	54.6 J	43.7	1.99	29.6	19.2	22.3	0.103 U	96.8 J
Ethylbenzene	ug/L	700	0.218 U	0.109 U	U	0.109 U	0.109 U	0.109 U	0.218 U	0.109 U	0.218 U	0.218 U	0.218 U	0.545 U	0.545 U	0.109 U	0.109 U	0.109 U	0.109 U	1.09 U	
Isopropylbenzene (Cumene)	ug/L	1	0.260 U	0.13 U	U	0.130 U	0.13 U	0.130 U	0.260 U	0.130 U	0.260 U	0.260 U	0.26 U	0.651 U	0.651 U	0.13 U	0.13 U	0.13 U	0.130 U	1.3 U	
m,p-Xylene	ug/L	RL	0.247 U	0.123 U	U	0.123 U	0.123 U	0.123 U	0.247 U	0.123 U	0.247 U	0.247 U	0.247 U	0.617 U	0.247 U	0.123 U	0.123 U	0.123 U	0.123 U	1.23 U	
Methylcyclohexane	ug/L	RL	0.287 U	0.143 U	U	0.143 U	0.143 U	0.143 U	0.287 U	0.143 U	0.287 U	0.287 U	0.287 U	0.717 U	0.717 U	0.143 U	0.143 U	0.143 U	0.143 U	1.43 U	
o-Xylene	ug/L	RL	0.111 U	0.055 U	U	0.055 U	0.055 U	0.055 U	0.111 U	0.055 U	0.111 U	0.111 U	0.111 U	0.277 U	0.111 U	0.055 U	0.055 U	0.055 U	0.055 U	0.554 U	
Tetrachloroethene	ug/L	5	258	49.9		32.1	4.47 J	7.94	284	28.1	267	287	232	295 J	341	48.1	129	106	96.2	1.98 J	914
Trichloroethene	ug/L	5	46.2	8.14		9.10	0.398 J	1.14 J	69.5	4.54 J	79.6	92.6	76.4	229 J	117	1.09	24.8	14.3	26.1	0.832 J	405
1,1,1-Trichloroethane	ug/L	200	0.246 U	0.123U	U	0.123 U	0.123 U	0.123 U	0.246 U	0.123 U	0.246 U	0.246 U	0.246 U	0.615 U	0.615 U	0.123 U	0.123 U	0.123 U	0.123 U	1.23 U	
1,1,2,2-Tetrachloroethane	ug/L	1	0.218 U	0.109U	U	0.109 U	0.109 U	0.109 U	0.218 U	0.109 U	0.218 U	0.218 U	0.218 U	0.546 U	0.546 U	0.109 U	0.109 U	0.109 U	0.109 U	1.09 U	
1,1,2-Trichloroethane	ug/L	5	0.318 U	0.159U	U	0.159 U	0.159 U	0.159 U	0.318 U	0.159 U	0.318 U	0.318 U	0.318 U	0.795 U	0.795 U	0.159 U	0.159 U	0.159 U	0.159 U	1.59 U	
1,1-Dichloroethane	ug/L	4000	0.342 U	0.171 U	U	0.171 U	0.171 U	0.171 U	0.342 U	0.171 U	0.342 U	0.342 U	0.342 U	0.856 U	0.856 U	0.171 U	0.171 U	0.171 U	0.171 U	1.71 U	
1,2,4-Trichlorobenzene	ug/L	70	0.210 U	0.105U	U	0.105 U	0.105 U	0.105 U	0.210 U	0.105 U	0.210 U	0.210 U	0.210 U	0.526 U	0.526 U	0.105 U	0.105 U	0.105 U	0.105 U	1.05 U	
1,2-Dibromo-3-chloropropane	ug/L	1	0.388 U	0.194U	U	0.194 U	0.194 U	0.194 U	0.388 U	0.194 U	0.388 U	0.388 U	0.388 U	0.971 U	0.971 U	0.194 U	0.194 U	0.194 U	0.194 U	1.94 U	
1,2-Dibromoethane	ug/L	1	0.205 U	0.102U	U	0.102 U	0.102 U	0.102 U	0.205 U	0.102 U	0.205 U	0.205 U	0.205 U	0.512 U	0.512 U	0.102 U	0.102 U	0.102 U	0.102 U	1.02 U	
1,2-Dichlorobenzene	ug/L	600	0.270 U	0.135U	U	0.135 U	0.135 U	0.135 U	0.270 U	0.135 U	0.270 U	0.270 U	0.270 U	0.674 U	0.674 U	0.135 U	0.135 U	0.135 U	0.135 U	1.35 U	
1,2-Dichloroethane	ug/L	5	0.232 U	0.116U	U	0.116 U	0.116 U	0.116 U	0.232 U	0.116 U	0.232 U	0.232 U	0.232 U	0.581 U	0.581 U	0.116 U	0.116 U	0.116 U	0.116 U	1.16 U	
1,2-Dichloropropane	ug/L	5	0.301 U	0.150U	U	0.150 U	0.150 U	0.150 U	0.301 U	0.150 U	0.301 U	0.301 U	0.301 U	0.752 U	0.752 U	0.15 U	0.15 U	0.15 U	0.150 U	1.50 U	
1,3-Dichlorobenzene	ug/L	600	0.275 U	0.138U	U	0.138 U	0.138 U	0.138 U	0.275 U	0.138 U	0.275 U	0.275 U	0.275 U	0.689 U	0.689 U	0.138 U	0.138 U	0.138 U	0.138 U	1.38 U	
1,4-Dichlorobenzene	ug/L	75	0.166 U	0.083U	U	0.083 U	0.083 U	0.083 U	0.166 U	0.083 U	0.166 U	0.166 U	0.166 U	0.416 U	0.416 U	0.083 U	0.083 U	0.083 U	0.083 U	0.831 U	
2-Butanone	ug/L	2000	0.284 U	0.142U	U	0.142 U	0.142 U	0.142 U	0.284 U	0.142 U	0.284 U	0.284 U	0.284 U	0.711 U	0.711 U	0.142 U	0.142 U	0.142 U	0.142 U	1.42 U	
2-Chloroethylvinyl ether	ug/L	RL	0.291 U	0.146U	U	0.146 U	0.146 U	0.146 U	0.291 U	0.146 U	0.291 U	0.291 U	0.291 U	0.729 U	0.729 U	0.146 U	0.146 U	0.146 U	0.146 U	1.46 U	
2-Hexanone	ug/L	RL	0.245 U	0.122U	U	0.122 U	0.122 U	0.122 U	0.245 U	0.122 U	0.245 U	0.245 U	0.245 U	0.6712 U	0.6712 U	0.122 U	0.122 U	0.122 U	0.122 U	1.22 U	
4-Methyl-2-pentanone	ug/L	200	0.240 U	0.120U	U	0.12 U	0.120 U	0.12 U	0.240 U	0.12 U	0.240 U	0.240 U	0.240 U	0.600 U	0.600 U	0.12 U	0.12 U	0.12 U	0.120 U	1.20 U	
Bromodichloromethane	ug/L	80	0.167 U	0.083U	U	0.083 U	0.083 U	0.083 U	0.167 U	0.083 U	0.167 U	0.167 U	0.167 U	0.417 U	0.417 U	0.083 U	1.23 J	0.083 U	0.083 U	0.834 U	
Bromoform	ug/L	80	0.430 U	0.215U	U	0.215 U	0.215 U	0.215 U	0.430 U	0.215 U	0.430 U	0.430 U	0.430 U	1.08 U	1.08 U	0.215 U	0.215 U	0.215 U	0.215 U	2.15 U	
Bromomethane	ug/L	10	0.854 U	0.427U	U	0.427 U	0.427 U	0.427 U	0.854 U	0.427 U	0.854 U	0.854 U	0.854 U	2.14 U	2.14 U	0.427 U	0.427 U	0.427 U	0.427 U	4.27 U	
Carbon disulfide	ug/L	4000	0.380 U	0.190U	U	0.190 U	0.190 U	0.190 U	0.380 U	0.19 U	0.380 U	0.380 U	0.380 U	0.950 U	0.950 U	0.19 U	0.19 U	0.190 U	0.19 U	1.90 U	
Carbon tetrachloride	ug/L	5	0.496 U	0.248U	U	0.248 U	0.248 U	0.248 U	0.496 U	0.248 U	0.496 U	0.496 U	0.496 U	1.24 U	1.24 U	0.248 U	0.248 U	0.248 U	0.248 U	2.48 U	
Chlorobenzene	ug/L	100	0.166 U	0.083U	U	0.083 U	0.083 U	0.083 U	0.166 U	0.083 U	0.166 U	0.166 U	0.166 U	0.414 U	0.414 U	0.083 U	0.083 U	0.083 U	0.083 U	0.828 U	
Chloroethane	ug/L	1	0.470 U	0.235U	U	0.235 U	0.235 U	0.235 U	0.470 U	0.235 U	0.470 U	0.470 U	0.470 U	1.18 U	1.18 U	0.235 U	0.235 U	0.235 U	0.235 U	2.35 U	
Chloromethane	ug/L	3	0.287 U	0.144U	U	0.144 U	0.144 U	0.144 U	0.287 U	0.144 U	0.287 U	0.287 U	0.287 U	0.718 U	0.718 U	0.144 U	0.144 U	0.144 U	0.144 U	1.44 U	
cis-1,3-Dichloropropene	ug/L	2	0.248 U	0.124U	U	0.124 U	0.124 U	0.124.													

Table 4. Summary of Groundwater Analytical Results, First Semi-Annual Sampling Event (September 2014), Woodall Creek Site, Atlanta, Fulton County, Georgia

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Well Designation			DPMW-27	DPMW-2I	DPMW-2S	DPMW-3S	GPMW-11	GPMW-18	GPMW-20	HOAMW-3	HOAMW-5	HOAMW-5I	JPBRW-1	JPMW-16	JPMW-17	JPMW-21	JPMW-22	JPMW-23	MPMW-15	MTWMW-08
Property Location			Dobbins Property	Dobbins Property	Dobbins Property	Dobbins Property	Goodstone	Goodstone	Goodstone	M-West HOA	M-West HOA	M-West HOA	Restaurant Supply	Restaurant Supply	Restaurant Supply	Restaurant Supply	Restaurant Supply	Restaurant Supply	Macys Property	Midtown West Partners
Sample Collection Date	Unit		23-Sep-14	23-Sep-14	23-Sep-14	18-Sep-14	19-Sep-14	22-Sep-14	22-Sep-14	29-Sep-14	29-Sep-14	29-Sep-14	26-Sep-14	26-Sep-14	26-Sep-14	24-Sep-14	29-Sep-14	22-Sep-14	18-Sep-14	29-Sep-14
VOCs		Type 1 RRS																		
MNA Parameters																				
Ethane	ug/L	NA	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	3.57	0.087 U	0.087 U	0.087 U	1.11	0.087 U	0.087 U	0.087 U
Ethene	ug/L	NA	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	49.4	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
Methane	ug/L	NA	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	2.23	222	2.76 U	0.435 U
Total Organic Carbon	mg/L	NA	0.30 U	1.0 J	0.37 J	1.2	0.35	1.7	3.30 J	1.30	2.00	1.60	2.00	2.70	1.50	2.10	2.5	6.2	4.8	0.89 J
Sulfide	mg/L	NA	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
Chloride	mg/L	NA	13.1	47.9	3.5	11	20.5	28.6	31.4	18.2	24.7	24.3	24.3	12.5	9.12	19.5	14	8.57	8.82	17.3
Nitrate	mg/L	NA	4.97	8.36	0.134 J	1.57	1.94	1.31	1.62	2.67	1.74	1.53	0.05 U	3.81	3.79	2.72	2.05	0.441	0.078 J	2.95
Sulfate	mg/L	NA	19.6	27.5	13.1	75.1	33.6	12.6	19.8	31.6	1.74	19.1	15.3	29.3	43.3	19.7	34.1	18.1	8.62	25.3
Ferrous Iron (mg/L)	mg/L	NA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Groundwater Quality																				
Temperature	°C	NA	21.50	22.07	20.51	13.67	20.60	23.95	19.80	19.51	20.24	20.42	24.38	23.11	22.56	24.56	19.89	26.46	22.62	20.48
pH	pH	NA	4.96	5.69	6.19	4.79	6.22	5.63	5.85	5.73	5.64	5.84	11.38	5.56	5.81	5.61	5.57	5.66	6.27	5.55
Turbidity	NTU	NA	0.0	0.0	40.0	9.4	0.0	0.0	185.0	0.0	0.0	0.0	0.0	615.0	430.0	1000.0	399.0	200.0	45.3	148.0
Conductivity	mg/L	NA	0.165	0.348	0.195	0.295	0.206	0.226	0.235	0.233	0.226	0.245	0.832	0.209	0.244	0.194	0.203	0.166	0.201	0.201
ORP	mV	NA	164	322	170	191	136	100	169	280	323	311	-532	327	360	369	485	27	9	342
Dissolved Oxygen (mg/L)	mg/L	NA	3.19	2.37	1.56	2.84	17.00	3.31	0.50	3.93	6.74	5.00	0.76	1.66	3.46	1.30	0.50	6.00	4.31	2.41

Notes

RRS - Risk Reduction Standard

mg/L - milligrams per liter

°C - degrees Celsius

pH - potential of hydrogen

NTU - nephelometric turbidity units

mV - millivolt

U - concentration below the indicated detection limit

J - estimated concentration

Bold indicates detected concentration

Table 4. Summary of Groundwater Analytical Results, First Semi-Annual Sampling Event (September 2014), Woodall Creek Site, Atlanta, Fulton County, Georgia

Well Designation			MTWMW-10	DUP -2 MTWMW-10	MTWMW-12	MTWMW-7	MTWMW-7I	MTWMW-9	RPMW-14	RPMW-15	RPMW-24	RPMW (DUP 1)	SMFDR-2	SMFMW-5	SMFDR-3	SMFMW-18	SMFMW-1D	SMFMW-2	SMFPI-1
Property Location			Midtown West Partners	Midtown West Partners	Midtown West Partners	Midtown West Partners	Midtown West Partners	Midtown West Partners	Daltile	Daltile	Daltile	Daltile	Southern Metal Finishing	Southern Metal Finishing	Southern Metal Finishing	Southern Metal Finishing	Southern Metal Finishing	Southern Metal Finishing	Southern Metal Finishing
Sample Collection Date	Unit		25-Sep-14	25-Sep-14	24-Sep-14	26-Sep-14	26-Sep-14	30-Sep-14	22-Sep-14	24-Sep-14	23-Sep-14	23-Sep-14	17-Sep-14	17-Sep-14	18-Sep-14	19-Sep-14	16-Sep-14	18-Sep-14	16-Sep-14
VOCs			Type 1 RRS																
1,1-Dichloroethene	ug/L	7	0.208 U	0.208 U	0.208 U	19.8	19.0	2.08 U	1.04 U	0.208 U	2.08 U	2.08 U	1.31 J	0.208 U	0.208 U	0.208 U	1.63 J	0.208 U	0.208 U
Acetone	ug/L	4000	0.193 U	0.193 U	0.193 U	0.387 U	0.387 U	1.93 U	0.967 U	0.193 U	1.93 U	13.1 J	0.193 U	0.193 U	0.193 U	0.193 U	0.193 U	0.193 U	0.193 U
Benzene	ug/L	5	0.111 U	0.111 U	0.111 U	0.222 U	0.222 U	1.11 U	0.555 U	0.111 U	1.11 U	1.11 U	0.111 U	0.111 U	0.111 U	0.111 U	0.111 U	0.111 U	0.111 U
Chloroform	ug/L	80	1.23 J	1.22 J	0.155 U	0.806 J	1.11 J	0.155 U	0.775 U	0.155 U	1.55 U	1.55 U	0.155 U	0.155 U	0.155 U	0.155 U	0.155 U	3.12 J	0.155 U
cis-1,2-Dichloroethene	ug/L	70	1.75 J	1.80 J	0.103 U	24.6	18.7	39.7 J	9.67 J	0.517 J	33.4 J	23.5 J	0.103 U	0.103 U	2.00 J	0.103 U	0.103 U	4.74	4.04 J
Ethylbenzene	ug/L	700	0.109 U	0.109 U	0.109 U	0.218 U	0.218 U	1.09 U	0.545 U	0.109 U	1.09 U	1.09 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U
Isopropylbenzene (Cumene)	ug/L	1	0.130 U	0.130 U	0.130 U	0.26 U	0.26 U	1.3 U	0.651 U	0.13 U	1.30 U	1.30 U	0.130 U	0.130 U	0.130 U	0.130 U	0.130 U	0.130 U	0.130 U
m,p-Xylene	ug/L	RL	0.123 U	0.123 U	0.123 U	0.247 U	0.247 U	1.23 U	0.247 U	0.123 U	1.23 U	1.23 U	0.123 U	0.214 U	0.123 U	0.214 U	0.123 U	0.214 U	0.123 U
Methylcyclohexane	ug/L	RL	0.143 U	0.143 U	0.143 U	0.287 U	0.287 J	1.43 U	0.717 U	0.143 U	1.43 U	1.43 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U
o-Xylene	ug/L	RL	0.055 U	0.055 U	0.055 U	0.111 U	0.111 U	0.554 U	0.111 U	0.055 U	0.554 U	0.554 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U
Tetrachloroethene	ug/L	5	49.7	51.2	0.701 J	265	304	384	934	67.3	781	730	4.00 J	9.52	158	1.51 J	1.50 J	130	11.5
Trichloroethene	ug/L	5	7.98	8.06	0.161 U	151	176	176	327	22.5	248	230	3.30 J	0.161 U	4.02 J	0.161 U	4.85 J	27.2	0.629 J
1,1,1-Trichloroethane	ug/L	200	0.123 U	0.123 U	0.123 U	2.93 J	3.93 J	1.23 U	0.615 U	0.123 U	1.23 U	1.23 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U
1,1,2,2-Tetrachloroethane	ug/L	1	0.109 U	0.109 U	0.109 U	0.218 U	0.218 U	1.09 U	0.546 U	0.109 U	1.09 U	1.09 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U
1,1,2-Trichloroethane	ug/L	5	0.159 U	0.159 U	0.159 U	0.318 U	0.318 U	1.59 U	0.795 U	0.159 U	1.59 U	1.59 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U
1,1-Dichloroethane	ug/L	4000	0.171 U	0.171 U	0.171 U	3.20 J	2.4 J	1.71 U	0.856 U	0.171 U	1.71 U	1.71 U	0.171 U	0.171 U	0.411 J	0.171 U	0.171 U	0.171 U	0.171 U
1,2,4-Trichlorobenzene	ug/L	70	0.105 U	0.105 U	0.105 U	0.210 U	0.210 U	1.05 U	0.526 U	0.105 U	1.05 U	1.05 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U
1,2-Dibromo-3-chloropropane	ug/L	1	0.194 U	0.194 U	0.194 U	0.388 U	0.388 U	1.94 U	0.971 U	0.194 U	1.94 U	1.94 U	0.194 U	0.194 U	0.194 U	0.194 U	0.194 U	0.194 U	0.194 U
1,2-Dibromoethane	ug/L	1	0.102 U	0.102 U	0.102 U	0.205 U	0.205 U	1.02 U	0.512 U	0.102 U	1.02 U	1.02 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U
1,2-Dichlorobenzene	ug/L	600	0.135 U	0.135 U	0.135 U	0.27 U	0.27 U	1.35 U	0.674 U	0.135 U	1.35 U	1.35 U	0.135 U	0.135 U	0.135 U	0.135 U	0.135 U	0.135 U	0.135 U
1,2-Dichloroethane	ug/L	5	0.116 U	0.116 U	0.116 U	0.232 U	0.232 U	1.16 U	0.581 U	0.116 U	1.16 U	1.16 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U
1,2-Dichloropropane	ug/L	5	0.15 U	0.15 U	0.150 U	0.301 U	0.301 U	1.50 U	0.752 U	0.150 U	1.5 U	1.5 U	0.150 U	0.150 U	0.150 U	0.150 U	0.150 U	0.150 U	0.150 U
1,3-Dichlorobenzene	ug/L	600	0.138 U	0.138 U	0.138 U	0.275 U	0.275 U	1.38 U	0.689 U	0.138 U	1.38 U	1.38 U	0.138 U	0.138 U	0.138 U	0.138 U	0.138 U	0.138 U	0.138 U
1,4-Dichlorobenzene	ug/L	75	0.083 U	0.083 U	0.083 U	0.166 U	0.166 U	0.831 U	0.416 U	0.083 U	0.931 U	0.931 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
2-Butanone	ug/L	2000	0.142 U	0.142 U	0.142 U	0.284 U	0.284 U	1.42 U	0.711 U	0.142 U	1.42 U	1.42 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U
2-Chloroethylvinyl ether	ug/L	RL	0.146 U	0.146 U	0.146 U	0.291 U	0.291 U	1.46 U	0.729 U	0.146 U	1.46 U	1.46 U	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U
2-Hexanone	ug/L	RL	0.122 U	0.122 U	0.122 U	0.245 U	0.245 U	1.22 U	0.6712 U	0.122 U	1.22 U	1.22 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U
4-Methyl-2-pentanone	ug/L	200	0.120 U	0.613 J	0.12 U	0.24 U	0.24 U	1.20 U	0.600 U	0.120 U	1.2 U	1.2 U	0.120 U	0.120 U	0.120 U	0.120 U	0.120 U	0.120 U	0.120 U
Bromodichloromethane	ug/L	80	0.083 U	0.083 U	0.083 U	0.167 U	0.167 U	0.834 U	0.417 U	0.083 U	0.834 U	0.834 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Bromoform	ug/L	80	0.215 U	0.215 U	0.215 U	0.430 U	0.430 U	2.15 U	1.08 U	0.215 U	2.15 U	2.15 U	0.215 U	0.215 U	0.215 U	0.215 U	0.215 U	0.215 U	0.215 U
Bromomethane	ug/L	10	0.427 U	0.427 U	0.427 U	0.854 U	0.854 U	4.27 U	2.14 U	0.427 U	4.27 U	4.27 U	0.427 U	0.427 U	0.427 U	0.427 U	0.427 U	0.427 U	0.427 U
Carbon disulfide	ug/L	4000	0.19 U	0.19 U	0.19 U	0.380 U	0.380 U	1.90 U	0.950 U	0.19 U	1.9 U	1.9 U	0.190 U	0.190 U	0.190 U	0.190 U	0.190 U	0.190 U	0.190 U
Carbon tetrachloride	ug/L	5	0.248 U	0.248 U	0.248 U	0.496 U	0.496 U	2.48 U	1.24 U	0.248 U	2.48 U	2.48 U	0.248 U	0.248 U	0.248 U	0.248 U	0.248 U	0.248 U	0.248 U
Chlorobenzene	ug/L	100	0.083 U	0.083 U	0.083 U	0.166 U	0.830 U	0.828 U	0.414 U	0.083 U	0.828 U	0.828 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Chloroethane	ug/L	1	0.235 U	0.235 U	0.235 U	0.470 U	0.470 U	2.35 U	1.18 U	0.235 U	2.35 U	2.35 U	0.235 U	0.235 U	0.235 U	0.235 U	0.235 U	0.235 U	0.235 U
Chloromethane	ug/L	3	0.144 U	0.144 U	0.144 U	0.287 U	0.287 U	1.44 U	0.718 U	0.144 U	1.44 U	1.44 U	0.144 U	0.144 U	0.144 U	0.144 U	0.144 U	0.144 U	0.144 U
cis-1,3-Dichloropropene	ug/L	2	0.124 U	0.124 U	0.124 U	0.248 U	0.248 U	1.24 U	0.248 U	0.124 U	1.24 U	1.24 U	0.124 U	0.124 U	0.124 U	0.124 U	0.124 U	0.124 U	0.124 U
Cyclohexane	ug/L	1	0.337 U	0.337 U	0.337 U	0.674 U	0.674 U	3.37 U	1.69 U	0.337 U	3.37 U	3.37 U	0.337 U	0.337 U	0.337 U	0.337 U	0.337 U	0.337 U	0.337 U
Dibromochloromethane	ug/L	80	0.054 U	0.054 U	0.054 U	0.108 U	0.108 U	0.539 U	0.27 U	0.054 U	0.539 U	0.539 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U
Dichlorodifluoromethane	ug/L	1000	0.145 U	0.145 U	0.145 U	0.29 U	0.29 U	1.45 U	0.724 U	0.145 U	1.45 U	1.45 U	0.145 U	0.145 U	0.145 U	0.145 U	0.145 U	0.145 U	0.145 U
Methyl Acetate	ug/L	RL	0.159 U	0.159 U	0.159 U	0.319 U	0.319 U	1.59 U	0.79										

Notes
ug/L - micrograms per liter
VOCs - volatile organic compounds
RRS - Risk Reduction Standard
U - concentration below the indicated detection lim
J - estimated concentration
Bold indicates detected concentration

Table 4. Summary of Groundwater Analytical Results, First Semi-Annual Sampling Event (September 2014), Woodall Creek Site, Atlanta, Fulton County, Georgia

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Well Designation			MTWMW-10	DUP -2 MTWMW-10	MTWMW-12	MTWMW-7	MTWMW-7I	MTWMW-9	RPMW-14	RPMW-15	RPMW-24	RPMW (DUP 1)	SMFDR-2	SMFMW-5	SMFDR-3	SMFMW-18	SMFMW-1D	SMFMW-2	SMFPI-1
Property Location			Midtown West Partners	Midtown West Partners	Midtown West Partners	Midtown West Partners	Midtown West Partners	Midtown West Partners	Daltile	Daltile	Daltile	Daltile	Southern Metal Finishing	Southern Metal Finishing	Southern Metal Finishing	Southern Metal Finishing	Southern Metal Finishing	Southern Metal Finishing	Southern Metal Finishing
Sample Collection Date	Unit		25-Sep-14	25-Sep-14	24-Sep-14	26-Sep-14	26-Sep-14	30-Sep-14	22-Sep-14	24-Sep-14	23-Sep-14	23-Sep-14	17-Sep-14	17-Sep-14	18-Sep-14	19-Sep-14	16-Sep-14	18-Sep-14	16-Sep-14
VOCs			Type 1 RRS																
MNA Parameters																			
Ethane	ug/L	NA	0.087 U	0.087 U	0.087 U	1.12	0.354 J	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087U
Ethene	ug/L	NA	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071U
Methane	ug/L	NA	0.435 U	0.435 U	636	342	191	0.435 U	2.43	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435 U	0.435U
Total Organic Carbon	mg/L	NA	3.0	2.8	2.9	3.3	3.0 J	1.90	2.5	17.9 U	1.20	2.30	0.50 J	1.9	6.30	29.5	1.5	1.8	1.9
Sulfide	mg/L	NA	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2 U	2.00 U	2.00 U	2.00 U	2 U	2.00 U	2.00U
Chloride	mg/L	NA	11.4	11.4	28.9	9.22	8.65	73.4	18.3	22.8	30.0	30.9	39.3	22.8	24	48.3	25.7	28.7	47.3
Nitrate	mg/L	NA	2.91	2.93	0.208	0.050 U	0.288	3.36	4.12	1.75	5.43	5.11	3.18	0.616	10.1	15.3	2.66	11.0	17.4
Sulfate	mg/L	NA	50.8	51.3	23.7	30.0	29.8	26.8	28.8	23.6	43.6	41.5	30.2	30.1	38.2	516	26	12.5	58.0
Ferrous Iron (mg/L)	mg/L	NA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Groundwater Quality																			
Temperature	°C	NA	19.55	19.55	21.93	17.67	18.02	23.81	22.69	22.32	24.96	24.96	18.65	18.89	18.24	19.54	21.75	26.80	20.14
pH	pH	NA	5.44	5.44	5.74	6.52	6.08	5.46	5.74	5.60	5.93	5.93	6.01	4.47	5.26	7.93	5.14	4.49	5.44
Turbidity	NTU	NA	0.0	0.0	0.0	12.8	0.0	97.0	0.0	122.0	-	-	411.0	0.0	0.0	25.2	0.0	0.0	0.0
Conductivity	mg/L	NA	0.249	0.249	0.315	0.453	0.307	0.198	0.315	0.244	0.000	0.000	0.558	0.170	0.334	8.45	0.272	0.220	0.466
ORP	mV	NA	134	134	60	-76	14	330	89	258	339	339	279	237	214	126	186	340	253
Dissolved Oxygen (mg/L)	mg/L	NA	1.65	1.65	1.03	1.47	0.89	5.23	2.88	1.01	2.29	2.29	1.19	3.14	3.19	2.82	1.38	2.96	1.89

Notes

RRS - Risk Reduction Standard

mg/L - milligrams per liter

°C - degrees Celsius

pH - potential of hydrogen

NTU - nephelometric turbidity units

mV - millivolt

U - concentration below the indicated detection lim

J - estimated concentration

Bold indicates detected concentration

Table 5.
Summary of Current and Historic Site-Wide Groundwater Quality Results
Woodall Creek Site, Atlanta, Fulton County, Georgia
 (page 2 of 7)

Historical Well Designation	Current Well Designation	Sample Date	Sample Type	1,1-Dichloroethene	Acetone	Benzene	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	o-Xylene	Tetrachloroethene	Trichloroethene
SMFMW-13	SMFMW-13	3/18/2014		<0.208	<0.193	<0.111	<0.155	<0.103	<0.109	<0.130	<0.123	<0.143	<0.055	2.65J	<0.161
SMFMW-14	SMFMW-14	3/1/2011		<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	60	6.7
SMFMW-14	SMFMW-14	3/20/2014		<0.208	2.38J	<0.111	0.227J	0.340J	<0.109	<0.130	<0.123	<0.143	<0.055	25.2	5.37
SMFMW-17	SMFMW-17	3/1/2011		<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SMFMW-17	SMFMW-17	3/20/2014		0.436J	2.45J	<0.111	<0.155	<0.103	<0.109	<0.130	<0.123	<0.143	<0.055	<0.193	<0.161
SMFMW-18	SMFMW-18	2/28/2011		<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SMFMW-18	SMFMW-18	3/21/2014		<0.208	<0.193	0.208J	0.172J	4.19J	<0.109	<0.130	<0.123	<0.143	<0.055	2.92J	0.860J
SMFMW-18	SMFMW-18	9/19/2014		<0.208	<0.193	<0.111	<0.155	<0.103	<0.109	<0.130	<0.214	<0.143	<0.055	1.51J	<0.161
SMFPI-1	SMFPI-1	3/19/2014	D	<0.208	0.666J	<0.111	<0.155	1.31J	<0.109	<0.130	<0.123	<0.143	<0.055	6.38	<0.161
SMFPI-1	SMFPI-1	3/19/2014		<0.208	0.736J	<0.111	<0.155	1.14J	<0.109	<0.130	<0.123	<0.143	<0.055	6.41	<0.161
SMFPI-1	SMFPI-1	9/16/2014		<0.208	<0.193	<0.111	<0.155	4.04J	<0.109	<0.130	<0.214	<0.143	<0.055	11.5	0.629J

Glidden Property

AKZMW-3	AKZMW-3	3/13/2014		<0.208	NA	NA	NA	<0.103	NA	NA	NA	NA	NA	<0.193	<0.161
AKZMW-4	AKZMW-4	3/13/2014		<0.208	NA	NA	NA	<0.103	NA	NA	NA	NA	NA	<0.193	<0.161
AKZMW-6	AKZMW-6	3/13/2014		<0.208	NA	NA	NA	<0.103	NA	NA	NA	NA	NA	<0.193	<0.161
AKZMW-7	AKZMW-7	3/13/2014		<0.208	NA	NA	NA	<0.103	NA	NA	NA	NA	NA	<0.193	<0.161
AKZMW-8	AKZMW-8	3/13/2014		<0.208	NA	NA	NA	<0.103	NA	NA	NA	NA	NA	<0.193	<0.161

Dobbins Property

MW-1	DPMW-1S	3/14/2014		<0.208	0.876J	<0.111	1.19J	<0.103	<0.109	<0.130	<0.123	<0.143	<0.055	1.32J	<0.161
MW-2I	DPMW-2I	3/14/2014		2.45J	<0.193	<0.111	0.623J	5.54	<0.109	<0.130	<0.123	<0.143	<0.055	36.1	8.61
MW-2I	DPMW-2I	9/23/2014		2.14J	<0.193	<0.111	0.694J	5.15	<0.109	<0.130	<0.123	<0.143	<0.055	49.9	8.14
MW-2	DPMW-2S	3/14/2014		<0.208	1.40J	<0.111	<0.155	<0.103	<0.109	<0.130	<0.123	<0.143	<0.055	20	6
MW-2	DPMW-2S	9/23/2014		<0.208	<0.193	<0.111	<0.155	0.365J	<0.109	<0.130	<0.123	<0.143	<0.055	32.1	9.10
MW-3	DPMW-3S	3/18/2014		<0.208	<0.193	<0.111	0.775J	1.58J	<0.109	<0.130	<0.123	<0.143	<0.055	33	1.60J
MW-3	DPMW-3S	9/18/2014		<0.208	<0.193	<0.111	<0.155	<0.103	<0.109	<0.13	<0.123	<0.143	<0.055	4.47	0.398
MW-4	DPMW-4S	3/14/2014		<0.208	1.18J	<0.111	1.54J	<0.103	<0.109	<0.130	<0.123	<0.143	<0.055	16	2.04J
MW-25	DPMW-25	10/28/2010		< 5	< 5	< 5	8.7	8.8	< 5	< 5	< 5	<5	< 5	120	13
MW-25	DPMW-25	3/3/2011		< 5	< 5	< 5	< 5	16	< 5	< 5	< 5	< 5	< 5	110	28
MW-25	DPMW-25	3/24/2014		<0.208	3.61J	<0.111	5.69	2.95J	<0.109	<0.130	<0.123	<0.143	<0.055	64	8
MW-26	DPMW-26	10/28/2010		<5	< 5	5.3	< 5	12	< 5	< 5	< 10	< 5	< 5	28	5.8
MW-26	DPMW-26	3/3/2011		<5	< 5	5.2	< 5	14	< 5	< 5	< 10	< 5	< 5	29	5.7
MW-26	DPMW-26	3/21/2014		<0.208	<0.193	<0.111	0.351J	9	<0.109	<0.130	<0.123	<0.143	<0.055	38	11.0
MW-27	DPMW-27	10/28/2010		< 5	< 20	< 5	< 5	89	< 5	< 5	< 10	< 5	< 5	250	88

Table 5.
Summary of Current and Historic Site-Wide Groundwater Quality Results
Woodall Creek Site, Atlanta, Fulton County, Georgia
(page 3 of 7)

Historical Well Designation	Current Well Designation	Sample Date	Sample Type	1,1-Dichloroethene	Acetone	Benzene	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	o-Xylene	Tetrachloroethene	Trichloroethene
MW-27	DPMW-27	3/3/2011		< 5	< 20	< 5	< 5	77	< 5	< 5	< 10	< 5	< 5	260	85
MW-27	DPMW-27	3/21/2014		<0.208	1.07J	<0.111	<0.155	<0.103	<0.109	<0.130	<0.123	<0.143	<0.055	<0.193	<0.161
MW-27	DPMW-27	9/23/2014		<0.416	<0.387	<0.222	<0.218	40.4	<0.218	<0.260	<0.247	<0.287	<0.111	258	46.2
MW-28	DPMW-28	10/28/2010		< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	70	10
MW-28	DPMW-28	3/3/2011	D	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	51	6
MW-28	DPMW-28	3/3/2011		< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	50	6.6
MW-28	DPMW-28	3/24/2014		<0.208	1.96J	<0.111	10.9	<0.103	<0.109	<0.130	<0.123	<0.143	<0.055	15	1.41J
Goodstone Property (1494 & 1510 Ellsworth Industrial Blvd.)															
MW-11	GPMW-11	8/3/2009		<5	< 50	< 5	16	< 5	< 5	< 5	NR	< 5	NR	31	5.4
MW-11	GPMW-11	4/1/2010		< 5	< 50	< 5	5.7	5.4	< 5	< 5	< 10	< 5	< 5	48	18
MW-11	GPMW-11	3/7/2011		< 5	< 50	< 5	< 5	27	< 5	< 5	< 10	< 5	< 5	290	86
MW-11	GPMW-11	3/10/2014		<0.208	0.926J	<0.111	4.18J	0.389J	<0.109	<0.130	<0.123	<0.143	<0.055	18	2.44J
MW-11	GPMW-11	9/19/2014		<0.208	<0.193	<0.111	0.551J	<0.103	<0.109	<0.130	<0.123	<0.143	<0.055	7.94	1.14
MW-18	GPMW-18	4/1/2010		< 5	71	< 5	<5	220	< 5	< 5	< 10	< 5	< 5	310	160
MW-18	GPMW-18	3/8/2011		< 5	< 50	< 5	<5	250	< 5	< 5	< 10	< 5	< 5	370	130
MW-18	GPMW-18	3/10/2014		0.734J	<0.387	<0.222	2.31J	106	<0.218	<0.260	<0.247	<0.287	<0.111	261	52
MW-18	GPMW-18	9/22/2014		1.09J	<0.387	<0.222	156	3.10J	<0.218	<0.260	<0.247	<0.287	<0.111	284	69.5
MW-19	GPMW-19	4/1/2010		< 5	190	< 5	< 5	180	93	< 5	<10	< 5	440	270	170
MW-19	GPMW-19	3/8/2011		< 5	< 50	< 5	< 5	190	< 5	< 5	<10	< 5	< 5	500	190
MW-19	GPMW-19	3/10/2014		<1.04	<0.967	<0.555	3.62J	164	<0.545	<0.651	<0.617	<0.717	<0.277	306	131
MW-20	GPMW-20	6/10/2010		< 5	< 20	< 5	< 5	9.3	< 5	< 5	< 10	< 5	< 5	110	12
MW-20	GPMW-20	3/8/2011		< 5	< 20	< 5	< 5	14	< 5	< 5	< 10	< 5	< 5	120	15
MW-20	GPMW-20	3/10/2014		<0.208	<0.193	<0.111	0.451J	6	<0.109	<0.130	<0.123	<0.143	<0.055	30	4.05J
MW-20	GPMW-20	9/22/2014		<0.208	<0.193	<0.111	<0.155	5.3	<0.109	<0.130	<0.123	<0.143	<0.055	28.1	4.54

Table 5.
Summary of Current and Historic Site-Wide Groundwater Quality Results
Woodall Creek Site, Atlanta, Fulton County, Georgia
(page 4 of 7)

Historical Well Designation	Current Well Designation	Sample Date	Sample Type	1,1-Dichloroethene	Acetone	Benzene	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	o-Xylene	Tetrachloroethene	Trichloroethene
Macy's Property															
MW-15	MPMW-15	9/18/2014		<0.208	<0.193	<0.111	<0.155	<0.103	<0.109	<0.130	<0.123	<0.143	<0.055	1.98J	0.832J
Restaurant Supply (Former Jodaco Property)															
RW-1	JPBRW-1	9/26/2014		<1.04	<0.967	<0.555	<0.775	54.6J	<0.545	<0.651	<0.617	<0.717	<0.277	295J	229J
MW-16	JPMW-16	4/1/2010		< 5	< 50	< 5	< 5	170	< 5	< 5	NR	< 5	NR	1,000	810
MW-16	JPMW-16	3/11/2011		< 5	< 50	< 5	< 5	240	< 5	< 5	NR	< 5	NR	1,600	930
MW-16	JPMW-16	3/12/2014		<0.416	6.23J	<0.222	1.53J	44	<0.218	<0.260	<0.247	<0.287	<0.111	262	177
MW-16	JPMW-16	9/26/2014		<1.04	<0.967	<0.555	7.1J	43.7	<0.545	<0.651	<0.247	<0.717	<0.111	341	117
MW-17	JPMW-17	4/1/2010		< 5	< 50	< 5	<5	14	< 5	< 5	< 10	< 5	< 5	140	36
MW-17	JPMW-17	3/11/2011		< 5	< 50	< 5	<5	72	< 5	< 5	< 10	< 5	< 5	340	92
MW-17	JPMW-17	3/11/2014		<0.208	<0.193	<0.111	1.51J	5	<0.109	<0.130	<0.123	<0.143	<0.055	67	11
MW-17	JPMW-17	9/26/2014		<0.208	<0.193	<0.111	1.24J	1.99	<0.109	<0.130	<0.123	<0.143	<0.055	48.1	1.09
MW-21	JPMW-21	6/10/2010		< 5	< 20	< 5	< 5	120	< 5	< 5	< 10	< 5	< 5	290	120
MW-21	JPMW-21	3/8/2011		< 5	< 20	< 5	< 5	99	< 5	< 5	< 10	< 5	< 5	330	100
MW-21	JPMW-21	3/11/2014		0.345J	<0.193	<0.111	17.2	39	<0.109	<0.130	<0.123	<0.143	<0.055	152	33
MW-21	JPMW-21	9/24/2014		0.326J	<0.193	<0.111	10.2	29.6	<0.109	<0.13	<0.123	<0.143	<0.055	129	24.8
MW-22	JPMW-22	6/10/2010		< 5	< 20	7.5	<5	250	< 5	< 5	< 10	< 5	< 5	1,300	230
MW-22	JPMW-22	3/8/2011		< 5	< 20	13	6.2	290	< 5	< 5	< 10	< 5	< 5	1,400	190
MW-22	JPMW-22	3/8/2011	D	< 5	< 20	14	6.1	320	< 5	< 5	< 10	<5	< 5	1,400	200
MW-22	JPMW-22	3/11/2014		1.22J	<0.387	4.98J	2.07J	22	<0.218	<0.260	<0.247	<0.287	<0.111	142	17
MW-22	JPMW-22	9/29/2014		1.33J	<0.193	4.63J	1.92J	19.2	<0.109	<0.13	<0.123	<0.143	<0.055	106	14.3
MW-23	JPMW-23	6/10/2010		< 5	< 20	1.5	< 5	53	< 5	< 5	< 10	<5	< 5	350	110
MW-23	JPMW-23	3/8/2011		< 5	< 20	< 5	< 5	52	< 5	< 5	< 10	< 5	< 5	460	120
MW-23	JPMW-23	3/12/2014		1.66J	<0.193	0.989J	0.855J	40	<0.109	<0.130	<0.123	<0.143	<0.055	111	35
MW-23	JPMW-23	9/22/2014		1.07J	<0.193	0.673J	1.54J	22.3	<0.109	<0.130	<0.123	<0.143	<0.055	96.2	26.1
Daltile (Former Reynolds Property)															
MW-1	RPMW-1	3/12/2014		<2.08	<1.93	<1.11	3.96J	167	<1.09	<1.30	<1.23	<1.43	<0.554	788	641
MW-2	RPMW-2	3/10/2014		<0.208	<0.193	<0.111	<0.155	<0.103	<0.109	<0.130	<0.123	<0.143	<0.055	2.68J	0.769J
MW-14	RPMW-14	4/1/2010		< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	140	56
MW-14	RPMW-14	3/7/2011		< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	360	130
MW-14	RPMW-14	3/10/2014		<0.416	<0.387	0.359J	<0.310	0.556J	<0.218	<0.260	<0.247	<0.287	<0.111	190	73
MW-14	RPMW-14	9/22/2014		<1.04	<0.967	<0.555	<0.775	9.67J	<0.545	<0.651	<0.247	<0.717	<0.111	934	327
MW-15	RPMW-15	4/10/2010		< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	630	380

Table 5.
Summary of Current and Historic Site-Wide Groundwater Quality Results
Woodall Creek Site, Atlanta, Fulton County, Georgia
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Historical Well Designation	Current Well Designation	Sample Date	Sample Type	1,1-Dichloroethene	Acetone	Benzene	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	o-Xylene	Tetrachloroethene	Trichloroethene
MW-15	RPMW-15	3/7/2011		< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 10	11	< 5	780	310
MW-15	RPMW-15	3/11/2014		<0.416	6.33J	<0.222	<0.310	3.13J	<0.218	<0.260	<0.247	<0.287	<0.111	362	158
MW-15	RPMW-15	9/24/2014		<0.208	<0.193	<0.111	<0.155	0.517J	<0.109	<0.13	<0.123	<0.143	<0.055	67.3	22.5
MW-24	RPMW-24	6/10/2010		<5	< 50	< 5	< 5	12	< 5	< 5	NR	< 5	NR	1,100	380
MW-24	RPMW-24	3/7/2011		<5	< 50	< 5	< 5	18	< 5	< 5	NR	<5	NR	1,200	400
MW-24	RPMW-24	3/10/2014	D	<2.08	13.1J	<1.11	<1.55	23.5J	<1.09	<1.30	<1.23	<1.43	<0.554	730	230
MW-24	RPMW-24	3/10/2014		<2.08	<1.93	<1.11	<1.55	33.4J	<1.09	<1.30	<1.23	<1.43	<0.554	781	248
MW-24	RPMW-24	9/23/2014	D	<2.08	13.1J	<1.11	<1.55	23.5J	<1.09	<1.30	<1.23	<1.43	<0.554	730	230
MW-24	RPMW-24	9/23/2014		<0.208	<0.193	<1.11	<1.55	33.4J	<1.09	<1.30	<1.23	<1.43	<0.554	781	248
Midtown West (Former M-West Lots/ABC Supply)															
MW-1	MTWMW-1	7/10/2008		< 5	< 20	< 5	< 5	71	< 5	< 5	< 10	< 5	< 5	200	260
MW-1	MTWMW-1	11/5/2008		< 5	< 20	< 5	< 5	190	< 5	< 5	< 10	< 5	< 5	240	330
MW-1	MTWMW-1	1/14/2009		< 5	< 20	< 5	< 5	210	< 5	< 5	< 10	< 5	< 5	230	260
MW-1	MTWMW-1	8/3/2009		5.4	< 50	< 5	< 5	260	< 5	NR	NR	NR	NR	310	260
MW-1	MTWMW-1	4/1/2010		< 5	< 50	< 5	< 5	420	< 5	< 5	< 10	< 5	< 5	250	200
MW-1	MTWMW-1	6/13/2012		<2.0	<100	<2.0	<2.0	390	<2.0	<10	< 5	< 5	< 5	62	57
MW-2	MTWMW-2	7/10/2008		< 5	< 50	< 5	< 5	120	< 5	< 5	< 10	< 5	< 5	130	110
MW-2	MTWMW-2	11/5/2008		< 5	< 50	< 5	< 5	64	< 5	< 5	< 10	< 5	< 5	150	110
MW-2	MTWMW-2	1/14/2009		< 5	< 20	< 5	< 5	48	< 5	< 5	< 10	< 5	< 5	130	91
MW-2	MTWMW-2	8/3/2009		< 5	< 20	< 5	< 5	49	< 5	< 5	< 10	< 5	< 5	93	88
MW-2	MTWMW-2	4/1/2010		< 5	< 20	< 5	< 5	39	< 5	< 5	< 10	NR	< 5	330	160
MW-3	MTWMW-3	7/1/2008		<5	< 50	< 5	< 5	190	< 5	< 5	NR	< 5	< 5	820	530
MW-3	MTWMW-3	11/5/2008		< 5	< 50	< 5	< 5	170	< 5	5.1	< 10	< 5	< 5	1200	760
MW-3	MTWMW-3	1/14/2009		< 5	< 50	< 5	< 5	150	< 5	< 5	< 10	15	< 5	820	530
MW-3	MTWMW-3	8/3/2009		< 5	< 50	< 5	< 5	140	< 5	< 5	< 10	< 5	< 5	900	520
MW-3	MTWMW-3	4/1/2010		< 5	< 20	< 5	< 5	150	< 5	< 5	< 10	6.5	< 5	950	480
MW-3	MTWMW-3	6/13/2012		<2.0	<100	<2.0	<2.0	97	<2.0	<10	< 5	< 5	< 5	400	210
MW-4	MTWMW-4	11/5/2008		< 5	< 20	< 5	< 5	70	< 5	< 5	< 10	<5	< 5	450	270
MW-4	MTWMW-4	1/14/2009		< 5	< 20	< 5	< 5	72	< 5	< 5	< 10	< 5	< 5	490	290
MW-4	MTWMW-4	8/3/2009		<5	< 50	< 5	< 5	87	< 5	< 5	NR	6.5	NR	620	310
MW-4	MTWMW-4	4/1/2010		< 5	< 50	< 5	< 5	100	< 5	< 5	< 10	<5	< 5	610	270
MW-4	MTWMW-4	6/13/2012		<2.0	<100	<2.0	<2.0	39	<2.0	<10	< 5	< 5	< 5	200	100
MW-4	MTWMW-4	3/11/2014		<0.416	<0.387	<0.222	15.8	27.7	<0.218	<0.260	<0.247	<0.287	<0.111	172	55.7

Table 5.
Summary of Current and Historic Site-Wide Groundwater Quality Results
Woodall Creek Site, Atlanta, Fulton County, Georgia
(page 6 of 7)

Historical Well Designation	Current Well Designation	Sample Date	Sample Type	1,1-Dichloroethene	Acetone	Benzene	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	o-Xylene	Tetrachloroethene	Trichloroethene
MW-5	MTWMW-5	11/5/2008		< 5	< 50	< 5	8.6	170	< 5	< 5	< 10	< 5	< 5	440	290
MW-5	MTWMW-5	1/14/2009		< 5	< 50	< 5	6.2	140	< 5	< 5	< 10	< 5	< 5	460	290
MW-5	MTWMW-5	8/3/2009		< 5	< 50	< 5	< 5	140	< 5	< 5	< 10	< 5	< 5	570	290
MW-5	MTWMW-5	4/1/2010		< 5	< 20	< 5	< 5	170	< 5	< 5	< 10	< 5	< 5	450	260
MW-5	MTWMW-5	4/24/2012		< 5	< 50	< 5	< 5	130	< 5	< 5	< 5	< 5	< 5	430	200
MW-6	MTWMW-6	1/14/2009		< 5	< 20	< 5	< 5	58	< 5	< 5	< 10	< 5	< 5	52	52
MW-6	MTWMW-6	8/3/2009		< 5	< 50	< 5	< 5	100	< 5	< 5	NR	< 5	NR	240	170
MW-6	MTWMW-6	4/1/2010		< 5	< 50	< 5	< 5	110	< 5	< 5	< 10	< 5	< 5	260	200
MW-6	MTWMW-6	4/24/2012		< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	320	190
MW-7	MTWMW-7	1/14/2009		19	< 50	< 5	< 5	11	< 5	< 5	< 10	< 5	< 5	260	210
MW-7	MTWMW-7	8/3/2009		32	< 50	< 5	< 5	10	< 5	< 5	< 10	< 5	< 5	240	190
MW-7	MTWMW-7	4/1/2010		8.2	< 20	< 5	< 5	6.4	< 5	< 5	< 10	< 5	< 5	46	50
MW-7	MTWMW-7	6/13/2012		23	<100	<2.0	<2.0	16.0	<2.0	<10	< 5	< 5	< 5	270	190
MW-7	MTWMW-7	3/10/2014		5.15	<0.193	<0.111	<0.155	49.4	<0.109	<0.130	<0.123	<0.143	<0.055	33	34
MW-7	MTWMW-7	9/26/2014		19.8	<0.387	<0.222	0.806J	24.6	<0.218	<0.26	<0.247	<0.287	<0.111	265	151
MTWMW-7I	MTWMW-7I	3/10/2014		8.58	<0.193	<0.111	0.394J	43.0	<0.109	<0.130	<0.123	0.675J	<0.055	82.9	64
MTWMW-7I	MTWMW-7I	9/26/2014		19.0	<0.387	<0.222	1.11J	18.7	<0.218	<0.26	<0.247	<0.287	<0.055	304	176
MW-8	MTWMW-08	3/31/2009		< 5	< 20	< 5	< 5	51	< 5	< 5	< 10	< 5	< 5	1,500	740
MW-8	MTWMW-08	8/3/2009		< 5	< 20	< 5	< 5	59	< 5	< 5	< 10	11	< 5	1,500	670
MW-8	MTWMW-08	4/1/2010		< 5	< 50	< 5	< 5	31	< 5	< 5	NR	< 5	NR	670	380
MW-8	MTWMW-08	6/11/2012		<2.0	<100	<2.0	<2.0	53	<2.0	<10	< 5	< 5	< 5	610	360
MW-8	MTWMW-08	3/11/2014		<2.08	<1.93	<1.11	2.77J	48.4J	<1.09	<1.30	<1.23	<1.43	<0.554	665	310
MW-8	MTWMW-08	9/29/2014		<2.08	<1.93	<1.11	<1.55	96.8J	<1.09	<1.3	<1.23	<1.43	<0.554	914	405
MW-9	MTWMW-9	3/31/2009		< 5	< 50	< 5	< 5	93	< 5	< 5	< 10	< 5	< 5	1,000	560
MW-9	MTWMW-9	8/3/2009		< 5	< 50	< 5	< 5	120	< 5	< 5	< 10	< 5	< 5	990	580
MW-9	MTWMW-9	4/10/2010		< 5	< 50	< 5	< 5	30	< 10	< 5	< 10	< 5	< 5	220	160
MW-9	MTWMW-9	6/11/2012		<2.0	<100	<2.0	<2.0	80	<2.0	<10	< 5	< 5	< 5	500	310
MW-9	MTWMW-9	3/11/2014	D	<0.416	<0.967	<0.555	2.14J	51.3	<0.545	<0.651	<0.617	<0.717	<0.277	445	241
MW-9	MTWMW-9	3/11/2014		<0.416	<0.967	<0.555	2.09J	49	<0.545	<0.651	<0.617	<0.717	<0.277	455	241
MW-9	MTWMW-9	9/30/2014		<2.08	<1.93	<1.11	<0.155	39.7	<1.09	<1.3	<1.23	<1.43	<0.554	384	176
MW-10	MW-10 (ABC)	3/31/2009		< 5	< 20	< 5	< 5	12	< 5	< 5	< 10	< 5	< 5	260	77
MW-10	MW-10 (ABC)	4/10/2010		< 5	< 20	< 5	< 5	6.8	< 5	< 5	< 10	< 5	< 5	94	28
MW-10	MW-10 (ABC)	6/11/2012		<2.0	<100	<2.0	<2.0	6.3	<2.0	<10	< 5	< 5	< 5	86	20

Table 5.
Summary of Current and Historic Site-Wide Groundwater Quality Results
Woodall Creek Site, Atlanta, Fulton County, Georgia
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Historical Well Designation	Current Well Designation	Sample Date	Sample Type	1,1-Dichloroethene	Acetone	Benzene	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	o-Xylene	Tetrachloroethene	Trichloroethene
MW-10	MTWMW-10	8/3/2009		< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	110	30
MW-10	MTWMW-10	3/10/2014		<0.208	<0.193	<0.111	0.854J	1.57J	<0.109	0.727J	<0.123	1.36J	6.3	61.3	12.6
MW-10	MTWMW-10	9/25/2014	D	<0.208	<0.193	<0.111	1.22J	1.80J	<0.109	<0.130	<0.123	<1.43	<0.055	51.2	8.06
MW-10	MTWMW-10	9/25/2014		<0.208	<0.193	<0.111	1.23J	1.75J	<0.109	<0.130	<0.123	<1.43	<0.055	49.7	7.98
MW-12	MTWMW-12	8/3/2009		<5	< 50	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	14	7
MW-12	MTWMW-12	4/1/2010		<5	< 50	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	56	37
MW-12	MTWMW-12	6/13/2012		<2.0	<100	<2.0	<2.0	<2.0	<2.0	<10	< 5	< 5	< 5	<2	<2.0
MW-12	MTWMW-12	3/11/2014		<0.208	<0.193	<0.111	<0.155	<0.103	<0.109	<0.130	<0.123	<0.143	<0.055	0.323J	<0.161
MW-12	MTWMW-12	9/24/2014		<0.208	<0.193	<0.111	<0.155	<0.103	<0.109	<0.130	<0.123	<0.143	<0.055	0.701J	<0.161

MWHOA - Midtown-West Home Owners Association Property

HOAMW-3	HOAMW-3	3/11/2014	0.416	0.387	0.222	6.26J	55.4	0.218	0.26	0.247	0.287	0.111	222	91.9
HOAMW-3	HOAMW-3	9/29/2014	0.416	0.387	0.222	13.1J	73.1	<0.218	<0.260	<0.247	<0.287	<0.111	267	79.6
HOAMW-5	HOAMW-5	3/13/2014	<0.416	<0.387	<0.222	2.97J	81.1	<0.218	<0.260	<0.247	<0.287	<0.111	252	96.1
HOAMW-5	HOAMW-5	9/29/2014	<0.416	<0.387	<0.222	4.21J	107	<0.218	<0.260	<0.247	<0.287	<0.111	287	92.6
HOAMW-5I	HOAMW-5I	3/12/2014	<0.416	<0.387	<0.222	3.75	87.9	<0.218	<0.260	<0.247	<0.287	<0.111	216	96.8
HOAMW-5I	HOAMW-5I	9/29/2014	<0.416	<0.387	<0.222	4.30J	111	<0.218	<0.260	<0.247	<0.287	<0.111	232	76.4
HOAMW-13	MTWMW-13	8/3/2009	< 5	< 20	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	<5	< 5
HOAMW-13	MTWMW-13	4/24/2012	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
HOAMW-14	HOAMW-14	3/12/2014	<0.208	<0.193	<0.111	<0.155	<0.103	<0.109	<0.130	<0.123	<0.143	<0.055	0.858J	0.378J

Notes

Sample collected during Baseline Sampling Event
 Sample collected during 1st Semi-Annual Sampling Event

Sample Type:

blank = field sample

D = duplicate sample

Results:

< - concentration below the indicated detection limit

J = estimated value

Table 6. Summary of Surface Water Quality Data (October 2014),
Woodall Creek Site
Atlanta, Fulton County, Georgia
(page 1 of 1)

Surface Water Location Sample Collection Date	Unit	S1 13-Oct-14	S6 13-Oct-14	S9 13-Oct-14	S10 13-Oct-14	S11 13-Oct-14	S12 13-Oct-14	S13 13-Oct-14	S14 13-Oct-14	S15 13-Oct-14	S16 13-Oct-14	S17 13-Oct-14	S18 13-Oct-14	S19 13-Oct-14	PB 13-Oct-14
VOCs															
1,1,1-Trichloroethane	ug/L	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U
1,1,2,2-Tetrachloroethane	ug/L	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U
1,1,2-Trichloroethane	ug/L	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U
1,1-Dichloroethane	ug/L	0.171 U	0.171 U	0.171 U	0.171 U	0.171 U	0.171 U	0.171 U	0.171 U	0.171 U	0.171 U	0.171 U	0.171 U	0.171 U	0.171 U
1,1-Dichloroethene	ug/L	0.208 U	0.208 U	0.344 J	0.379 J	0.208 U	0.208 U	0.208 U	0.208 U	0.208 U	0.208 U	0.208 U	0.208 U	0.208 U	0.208 U
1,2,4-Trichlorobenzene	ug/L	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U	0.105 U
1,2-Dibromo-3-chloropropane	ug/L	0.194 U	0.194 U	0.194 U	0.194 U	0.194 U	0.194 U	0.194 U	0.194 U	0.194 U	0.194 U	0.194 U	0.194 U	0.194 U	0.194 U
1,2-Dibromoethane	ug/L	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U	0.102 U
1,2-Dichlorobenzene	ug/L	0.135 U	0.135 U	0.135 U	0.135 U	0.135 U	0.135 U	0.135 U	0.135 U	0.135 U	0.135 U	0.135 U	0.135 U	0.135 U	0.135 U
1,2-Dichloroethane	ug/L	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	0.116 U	1.96 J	0.116 U
1,2-Dichloropropane	ug/L	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,3-Dichlorobenzene	ug/L	0.138 U	0.138 U	0.138 U	0.138 U	0.138 U	0.138 U	0.138 U	0.138 U	0.138 U	0.138 U	0.138 U	0.138 U	0.138 U	0.138 U
1,4-Dichlorobenzene	ug/L	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
2-Butanone	ug/L	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U	0.142 U
2-Chloroethylvinyl ether	ug/L	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U
2-Hexanone	ug/L	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U
4-Methyl-2-pentanone	ug/L	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Acetone	ug/L	16.3	16.4	7.01	6.48	7.93	5.85	0.193 U	5.29	0.193 U	0.193 U	0.193 U	0.193 U	0.193 U	0.193 U
Benzene	ug/L	0.111 U	0.111 U	0.111 U	0.111 U	0.111 U	0.111 U	0.111 U	0.111 U	0.111 U	0.111 U	0.111 U	0.111 U	0.111 U	0.111 U
Bromodichloromethane	ug/L	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Bromoform	ug/L	0.215 U	0.215 U	0.215 U	0.215 U	0.215 U	0.215 U	0.215 U	0.215 U	0.215 U	0.215 U	0.215 U	0.215 U	0.215 U	0.215 U
Bromomethane	ug/L	0.427 U	0.427 U	0.427 U	0.427 U	0.427 U	0.427 U	0.427 U	0.427 U	0.427 U	0.427 U	0.427 U	0.427 U	0.427 U	0.427 U
Carbon disulfide	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon tetrachloride	ug/L	0.248 U	0.248 U	0.248 U	0.248 U	0.248 U	0.248 U	0.248 U	0.248 U	0.248 U	0.248 U	0.248 U	0.248 U	0.248 U	0.248 U
Chlorobenzene	ug/L	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Chloroethane	ug/L	0.235 U	0.235 U	0.235 U	0.235 U	0.235 U	0.235 U	0.235 U	0.235 U	0.235 U	0.235 U	0.235 U	0.235 U	0.235 U	0.235 U
Chloroform	ug/L	0.155 U	0.155 U	0.155 U	0.155 U	0.155 U	0.155 U	0.155 U	0.155 U	0.155 U	0.155 U	0.155 U	0.155 U	0.155 U	0.155 U
Chloromethane	ug/L	0.144 U	0.144 U	0.144 U	0.144 U	0.144 U	0.144 U	0.144 U	0.144 U	0.144 U	0.144 U	0.144 U	0.144 U	0.144 U	0.144 U
Cyclohexane	ug/L	0.337 U	0.337 U	0.337 U	0.337 U	0.337 U	0.337 U	0.337 U	0.337 U	0.337 U	0.337 U	0.337 U	0.337 U	0.337 U	0.337 U
Dibromochloromethane	ug/L	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U
Dichlorodifluoromethane	ug/L	0.145 U	0.145 U	0.145 U	0.145 U	0.145 U	0.145 U	0.145 U	0.145 U	0.145 U	0.145 U	0.145 U	0.145 U	0.145 U	0.145 U
Ethylbenzene	ug/L	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U
Isopropylbenzene (Cumene)	ug/L	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Methyl Acetate	ug/L	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U	0.159 U
Methylcyclohexane	ug/L	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U	0.143 U
Methylene chloride	ug/L	0.149 U	0.149 U	0.149 U	0.149 U	0.149 U	0.149 U	0.149 U	0.149 U	0.149 U	0.149 U	0.149 U	0.149 U	0.149 U	0.149 U
Styrene	ug/L	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U
Tetrachloroethene	ug/L	0.193 U	3.98 J	7.54	7.57	7.67	8.56	10	10.5	11	10.7	10.5	10.2	8.82	6.75
Toluene	ug/L	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U	0.122 U
Trichloroethene	ug/L	0.161 U	1.54 J	3.37 J	3.58 J	3.53 J	3.91 J	4.19 J	4.47 J	4.55 J	4.39 J	4.37 J	4.04 J	3.59 J	2.77 J
Trichlorofluoromethane	ug/L	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U
Trichlorotrifluoroethane	ug/L	0.158 U	0.158 U	0.158 U	0.158 U	0.158 U	0.158 U	0.158 U	0.158 U	0.158 U	0.158 U	0.158 U	0.158 U	0.158 U	0.158 U
Vinyl acetate	ug/L	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U	0.151 U
Vinyl chloride	ug/L	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U	0.127 U
Xylene (total)	ug/L	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U	0.179 U
cis-1,2-Dichloroethene	ug/L	0.103 U	0.103 U	1.82 J	2.01 J	2.01 J	2.16 J	2.33 J	2.76 J	2.75 J	2.72 J	2.76 J	2.61 J	2.2 J	1.9 J
cis-1,3-Dichloropropene	ug/L	0.124 U	0.124 U	0.124 U	0.124 U	0.124 U	0.124 U	0.124 U	0.124 U	0.124 U	0.124 U	0.124 U	0.124 U	0.124 U	0.124 U
m,p-Xylene	ug/L	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U	0.123 U
o-Xylene	ug/L	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U
tert-Butyl methyl ether (MTBE)	ug/L	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
trans-1,2-Dichloroethene	ug/L	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
trans-1,3-Dichloropropene	ug/L	0.128 U	0.128 U	0.128 U	0.128 U	0.128 U	0.128 U	0.128 U	0.128 U	0.128 U	0.128 U	0.128 U	0.128 U	0.128 U	0.128 U

Notes:

ug/L - micrograms per liter

U - result below the indicated detection limit

J - estimated concentration; result between method detection limit and reporting limit

Table 7. Historical Summary of Surface Water Quality Data, Woodall Creek Site
Atlanta, Fulton County, Georgia
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Sample Point	Analyte	9/18/2006	10/2/2006	11/14/2006	1/25/2007	2/28/2007	3/30/2007	4/30/2007	5/30/2007	6/28/2007	7/25/2007	8/23/2007	9/27/2007	7/10/2008	11/5/2008	1/14/2009	8/6/2009	4/1/2010	4/19/2012	7/18/2012	3/25/2014		10/13/2014	
																					Raw Result	Normalized for Flow	Raw Result	Normalized for Flow
Point No. 1	PCE	<5	NS	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<0.47	<0.193	<0.193	<0.193	
	1,1-DCE	<5	NS	<5	<5	<5	<5	<5	<3	<5	<3	<5	<5	<5	<5	<5	<5	<5	NS	<0.79	<0.208	<0.208	<0.208	
	cis 1,2-DCE	<5	NS	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<0.31	<0.103	<0.103	<0.103	
	TCE	<5	NS	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<0.38	<0.161	<0.161	<0.161	
Point No. 2	Methylene Chloride	<5	NS	<5	<5	<5	<5	<5	5.3	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<2.3	<0.149	<0.149	<0.149
	PCE	<5	NS	<5	1.3	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1,1-DCE	<5	NS	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	cis 1,2-DCE	<5	NS	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Point No. 3	TCE	<5	NS	<5	1.0	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	PCE	<5	NS	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1,1-DCE	<5	NS	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	cis 1,2-DCE	<5	NS	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Point No. 4	TCE	<5	NS	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	PCE	<5	NS	6.5	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1,1-DCE	<5	NS	<5	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	cis 1,2-DCE	<5	NS	<5	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Point No. 5	TCE	<5	NS	<5	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Methylene Chloride	<5	NS	<5	<5	<5	<5	<5	5.3	<5	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	PCE	<5	NS	<5	5.7	5.4	5.6	<5	5.2	<5	5.7	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1,1-DCE	<5	NS	<5	<5	<5	<5	<5	<3	<5	3.1	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Point No. 6	cis 1,2-DCE	<5	NS	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	TCE	<5	NS	<5	3.8	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Methylene Chloride	<5	NS	<5	<5	<5	<5	<5	5.3	<5	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	PCE	<5	5.9	5.8	4.9	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<0.47	4.33	1.44	3.98	0.88
Point No. 7	1,1-DCE	<5	7.4	8.2	5.0	<5	6.0	<5	5.5	5.5	4.8	8.2	11.0	<5	7.0	<5	<5	<5	NS	<0.79	<0.208	<0.208	<0.208	<0.208
	cis 1,2-DCE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<0.31	<0.103	<0.103	<0.103	<0.103
	TCE	<5	<5	<5	3.3	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<0.38	1.55	0.51	1.54	0.34
	Methylene Chloride	<5	<5	<5	<5	<5	<5	<5	6.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<2.3	<0.149	<0.149	<0.149	<0.149
Point No. 8	PCE	<5	6.0	6.9	5.8	<5	5.7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	NS	NS
	1,1-DCE	<5	6.3	8.2	5.4	<5	5.1	<5	4.8	6.0	7.0	8.9	6.9	<5	6.6	<5	<5	<5	NS	NS	NS	NS	NS	NS
	cis 1,2-DCE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS
	TCE	<5	<5	5.3	3.6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS
Point No. 9	Methylene Chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS
	PCE	6.4	13.0	11.0	12.0	7.7	12.0	5.0	6.0	<5	7.0	9.7	5.5	<5	5.1	<5	<5	5.0	NS	<0.47	NS	NS	NS	NS
	1,1-DCE	<5	5.6	7.7	5.1	<5	5.9	<5	5.2	<5	5.3	7.3	6.7	<5	6.1	<5	<5	<5	NS	<0.79	NS	NS	NS	NS
	cis 1,2-DCE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<0.31	NS	NS	NS	NS
Point No. 10	TCE	<5	8.0	7.6	7.0	5.7	9.6	<5	<5	<5	<5	5.9	<5	<5	<5	<5	<5	<5	NS	<0.38	NS	NS	NS	NS
	Methylene Chloride	<5	<5	<5	<5	<5	<5	<5	5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<2.3	NS	NS	NS	NS
	PCE	12.0	19.0	13.0	16.0	9.1	12.0	11.0	9.9	11.0	13.0	17.0	<5	9.4	12.0	8.4	6.3	7.5	<5	<0.47	7.18	2.38	7.54	1.02
	1,1-DCE	<5	<5	6.7	4.3	<5	<5	<5	3.6	<5	3.0	<5	6.7	<5	<5	<5	<5	<5	<5	<0.79	<0.208	<0.208	0.344	0.05
Point No. 9.5	cis 1,2-DCE	<5	<5	<5	2.8	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.31	0.726	0.24	1.820	0.25
	TCE	7.3	13.0	10.0	11.0	6.1	8.9	6.3	6.2	6.9	8.2	11.0	<5	5.5	7.6	5.7	<5	<5	<5	<0.38	3.44	1.14	3.37	0.46
	PCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	15.0	NS	NS	NS	NS	NS
	1,1-DCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	NS	NS	NS	NS	NS
Point No. 10.5	cis 1,2-DCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS													

Table 7. Historical Summary of Surface Water Quality Data, Woodall Creek Site
Atlanta, Fulton County, Georgia
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Sample Point	Analyte	9/18/2006	10/2/2006	11/14/2006	1/25/2007	2/28/2007	3/30/2007	4/30/2007	5/30/2007	6/28/2007	7/25/2007	8/23/2007	9/27/2007	7/10/2008	11/5/2008	1/14/2009	8/6/2009	4/1/2010	4/19/2012	7/18/2012	3/25/2014		10/13/2014	
																					Raw Result	Normalized for Flow	Raw Result	Normalized for Flow
Point No. 13	PCE	NS	25.0	38.0	23.0	30.0	28.0	27.0	NS	16.0	35.0	NS	35.0	NS	NS	NS	NS	13.0	15.0	NS	8.98	2.98	10.00	1.35
	1,1-DCE	NS	<5	<5	3.0	<5	<5	<5	NS	<5	<3	NS	<5	NS	NS	NS	NS	<5	<5	NS	<0.208	<0.208	<0.208	<0.208
	cis 1,2-DCE	NS	6.8	11.0	5.8	6.9	9.6	7.9	NS	8.5	6.1	NS	12.0	NS	NS	NS	NS	<5	<5	NS	1.25	0.42	2.33	0.32
	TCE	NS	20.0	26.0	19.0	20.0	22.0	17.0	NS	10.0	18.0	NS	22.0	NS	NS	NS	NS	8.6	7.6	NS	4.22	1.40	4.19	0.57
Point No. 14	PCE	NS	23.0	38.0	26.0	28.0	27.0	NS	13.0	NS	NS	23.0	NS	21.0	17.0	18.0	17.0	14.0	16.0	<0.47	9.73	3.23	10.50	1.42
	1,1-DCE	NS	<5	<5	2.7	<5	9.2	NS	9.2	NS	NS	<5	NS	<5	<5	<5	<5	<5	<5	<0.79	<0.208	<0.208	<0.208	<0.208
	cis 1,2-DCE	NS	6.4	11.0	6.4	6.8	<5	NS	6.6	NS	NS	8.9	NS	6.3	5.7	<5	9.6	<5	<5	<0.31	1.25	0.42	2.76	0.37
	TCE	NS	19.0	26.0	20.0	19.0	21.0	NS	9.1	NS	NS	15.0	NS	12.0	13.0	12.0	12.0	9.7	8.0	<0.38	4.37	1.45	4.47	0.60
Point No. 15	PCE	NS	28.0	39.0	26.0	34.0	29.0	22.0	NS	14.0	33.0	NS	28.0	NS	NS	NS	NS	NS	15.0	NS	11.1	3.69	11.0	1.49
	1,1-DCE	NS	<5	<5	2.8	<5	<5	<5	NS	<5	<3	NS	<5	NS	NS	NS	NS	NS	<5	NS	<0.208	<0.208	<0.208	<0.208
	cis 1,2-DCE	NS	7.4	12.0	6.4	8.0	9.4	7.1	NS	7.1	5.7	NS	10.0	NS	NS	NS	NS	NS	<5	NS	1.52	0.50	2.75	0.37
	TCE	NS	19.0	27.0	20.0	22.0	21.0	14.0	NS	9.5	17.0	NS	19.0	NS	NS	NS	NS	NS	6.9	NS	4.36	1.45	4.55	0.62
Point No. 16	PCE	NS	24.0	41.0	26.0	34.0	30.0	NS	15.0	NS	NS	17.0	NS	23.0	33.0	21.0	18.0	NS	16.0	<0.47	11.30	3.75	10.70	1.45
	1,1-DCE	NS	<5	<5	2.7	<5	<5	NS	<3	NS	NS	<5	NS	<5	<5	<5	<5	NS	<5	<0.79	<0.208	<0.208	<0.208	<0.208
	cis 1,2-DCE	NS	6.6	11.0	6.5	7.6	11.0	NS	5.3	NS	NS	7.1	NS	6.5	7.5	<5	9.4	NS	<5	<0.31	1.66	0.55	2.72	0.37
	TCE	NS	19.0	26.0	19.0	21.0	23.0	NS	9.3	NS	NS	11.0	NS	13.0	20.0	13.0	12.0	NS	6.8	<0.38	4.65	1.54	4.39	0.59
Point No. 17	PCE	NS	NS	NS	NS	NS	NS	30	14.0	12.0	30.0	16.0	25.0	21.0	29.0	20.0	18.0	13.0	16.0	NS	11.3	3.75	10.5	1.42
	1,1-DCE	NS	NS	NS	NS	NS	NS	<5	<3	<5	<3	<5	<5	<5	<5	<5	<5	<5	<5	NS	<0.208	<0.208	<0.208	<0.208
	cis 1,2-DCE	NS	NS	NS	NS	NS	NS	5.8	5.8	7.1	<5	5.6	8.7	6.8	6.4	<5	9.5	<5	<5	NS	1.76	0.58	2.76	0.37
	TCE	NS	NS	NS	NS	NS	NS	16.0	8.7	7.3	15.0	10.0	15.0	12.0	19.0	12.0	11.0	8.2	6.7	NS	4.51	1.50	4.37	0.59
Point No. 18	PCE	NS	NS	NS	NS	NS	NS	21.0	14.0	12.0	17.0	17.0	22.0	NS	NS	NS	NS	NS	18.0	<0.47	10.1	3.35	10.2	1.38
	1,1-DCE	NS	NS	NS	NS	NS	NS	<5	<3	<5	<3	<5	<5	NS	NS	NS	NS	NS	<5	<0.79	<0.208	<0.208	<0.208	<0.208
	cis 1,2-DCE	NS	NS	NS	NS	NS	NS	6.6	5.0	5.3	5.7	<5	5.6	NS	NS	NS	NS	NS	5.1	<0.31	1.49	0.49	2.61	0.35
	TCE	NS	NS	NS	NS	NS	NS	13.0	8.1	6.7	11.0	9.8	13.0	NS	NS	NS	NS	NS	8.2	<0.38	4.41	1.46	4.04	0.55
Point No. 19	PCE	NS	NS	NS	NS	NS	NS	20.0	13.0	10.0	17.0	15.0	18.0	17.0	25.0	17.0	15.0	13.0	13.0	NS	10.1	3.35	8.8	1.19
	1,1-DCE	NS	NS	NS	NS	NS	NS	<5	<3	<5	<3	<5	<5	<5	<5	<5	<5	<5	<5	NS	<0.208	<0.208	1.96	0.27
	cis 1,2-DCE	NS	NS	NS	NS	NS	NS	5.8	5.1	<5	<5	<5	<5	5.4	6.2	<5	8.5	<5	<5	NS	1.39	0.46	2.20	0.30
	TCE	NS	NS	NS	NS	NS	NS	12.0	8.7	6.0	9.4	8.8	11.0	10.0	16.0	10.0	10.0	8.6	6.8	NS	4.05	1.34	3.59	0.49
Point No. PB	PCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	15.0	20.0	16.0	13.0	12.0	12.0	<0.47	6.54	2.17	6.75	0.91
	1,1-DCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	<5	<5	<5	<0.79	<0.208	<0.208	<0.208	<0.208
	cis 1,2-DCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	6.3	<5	<5	<0.31	0.925	0.31	1.900	0.26
	TCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.2	13.0	9.1	8.0	7.1	5.1	<0.38	2.72	0.90	2.77	0.37
Point No. RR	PCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11.0	15.0	12.0	8.2	NS	7.7	NS	NS	NS	NS
	1,1-DCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	<5	NS	<5	NS	NS	NS	NS
	cis 1,2-DCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	<5	NS	<5	NS	NS	NS	NS
	TCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.3	9.1	7.0	5.3	NS	<5	NS	NS	NS	NS
Point No. T1	PCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.9	12.0	9.4	6.6	NS	6.2	NS	NS	NS	NS	NS
	1,1-DCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	<5	NS	<5	NS	NS	NS	NS	NS
	cis 1,2-DCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	<5	NS	<5	NS	NS	NS	NS	NS
	TCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.5	7.8	6.1	<5	NS	<5	NS	NS	NS	NS	NS
Point No. 2R	PCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.0	6.6	6.7	<5	NS	NS	NS	NS	NS	NS
	1,1-DCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS
	cis 1,2-DCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS
	TCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS	NS
Point No. 2R500	PCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1,1-DCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	cis 1,2-DCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	TCE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Source for Pre-2014 results: Peachtree Environmental, Inc.

NOTES:

Results reported in micrograms per liter (ug/L)

< - concentration below the indicated detection limit

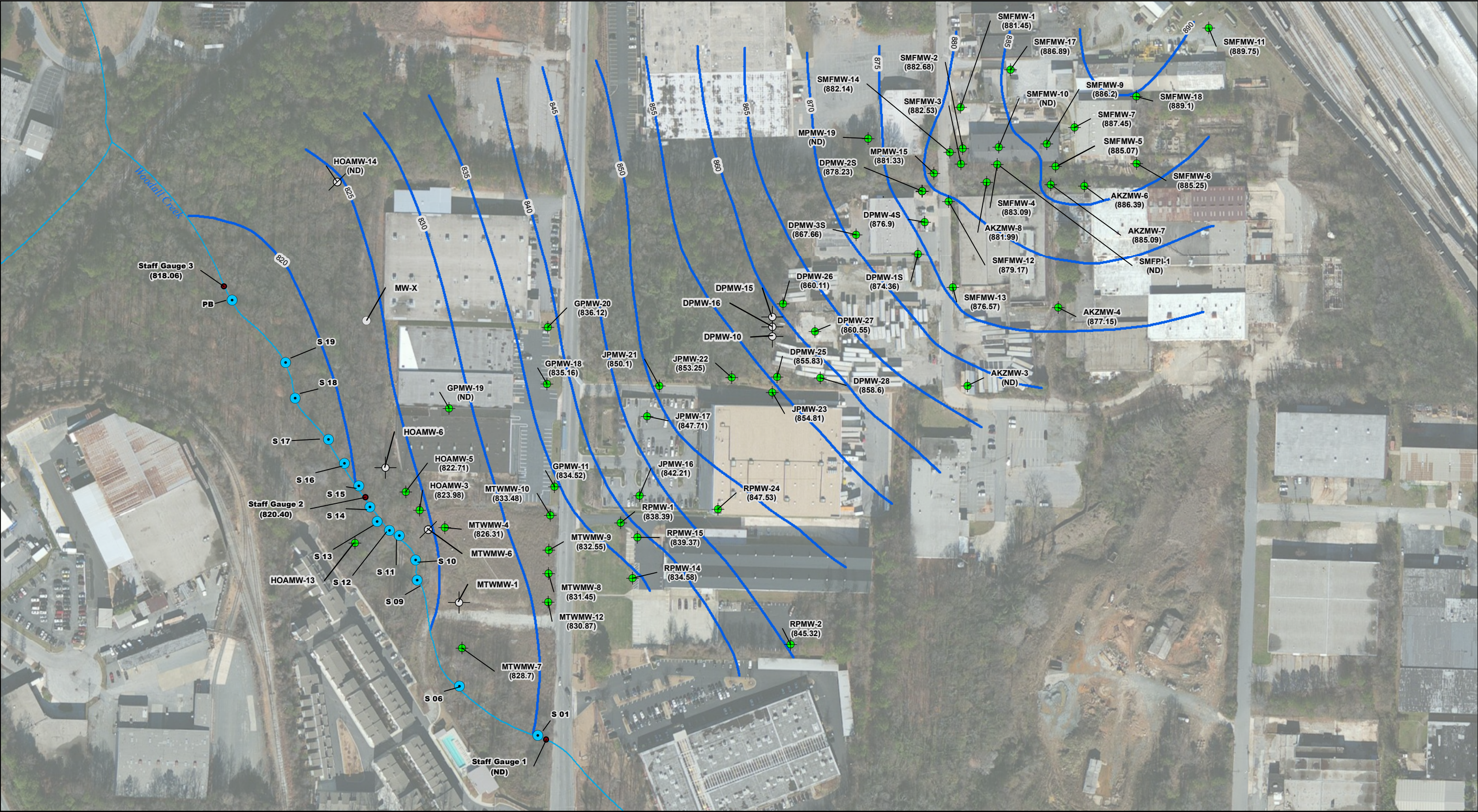
NS - Not sampled/COC was not analyzed

1 - Results normalized by multiplying raw result by ratio of instantaneous flow at time of sampling (1.3 cfs) divided by long-term annual average flow (in Woodall Creek) of 3.92 cfs

2 - Results normalized by multiplying raw result by ratio of instantaneous flow at time of sampling (0.53 cfs) divided by long-term annual average flow (in Woodall Creek) of 3.92 cfs

Underlined values denote max. detected concentration for sampling event

FIGURES



- Groundwater Monitoring Well - Recently Found, Location Approximate - Proposed Alternate, Location Approximate - Damaged Well	- Surface Water Sample Location *groundwater elevation measured in feet above mean sea level - Potentiometric Surface Elevation - Woodall Creek Staff Gauge Location	Southern Metal Finishing Company, LLC 1581 Huber Street, N.W. Atlanta, Georgia 30381-7701	N	FIGURE 1 Woodall Creek Site Potentiometric Surface Shallow Groundwater Bearing Zone, October 2014	
0 12.5 25 50 75 100 125 150 Meters 0 100 200 400 600 800 Feet				NOTES: -Base map imagery obtained through ESRI Online Services	C:\Project\Woodall Creek\mxd\Working\POT_Well\Additions\030915.mxd Date Saved: 3/11/2015 Drawn: TDN PROJ: 6122130015



 Intermediate Groundwater Monitoring Well
Semi-Annual Sampling Event - September 2014
(265) - detected concentration in parentheses as micrograms per liter, "J" suffix indicates estimated concentration
"ND" indicates constituent below detection limit. Refer to Table 3.

**Southern Metal
Finishing Company, LLC**

1581 Huber Street, N.W.
Atlanta, Georgia 30381-7701



0 12.5 25 50 75 100 125 150 Meters

0 100 200 400 600 800 Feet

**FIGURE 3
Woodall Creek Site
PCE Concentration Map September 2014
Intermediate Groundwater Bearing Zone**

NOTES:
-Base map imagery obtained through
ESRI Online Services

C:\Project\Woodall Creek\mxd\Working\Fig3_PCE_Int.mxd
Date Saved: 3/11/2015

Drawn: TDN PROJ: 6122130015



Fractured Bedrock Groundwater Monitoring Well
Semi-Annual Sampling Event - September 2014
(265) - detected concentration in parentheses as micrograms per liter, "J" suffix indicates estimated concentration
"ND" indicates constituent below detection limit. Refer to Table 3.

**Southern Metal
Finishing Company, LLC**

1581 Huber Street, N.W.
Atlanta, Georgia 30381-7701

N



0 12.5 25 50 75 100 125 150 Meters

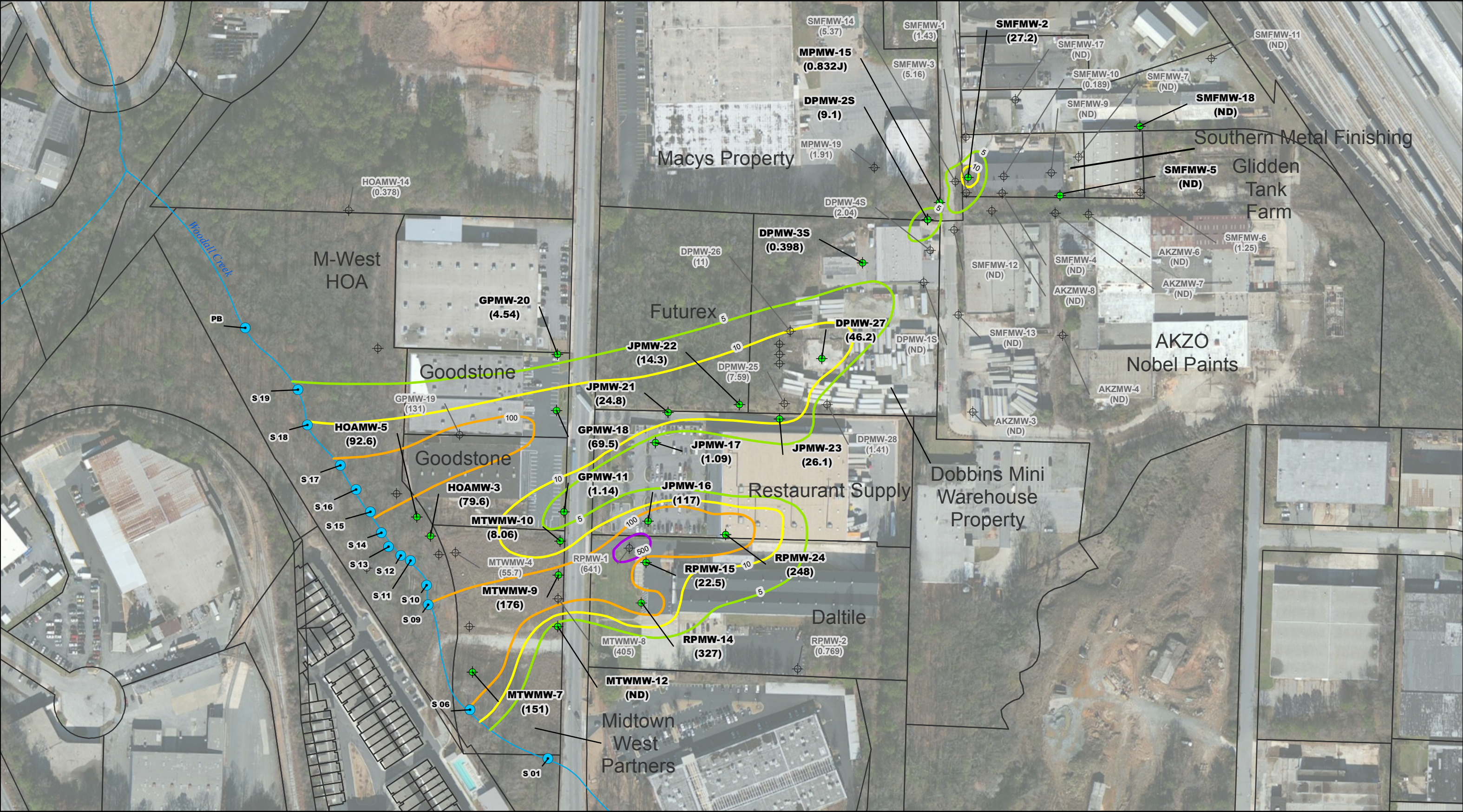
0 100 200 400 600 800 Feet

**FIGURE 4
Woodall Creek Site
PCE Concentration Map September 2014
Fractured Bedrock Groundwater Bearing Zone**

NOTES:
-Base map imagery obtained through
ESRI Online Services

C:\Project\Woodall Creek\mxd\Working\Fig4_PCE_Bedrock.mxd
Date Saved: 3/11/2015

Drawn: TDN PROJ: 6122130015



Concentration Contour (ug/L) 5 10 100 500 *contour dashed where inferred	Surface Water Sample Location Shallow Groundwater Monitoring Well Semi-Annual Sampling Event - September 2014 Shallow Groundwater Monitoring Well Baseline Sampling Event- March 2014 (265) - detected concentration in parentheses as micrograms per liter, "J" suffix indicates estimated concentration "ND" indicates constituent below detection limit. Refer to Table 3.	Southern Metal Finishing Company, LLC 1581 Huber Street, N.W. Atlanta, Georgia 30381-7701 0 7.515 30 45 60 75 90 Meters 0 62.5 125 250 375 500 Feet	FIGURE 5 Woodall Creek Site TCE Isoconcentration Map September 2014 Shallow Groundwater Bearing Zone NOTES: -Base map imagery obtained through ESRI Online Services Drawn: TDN PROJ: 6122130015
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Intermediate Groundwater Monitoring Well
Semi-Annual Sampling Event - September 2014
(265) - detected concentration in parentheses as micrograms per liter, "J" suffix indicates estimated concentration
"ND" indicates constituent below detection limit. Refer to Table 3.

**Southern Metal
Finishing Company, LLC**

1581 Huber Street, N.W.
Atlanta, Georgia 30381-7701

N



0 12.5 25 50 75 100 125 150 Meters

0 100 200 400 600 800 Feet

**FIGURE 6
Woodall Creek Site
TCE Concentration Map September 2014
Intermediate Groundwater Bearing Zone**

NOTES:

-Base map imagery obtained through
ESRI Online Services

C:\Project\Woodall Creek\mxd\Working\Fig6_TCE_Int.mxd
Date Saved: 3/11/2015

Drawn: TDN

PROJ: 6122130015



Fractured Bedrock Groundwater Monitoring Well
Semi-Annual Sampling Event - September 2014
(265) - detected concentration in parentheses as micrograms per liter, "J" suffix indicates estimated concentration
"ND" indicates constituent below detection limit. Refer to Table 3.

**Southern Metal
Finishing Company, LLC**

1581 Huber Street, N.W.
Atlanta, Georgia 30381-7701



0 12.5 25 50 75 100 125 150 Meters

0 100 200 400 600 800 Feet

**FIGURE 7
Woodall Creek Site
TCE Concentration Map September 2014
Fractured Bedrock Groundwater Bearing Zone**

NOTES:
-Base map imagery obtained through
ESRI Online Services

C:\Project\Woodall Creek\mxd\Working\Fig7_TCE_Bedrock.mxd
Date Saved: 3/11/2015

Drawn: TDN PROJ: 6122130015



Concentration Contour (ug/L) 5 10 100 500 *contour dashed where inferred	Surface Water Sample Location Shallow Groundwater Monitoring Well Semi-Annual Sampling Event - September 2014 Shallow Groundwater Monitoring Well Baseline Sampling Event- March 2014 (265) - detected concentration in parentheses as micrograms per liter, "J" suffix indicates estimated concentration "ND" indicates constituent below detection limit. Refer to Table 3.	Southern Metal Finishing Company, LLC 1581 Huber Street, N.W. Atlanta, Georgia 30381-7701	N	FIGURE 8 Woodall Creek Site cis-1,2 DCE Isoconcentration Map September 2014 Shallow Groundwater Bearing Zone
		NOTES: -Base map imagery obtained through ESRI Online Services	C:\Project\Woodall Creek\mxd\Working\Fig8_DCEShallow.mxd Date Saved: 3/11/2015	
		Drawn: TDN	PROJ: 6122130015	



Intermediate Groundwater Monitoring Well
Semi-Annual Sampling Event - September 2014
(265) - detected concentration in parentheses as micrograms per liter, "J" suffix indicates estimated concentration
"ND" indicates constituent below detection limit. Refer to Table 3.

**Southern Metal
Finishing Company, LLC**

1581 Huber Street, N.W.
Atlanta, Georgia 30381-7701



0 12.5 25 50 75 100 125 150 Meters

0 100 200 400 600 800 Feet

FIGURE 9
Woodall Creek Site
cis-1,2 DCE Concentration Map September 2014
Intermediate Groundwater Bearing Zone

NOTES:
-Base map imagery obtained through
ESRI Online Services

C:\Project\Woodall Creek\Imxd\Working\Fig9_DCE_Int.mxd
Date Saved: 3/11/2015

Drawn: TDN PROJ: 6122130015



Fractured Bedrock Groundwater Monitoring Well
Semi-Annual Sampling Event - September 2014
(265) - detected concentration in parentheses as micrograms per liter, "J" suffix indicates estimated concentration
"ND" indicates constituent below detection limit. Refer to Table 3.

**Southern Metal
Finishing Company, LLC**

1581 Huber Street, N.W.
Atlanta, Georgia 30381-7701

N



0 12.5 25 50 75 100 125 150 Meters

0 100 200 400 600 800 Feet

**FIGURE 10
Woodall Creek Site
cis-1,2 DCE Concentration Map September 2014
Fractured Bedrock Groundwater Bearing Zone**

NOTES:

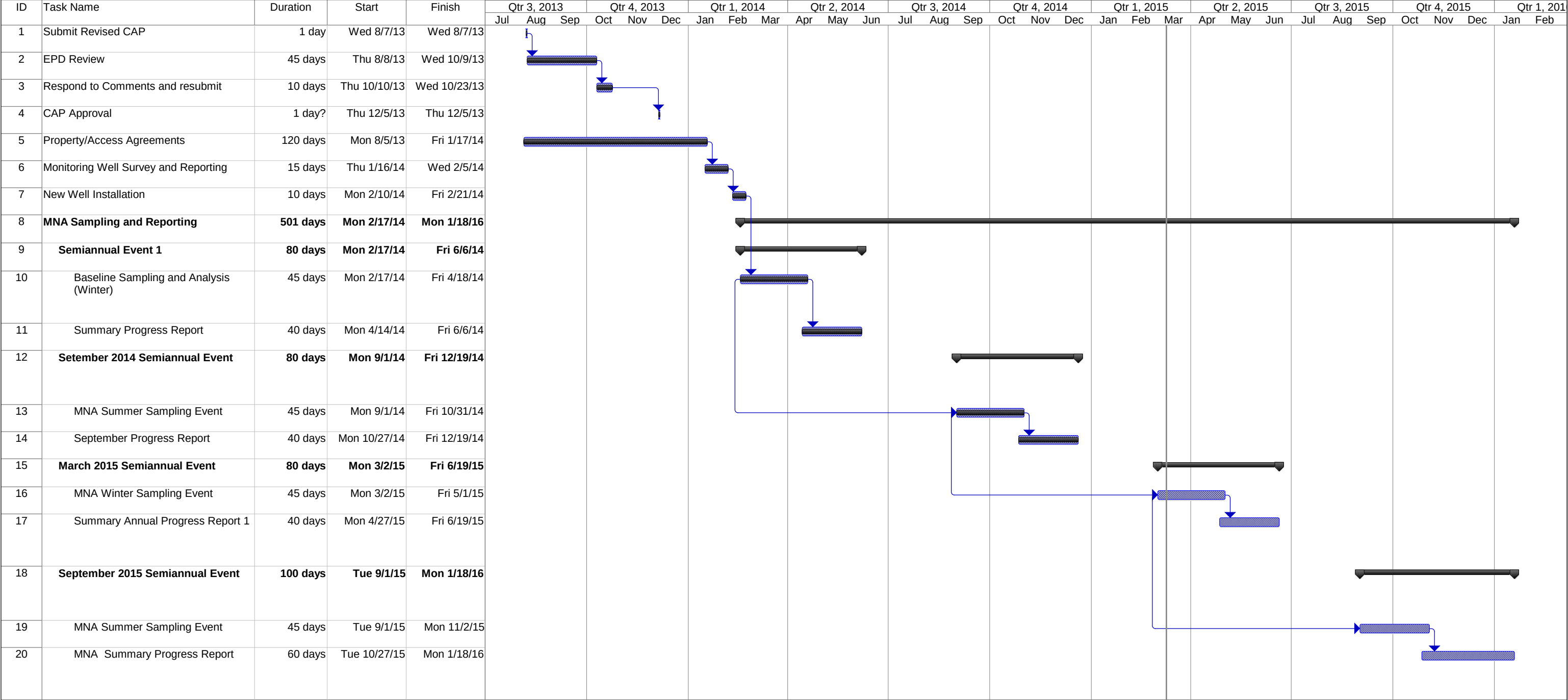
-Base map imagery obtained through
ESRI Online Services

C:\Project\Woodall Creek\mxd\Working\Fig10_DCE_Bedrock.mxd
Date Saved: 3/11/2015

Drawn: TDN

PROJ: 6122130015

Figure 11
CAP Implementation Schedule
Updated December 2014



Project: Figure 5 schedule 12.2014
Date: Tue 3/10/15

Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Progress	
Split		External Tasks		Inactive Summary		Manual Summary		Deadline	
Milestone		External Milestone		Manual Task		Start-only			
Summary		Inactive Task		Duration-only		Finish-only			

APPENDIX A
GROUNDWATER SAMPLING LOGS



GROUNDWATER SAMPLING LOG

Page 1 of 1

CLIENT: Southern metals LOCATION: Daltile Property DATE: 9/30/14
WELL NO. RPMW-2 WEATHER: Sun ~75°F SAMPLE TIME: _____

REMARKS: Sediment clogging pump SAMPLER(S): Tela Noreikas
Cannot sample with bladder pump

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 25.7 ft. WELL DEPTH: 29 ft.
LENGTH OF SATURATED ZONE: 3.3 linear ft. ONE WELL VOLUME: _____ gals.
THREE WELL VOLUMES = _____ gals. ACTUAL VOLUME EVACUATED: _____ gals.
PURGE METHOD: _____ DEPTH OF PUMP INTAKE: ~27 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
<u>1230</u>								<u>25.7</u>	<u>Pump Start</u>
									<u>Cleared pump of sediment</u>
									<u>Cannot sample well with bladder pump -</u>
									<u>Screen repeatedly clogs with sediment</u>
									<u>Only sediment in well.</u>

SAMPLE WITHDRAWAL METHOD: Bladder Pump

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

No Samples collected

SAMPLE ID
NUMBER(s): RPMW-2

DECON METHOD: Liquinox / DI

PURGE WATER MANAGEMENT: Containerized

SAMPLES DELIVERED TO: GCAL, Atlanta, GA

TRANSPORTER: GCAL

DATE: 9-30-14

TIME: ~1100

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page 1 of 1

CLIENT: S. Metals LOCATION: Southern Metals DATE: 9/16/14
WELL NO. SMFPI-1 WEATHER: overcast ~75°F Humid SAMPLE TIME: 1120
REMARKS: Horiba (Handset: 12126628) SAMPLER(S): T. Noreika
D. Morris

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 116.29 ft. WELL DEPTH: 35 ft.
LENGTH OF SATURATED ZONE: 18.71 linear ft. ONE WELL VOLUME: 2.9 gals.
THREE WELL VOLUMES = 8.7 gals. ACTUAL VOLUME EVACUATED: 1.9 gals.
PURGE METHOD: Bladder Pump (002056 motor: 04542) DEPTH OF PUMP INTAKE: 30 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm) mg/L	flow rate (ml/min)	draw down (ft)	COMMENTS
0950								116.35	
1000	20.84	5.43	0.0	0.455	231	2.74	70	116.45	
1010	20.08	5.46	0.0	0.473	252	2.38	75	116.49	
1020	19.88	5.45	0.0	0.476	253	2.24	75	116.49	
1030	19.94	5.42	0.0	0.471	254	2.11	75	116.5	
1040	19.95	5.44	0.0	0.469	252	1.96	75	116.5	
1050	20.00	5.44	0.0	0.466	252	1.95	75	116.5	
1100	20.05	5.43	0.0	0.465	252	1.90	75	116.5	
1110	20.14	5.41	0.0	0.464	254	1.90	75	116.5	
1120	20.14	5.44	0.0	0.466	253	1.89	75	116.5	

SAMPLE WITHDRAWAL METHOD: Pump

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Sulfate, Nitrate, Sulfide, Chloride / Sulfate Ferrous Iron: 0.0 mg/l
VOC, Methane / Ethane / Ethene, TDC

SAMPLE ID
NUMBER(s): SMFPI-1DECON METHOD: Liquinox / DI rinsePURGE WATER MANAGEMENT: ContainerizedSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9/16/14TIME: 1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page 1 of 4

CLIENT: S. Metals LOCATION: Southern Metals DATE: 9/16/14
WELL NO. SMFDR-2 WEATHER: overcast ~80°F Humid SAMPLE TIME: 1250 9/17/14
REMARKS: Sample collected 9/17/14 SAMPLER(S): T. Noreikas

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 11.8 ft. WELL DEPTH: 42 ft.
LENGTH OF SATURATED ZONE: 30.2 linear ft. ONE WELL VOLUME: 4.8 gals. Well pumped
THREE WELL VOLUMES = 14.4 gals. ACTUAL VOLUME EVACUATED: — gals. over 2 day
PURGE METHOD: Bladder Pump (motor: 04542) DEPTH OF PUMP INTAKE: 40.75 ft. period

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm) mg/L	flow rate (ml/min)	draw down (ft)	COMMENTS
1330								11.77	
1332	21.76	5.88		0.390	229	4.30	70	12.6	- Pump slowed
1352	22.20	5.96		0.277	198	3.23	250	15.45	- Well not
1400	21.93	5.32	232	0.189	249	5.33	250	19.4	recharging..
1420	21.93	5.32	232	0.207	252	0.84	250	21.0	Pumping 3
1430									volumes +
									sampling
Pump Stopped to continue 9/17/14									
to achieve 3 well total continuous well volumes									

SAMPLE WITHDRAWAL METHOD: Pump (Bladder: 002056 motor 04542)

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

nitrate, Sulfide, Chloride/Sulfate Ferrous: 0.0 mg/L
VOCs, TOC, methane/Ethane/Ethene Iron

SAMPLE ID
NUMBER(s): SMFDR-2

DECON METHOD: liguinox / DI rinse

PURGE WATER MANAGEMENT: Containerized

SAMPLES DELIVERED TO: GCAL, Atlanta, GA

DATE: 9/16/14 9/17/14

TRANSPORTER: GCAL

TIME: 1700 1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page 2 of 3 ⁴

CLIENT: _____ LOCATION: * See Page 1 * DATE: 9/17/14
WELL NO. SmFDR-2 WEATHER: _____ SAMPLE TIME: _____
REMARKS: _____ SAMPLER(S): _____

WELL PURGING: WELL DIAMETER: _____ in. STATIC WATER LEVEL: _____ ft. WELL DEPTH: _____ ft.
LENGTH OF SATURATED ZONE: _____ linear ft. ONE WELL VOLUME: _____ gals.
THREE WELL VOLUMES = _____ gals. ACTUAL VOLUME EVACUATED: _____ gals.
PURGE METHOD: _____ DEPTH OF PUMP INTAKE: _____ ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0915								12.7	
0925	21.03	5.96		0.542	200	3.55	190	13.5	
0935	20.89	5.93		0.546	212	3.11	80	14.5	Clear sediment from flow cell
0945	20.44	5.62	0.77	0.277	240	5.60		15.5	Flow cell not filled
0950	20.66	6.10	206	0.540	232	2.57	70	15.5	
1000	20.25	6.02	208	0.545	234	1.79	60	15.5	
1010	19.90	5.90	412	0.577	252	0.54	60	15.5	
1020	20.08	5.91	334	0.574	253	0.51	60	15.5	
1030	20.23	5.88	641	0.574	255	0.48	60	15.5	

SAMPLE WITHDRAWAL METHOD: Bladder Pump (CPM4/Discharge 2.5 / ~20 psi / 50 ft)
range → 3.0-210

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Nitrate, Chloride/Sulfate, Sulfide

Methane/Ethane/Ethene, VOC's, TOC

SAMPLE ID

NUMBER(s): _____

DECON METHOD: _____

PURGE WATER MANAGEMENT: _____

SAMPLES DELIVERED TO: GCAL, Atlanta, GA

TRANSPORTER: GCAL

DATE: _____

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page 3 of 4

CLIENT: _____ LOCATION: _____ DATE: _____
WELL NO. SMFDR-2 WEATHER: _____ SAMPLE TIME: 9/17/14 1250
REMARKS: _____ SAMPLER(S): _____

WELL PURGING: WELL DIAMETER: _____ in. STATIC WATER LEVEL: _____ ft. WELL DEPTH: _____ ft.
LENGTH OF SATURATED ZONE: _____ linear ft. ONE WELL VOLUME: _____ gals.
THREE WELL VOLUMES = _____ gals. ACTUAL VOLUME EVACUATED: _____ gals.
PURGE METHOD: _____ DEPTH OF PUMP INTAKE: _____ ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1040	20.14	5.88	819	0.568	259	0.41	60	15.5	
1050	20.06	5.89	727	0.564	263	0.23	60	15.5	
1106	20.08	5.89	820	0.568	265	0.27	60	15.5	
1110	20.15	5.87	961	0.567	266	0.27	60	15.5	
1120	20.17	5.88	* turned pump up to get 3 volumes						
1130	18.38	5.82	604	0.564	281	0.40	500	22.4	
1140	18.37	5.83	315	0.567	277	0.70	600	25	
1150	18.38	5.87	231	0.544	274	1.10	600	29.7	
1200	18.37	5.97	231	0.542	277	0.95	600	34	

3 ga
4.6 ga
6.2
7.8

SAMPLE WITHDRAWAL METHOD: _____
LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

SAMPLE ID
NUMBER(s): SMFDR-2

DECON METHOD: _____

PURGE WATER MANAGEMENT: _____

SAMPLES DELIVERED TO: GCAL, Atlanta, GA

TRANSPORTER: GCAL

DATE: _____

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: S. Metals LOCATION: Southern Metals DATE: 9-17-14
WELL NO. SMFDR-2 WEATHER: Sun ~78°F SAMPLE TIME: ~~1250~~ 1250
REMARKS: well pumped dry @ 1230
Allowed to recharge + sampled 1250 SAMPLER(S): ~~1250~~ 1250 Norelka

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: _____ ft. WELL DEPTH: 42 ft.
LENGTH OF SATURATED ZONE: _____ linear ft. ONE WELL VOLUME: _____ gals.
THREE WELL VOLUMES = 14.4 gals. ACTUAL VOLUME EVACUATED: _____ gals.
PURGE METHOD: _____ DEPTH OF PUMP INTAKE: _____ ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm) mg/L	flow rate (ml/min)	draw down (ft)	COMMENTS
<u>1210</u>	<u>18.52</u>	<u>6.01</u>	<u>289</u>	<u>0.545</u>	<u>277</u>	<u>0.84</u>	<u>600</u>	<u>38.3</u>	
<u>1220</u>	<u>18.65</u>	<u>6.01</u>	<u>411</u>	<u>0.558</u>	<u>279</u>	<u>1.19</u>	<u>600</u>		<u>well dry</u>
<u>1230</u>	<u>Allow for re-charge + sample</u>								
<u>1240</u>									
<u>1250</u>									
<u>1250</u>	<u>Sample collected</u>								

SAMPLE WITHDRAWAL METHOD: Pump

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

see page 1SAMPLE ID
NUMBER(s): SMFDR-2DECON METHOD: liquinox / DI rinsePURGE WATER MANAGEMENT: ContainerizedSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9-17-14TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page 1 of 1

CLIENT: Southern Metals LOCATION: Macy's Property DATE: 9/18/14
WELL NO. MPMW-15 WEATHER: Sun ~75°F SAMPLE TIME: 1100
REMARKS: Horiba (Handset Sonde ID: 0126628) SAMPLER(S): T. Nor

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 15.2 ft. WELL DEPTH: 18.1 ft.
LENGTH OF SATURATED ZONE: 2.8 linear ft. ONE WELL VOLUME: .01 gals.
THREE WELL VOLUMES = 1.32 gals. ACTUAL VOLUME EVACUATED: 2.9 gals.
PURGE METHOD: Bladder Pump DEPTH OF PUMP INTAKE: 17 ft.

WELL PURGE DATA: (ID: 002054)
motor: 04542

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0943									Pump Start
0950	21.35	6.19	0.0	0.271	-47	0.53	130	15.2	
1000	21.64	6.23	104	0.245	-31	4.55	130	15.2	
1010	22.04	6.16	89.3	0.222	-9	3.61	130	15.2	
1020	22.04	6.04	71.8	0.207	7	2.3	130	15.2	
1030	22.12	6.16	62.8	0.204	6	4.55	130	15.2	
1040	22.27	6.24	59.3	0.200	8	4.25	130	15.2	
1050	22.45	6.29	63.1	0.199	11	4.36	130	15.2	
1100	22.62	6.27	45.3	0.201	9	4.31	130	15.2	11,310 ml

SAMPLE WITHDRAWAL METHOD: Bladder Pump (CPM3/Discharge 4.0/~10 PSI)

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Nitrate, Chloride/Sulfate, Sulfide, Methane/Ethane/EtheneFerrous Iron: 0.0VOC, TOCSAMPLE ID
NUMBER(s): MPMW-15DECON METHOD: Liquinox / DI rinsePURGE WATER MANAGEMENT: ContainerizedSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9/18/14TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page 1 of 1

CLIENT: S Metals LOCATION: Southern Metals DATE: 9/18/14
WELL NO. SmFMW-2 WEATHER: Sun ~79°F SAMPLE TIME: 1330
REMARKS: Horiba (Handset Sonde: K126628) SAMPLER(S): T. Noreikas

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 17.96 ft. WELL DEPTH: 29 ft.
LENGTH OF SATURATED ZONE: 11.04 linear ft. ONE WELL VOLUME: 1.7 gals.
THREE WELL VOLUMES = 5.1 gals. ACTUAL VOLUME EVACUATED: 2.21 gals.
PURGE METHOD: Bladder Pump (062056) DEPTH OF PUMP INTAKE: 21.5 ft.

WELL PURGE DATA:

motor ~~compressor~~: 04542

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
<u>1215</u>								<u>17.95</u>	
<u>1220</u>	<u>24.56</u>	<u>4.69</u>	<u>27.7</u>	<u>0.229</u>	<u>278</u>	<u>4.08</u>	<u>100</u>	<u>18.1</u>	
<u>1230</u>	<u>24.58</u>	<u>4.67</u>	<u>52.3</u>	<u>0.236</u>	<u>285</u>	<u>4.03</u>	<u>100</u>	<u>18.1</u>	
<u>1240</u>	<u>24.66</u>	<u>4.54</u>	<u>27.7</u>	<u>0.242</u>	<u>318</u>	<u>3.75</u>	<u>100</u>	<u>18.1</u>	
<u>1250</u>	<u>25.20</u>	<u>4.48</u>	<u>5.01</u>	<u>0.235</u>	<u>332</u>	<u>3.35</u>	<u>100</u>	<u>18.1</u>	
<u>1300</u>	<u>25.99</u>	<u>4.43</u>	<u>0.30</u>	<u>0.221</u>	<u>338</u>	<u>3.08</u>	<u>100</u>	<u>18.1</u>	
<u>1310</u>	<u>26.30</u>	<u>4.47</u>	<u>0.00</u>	<u>0.220</u>	<u>337</u>	<u>2.98</u>	<u>100</u>	<u>18.1</u>	
<u>1320</u>	<u>26.79</u>	<u>4.50</u>	<u>0.0</u>	<u>0.219</u>	<u>337</u>	<u>2.96</u>	<u>100</u>	<u>18.1</u>	
<u>1330</u>	<u>26.80</u>	<u>4.49</u>	<u>0.0</u>	<u>0.220</u>	<u>340</u>	<u>2.96</u>	<u>100</u>	<u>18.1</u>	

SAMPLE WITHDRAWAL METHOD:

(CPM2/Discharge 3.0/~15 PSI)

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ferrous Iron: 0.0 mg/LVOC's, TOC'sNitrate, Sulfide, Methane, Ethane, Ethene, Chloride/SulfateSAMPLE ID NUMBER(s): SmFMW-2DECON METHOD: DI/LiquinoxPURGE WATER MANAGEMENT: ContainerizedSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9/18/14TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page 1 of 1

CLIENT: Southern Metals LOCATION: Southern Metals DATE: 9/19/14
WELL NO. 8mFMW-18 WEATHER: Sun ~72°F SAMPLE TIME: 1100
REMARKS: Bladder → Controller: 002056
Horiba (P1266028) compressor: 045412 SAMPLER(S): T. Noreikas

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 22.2 ft. WELL DEPTH: 30 ft.
LENGTH OF SATURATED ZONE: 7.8 linear ft. ONE WELL VOLUME: 1.24 gals.
THREE WELL VOLUMES = 3.72 gals. ACTUAL VOLUME EVACUATED: 3.9 gals.
PURGE METHOD: Bladder Pump DEPTH OF PUMP INTAKE: 25 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0930 0915								<u>22.2</u>	
									<u>Pump Start</u>
0935	19.84	7.82	372	8.38	132	5.98	200	22.4	
0945	19.85	7.84	164	8.48	129	5.46	150	22.4	
0955	19.87	8.0	164	8.89	121	4.08	150	22.4	
1005	19.54	8.0	38.5	8.78	120	3.67	150	22.4	
1015	19.55	7.94	38.5	8.62	123	3.30	150	22.4	
1025	19.55	7.95	29.5	8.51	124	3.06	150	22.4	
1035	19.54	7.92	26.7	8.46	125	2.85	150	22.4	
1045	19.54	7.93	25.2	8.42	124	2.82	150	22.4	
1055	19.54	7.93	25.2	8.45	126	2.82	150	22.4	

SAMPLE WITHDRAWAL METHOD: bladder pump (CPM 4 / Discharge 2.5 / ~23 PSI)

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Nitrate, Chloride / Sulfate, Sulfide, Methane / Ethane / Ethene
VOC, TOC Ferrous Iron: 0.0 mg / L

SAMPLE ID
NUMBER(s): 8mFMW-18DECON METHOD: liquinox / DI rinsePURGE WATER MANAGEMENT: ContainerizedSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9/18/14TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: Southern Metals LOCATION: Dobbins DATE: 9-23-14
WELL NO. Dmmw-2I WEATHER: Sun ~70°F SAMPLE TIME: 1100
REMARKS: Sonde: 028361
Handset: 028362 SAMPLER(S): Noreikas
10 ft Screen

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 18.4 ft. WELL DEPTH: 50 ft.
LENGTH OF SATURATED ZONE: 26.6 linear ft. ONE WELL VOLUME: 4.2 gals.
THREE WELL VOLUMES = 12.6 gals. ACTUAL VOLUME EVACUATED: 2.15 gals.
PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 45 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0925								18.4	
0935	21.50	5.60	3.7	0.344	303	3.79	120	18.8	
0945	21.85	5.63	3.2	0.348	324	2.93	110	18.7	88004
0955	22.08	5.66	2.3	0.349	319	3.68	110	18.7	
1005	22.16	5.68	0.0	0.352	317	4.89	110	18.7	
1015	23.26	5.67	0.0	0.352	328	3.28	110	18.7	
1025	23.58	5.67	0.0	0.351	339	2.09	110	18.7	
1035	23.34	5.69	0.0	0.351	328	2.24	110	18.7	
1045	23.26	5.70	0.0	0.351	318	2.42	110	18.7	
1055	22.07	5.69	0.0	0.348	322	2.37	110	18.7	

SAMPLE WITHDRAWAL METHOD: Soda straw

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ferrous Iron: 0.0 mg/LNitrate, Chloride / SulfateSulfide, Methane / EtheneVOC, TOCSAMPLE ID
NUMBER(s): DPMW-2IDECON METHOD: Liquinox / DIPURGE WATER MANAGEMENT: ContainerizedSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9-23-14TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: Southern Metals LOCATION: Dobbins DATE: 9/23/14
WELL NO. DPMW-2S WEATHER: Sun ~70°F SAMPLE TIME: 1045
REMARKS: Handset sonde # R126628 Dine 10 SAMPLER(S): T. Noreikas
10 ft. Screen

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 16.72 ft. WELL DEPTH: 24.3 ft.
LENGTH OF SATURATED ZONE: 7.4 linear ft. ONE WELL VOLUME: 1.21 gals.
THREE WELL VOLUMES = 3.4 gals. ACTUAL VOLUME EVACUATED: 3.4 gals.
PURGE METHOD: Bladder (002056 motor: 04542) DEPTH OF PUMP INTAKE: ~19.3 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0920	Pump Start								
0925	19.59	5.77	457	0.457	208	3.21	140	16.7	
0935	19.59	5.99	396	0.212	197	2.40	140	17.0	
0945	19.97	6.08	253	0.199	188	2.13	140	17.0	
0955	20.03	6.15	95.7	0.1	185	1.97	140	17.0	
1005	20.03	6.17	82.5	0.197	181	1.89	140	17.0	
1015	20.32	6.20	73.2	0.195	176	1.68	140	17.0	
1025	20.42	6.22	60.0	0.195	169	1.55	140	17.0	
1035	20.46	6.22	43.7	0.195	170	1.55	140	17.0	
1045	20.51	6.19	40.0	0.195	170	1.56	140	17.0	

SAMPLE WITHDRAWAL METHOD: Bladder Pump (CPM) / Discharge 3.0 / ~17 PSI

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Nitrate, Chloride, Sulfate, Sulfide, VOC, TOC, methane, Ethane, Ethene
Ferrous Iron: 0.0 mg/L

SAMPLE ID
NUMBER(s): DPMW-2S

DECON METHOD: Liquinox / DI rinse

PURGE WATER MANAGEMENT: Containerized

SAMPLES DELIVERED TO: GCAL, Atlanta, GA

TRANSPORTER: GCAL

DATE: 9/23/14

TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: Southern Metals LOCATION: Daltile Property DATE: 9/24/14
WELL NO. RPMW-15 WEATHER: Sun ~60°F SAMPLE TIME: 1040
REMARKS: 30 ft. Screen Sonde: 028361 Pine ID#
Handset: 028362 SAMPLER(S): +rela Norcikas

WELL PURGING:

WELL DIAMETER: 2 in. STATIC WATER LEVEL: 21.03 ft. WELL DEPTH: 50 ft.
LENGTH OF SATURATED ZONE: 28.87 linear ft. ONE WELL VOLUME: 4.5 gals.
THREE WELL VOLUMES = 13.6 gals. ACTUAL VOLUME EVACUATED: 1.97 gals.
PURGE METHOD: Bladder (002056 motor: 04542) DEPTH OF PUMP INTAKE: 30 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0910	Pump Start								
0915	18.90	5.27	370	0.269	334	2.97	80	11.63	
0925	20.91	5.58	380	0.253	302	1.93	80	11.7	
0935	21.15	5.59	263	0.251	286	1.56	80	11.7	
0945	21.28	5.59	231	0.250	271	1.40	80	11.7	
0955	21.57	5.60	169	0.246	265	1.27	80	11.7	
1005	21.77	5.60	150	0.244	262	1.14	80	11.7	
1015	22.05	5.60	133	0.245	260	1.10	80	11.7	
1025	22.32	5.60	122	0.244	258	1.01	80	11.7	
1035	22.32	5.60	122	0.244	258	1.01	80	11.7	

SAMPLE WITHDRAWAL METHOD: Bladder Pump

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Nitrate, Chloride, Sulfate, Sulfide, VDC, TDC, Methane, Ethene, Ethane
Ferrous Iron: 0.0 mg/L

SAMPLE ID NUMBER(S): RPMW-15DECON METHOD: DI, LiquinoxPURGE WATER MANAGEMENT: ContainerizedSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9/24/14TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

Controller ID: 002056



GROUNDWATER SAMPLING LOG

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CLIENT: Southern metals LOCATION: Restaurant Property DATE: 9-24-14
WELL NO. JPMW-21 WEATHER: Sun ~73°F SAMPLE TIME: 1305
REMARKS: 30ft. well screen Sonde ID: 028361 Handset ID: 028362 SAMPLER(S): Tioreikas

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 8.7 ft. WELL DEPTH: 39 ft.
LENGTH OF SATURATED ZONE: 30.3 linear ft. ONE WELL VOLUME: 4.8 gals.
THREE WELL VOLUMES = 14.4 gals. ACTUAL VOLUME EVACUATED: 2.9 gals.
PURGE METHOD: Bladder Pump (controller: 002056) DEPTH OF PUMP INTAKE: 24 ft.
(motor: 04542)

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm) mg/L	flow rate (ml/min)	draw down (ft)	COMMENTS
<u>1150</u>		<u>Pump Start</u>						<u>8.69</u>	
<u>1200</u>	<u>23.21</u>	<u>5.62</u>	<u>514</u>	<u>0.218</u>	<u>329</u>	<u>3.76</u>	<u>125</u>	<u>8.8</u>	
<u>1210</u>	<u>23.24</u>	<u>5.61</u>	<u>712</u>	<u>0.204</u>	<u>350</u>	<u>2.34</u>	<u>125</u>	<u>8.8</u>	
<u>1220</u>	<u>23.36</u>	<u>5.61</u>	<u>862</u>	<u>0.198</u>	<u>362</u>	<u>1.86</u>	<u>125</u>	<u>8.8</u>	
<u>1230</u>	<u>23.54</u>	<u>5.61</u>	<u>993</u>	<u>0.192</u>	<u>379</u>	<u>1.60</u>	<u>125</u>	<u>8.8</u>	
<u>1240</u>	<u>23.62</u>	<u>5.61</u>	<u>>1000</u>	<u>0.192</u>	<u>374</u>	<u>1.49</u>	<u>125</u>	<u>8.8</u>	<u>Clear flow cell of sediment</u>
<u>1250</u>	<u>24.16</u>	<u>5.61</u>	<u>>1000</u>	<u>0.194</u>	<u>370</u>	<u>1.32</u>	<u>125</u>	<u>8.8</u>	
<u>1300</u>	<u>24.56</u>	<u>5.61</u>	<u>>1000</u>	<u>0.194</u>	<u>369</u>	<u>1.30</u>	<u>125</u>	<u>8.8</u>	
<u>1305</u>	<u>sample collected</u>								<u>Suspected issues w/ turbidity sensor</u>

SAMPLE WITHDRAWAL METHOD: Bladder Pump (CPM4 / Discharge 2.5 / 20 PSI)

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ferrous Iron: 0.0 mg/LNitrate, Chloride, Sulfate, Sulfide, VOC, TDC, Methane, Ethene, EthaneSAMPLE ID NUMBER(S): JPMW-21DECON METHOD: Quinnox / D5PURGE WATER MANAGEMENT: ContainerizedSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9-24-14TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: metals LOCATION: Restaurant Property DATE: 9/25/14
WELL NO. JPBRW-1 WEATHER: overcast ~65°F SAMPLE TIME: 1330
REMARKS: open hole @ 147.5 ft. Horiba Handset 028361 Sonde: 028362 SAMPLER(S): T. Noreikas

WELL PURGING: WELL DIAMETER: 4 in. STATIC WATER LEVEL: 31.82 ft. WELL DEPTH: 164.5 ft.
LENGTH OF SATURATED ZONE: 132.7 linear ft. ONE WELL VOLUME: 21.2 gals.
THREE WELL VOLUMES = 63.6 gals. ACTUAL VOLUME EVACUATED: 1.46 gals.
PURGE METHOD: Bladder Pump DEPTH OF PUMP INTAKE: ~156.5 ft.

WELL PURGE DATA: (002056 motor: 04542)

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1050 1004									Pump Start
1115	22.65	11.12	6.8	0.635	-495	3.10	45	31.5	
1125	23.16	11.20	6.2	0.676	-490	1.87	45	31.53	
1135	23.56	11.32	5.4	0.683	-525	1.63	45	31.53	
1145	23.20	11.27	3.3	0.690	-588	1.19	45	31.62	
1155	23.62	11.32	2.6	0.686	-580	1.15	45	31.64	
1205	23.75	11.33	2.0	0.702	-578	1.12	45	31.64	
1215	23.95	11.35	0.7	0.791	-572	0.99	45	31.64	
1225	24.12	11.38	0.0	0.828	-563	0.86	45	31.64	
1235	24.18	11.39	0.0	0.835	-536	0.78	45	31.64	
1245	24.38	11.38	0.0	0.832	-532	0.70	45	31.64	

SAMPLE WITHDRAWAL METHOD:

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:
1255 24.51 11.38 0.0 0.833 -531 0.74 45 31.64

~~1305~~ Nitrate, Chloride/Sulfate, Sulfide, VOC, TDC, Methane, Ethane, Ethene)
SAMPLE ID NUMBER(S): JPBRW-1 Ferrous Iron: 0.0 mg/L

DECON METHOD: ~~cont~~ DI, LiquinoxPURGE WATER MANAGEMENT: ContainerizedSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9-25/14TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page 1 of 1

CLIENT: Southern Metals LOCATION: Restaurant Property DATE: 9-26-14WELL NO. JPMW-17 WEATHER: Partly cloudy ~70°F SAMPLE TIME: 4:40REMARKS: 30 ft. Screen | Horiba Handset 028361 | Sonde 028362 | ID SAMPLER(S): Noricas

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 116.29 ft. WELL DEPTH: 50 ft.
LENGTH OF SATURATED ZONE: 33.71 linear ft. ONE WELL VOLUME: 5.4 gals.
THREE WELL VOLUMES = 116.2 gals. ACTUAL VOLUME EVACUATED: 13 gals.
PURGE METHOD: Bladder Pump (motor: 002054) DEPTH OF PUMP INTAKE: 35 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0935									Pump Start
0940	21.03	5.73	216	0.424	327	5.03	165 400	16.5	
0950	21.35	5.82	399	0.266	328	8.00	400	16.5	
1000	21.54	5.82	786	0.262	335	4.63	400	16.5	
1010	21.65	5.84	>1000	0.257	343	3.68	400	16.5	
1020	21.64	5.83	>1000	0.261	345	3.68	400	16.5	
1030	21.67	5.82	963	0.258	347	3.66	400	16.5	
1040	21.75	5.81	815	0.256	348	3.59	400	16.5	
1050	21.78	5.81	759	0.254	353	3.58	400	16.5	
1100	21.88	5.81	667	0.254	354	3.52	400		
1110	21.99	5.82	526	0.243	357	3.39	400	16.5	

SAMPLE WITHDRAWAL METHOD:

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1120 22.32 5.81 463 0.243 359 3.42 400 16.5

1130 22.56 5.81 430 0.244 300 3.46 400 16.5

SAMPLE ID NUMBER(S): JPMW-17DECON METHOD: Liquinox / DI rinsePURGE WATER MANAGEMENT: ContainerizedSAMPLES DELIVERED TO: GCAL, Atlanta, GADATE: 9-26-14TRANSPORTER: GCALTIME: ~1700

Ferrous Iron: 0.0mg/L
TOC, VOC, Methane
Ethane
Sulfate
Chloride, Sulfide,
Nitrate

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

Withdrawal: Bladder Pump (CPM 4 / Discharge 3.5 / ~30 PSI)



GROUNDWATER SAMPLING LOG

Page 1 of 1

CLIENT: metals LOCATION: Restaurant Property DATE: 9-26-14
WELL NO. JPMW-16 WEATHER: cloudy
~70°F SAMPLE TIME: 1415
REMARKS: 30 ft. screen Horiba: 028361
028362 SAMPLER(S): Norckas

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 21.6 ft. WELL DEPTH: 50 ft.
LENGTH OF SATURATED ZONE: 21.6 28.4 linear ft. ONE WELL VOLUME: 4.5 gals.
THREE WELL VOLUMES = 13.5 gals. ACTUAL VOLUME EVACUATED: 3.2 gals.
PURGE METHOD: Bladder (002056 motor: 04542) DEPTH OF PUMP INTAKE: 35 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1240									Pump Start
1245	24.20	5.67	297	0.203	328	5.06	130	21.6	
1255	24.03	5.66	368	0.210	323	4.63	130	21.76	
1305	23.66	5.65	444	0.213	320	3.80	130	21.76	
1315	23.32	5.64	550	0.215	318	2.56	130	21.76	
1325	23.12	5.63	627	0.216	317	1.98	130	21.76	
1335	23.05	5.58	677	0.210	324	1.78	130	21.76	
1345	23.04	5.58	707	0.210	325	1.78	130	21.76	
1355	23.04	5.57	671	0.210	325	1.75	130	21.76	
1405	23.11	5.52	615	0.209	327	1.66	130	21.76	

SAMPLE WITHDRAWAL METHOD: Bladder Pump (CPM4 / Discharge 2.5 / ~30 PSI)

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ferrous Iron: 0.0 mg/LNitrate, Chloride, Sulfide, VOC, TOC, methane, Ethene, EthaneSAMPLE ID
NUMBER(s): JPMW-16DECON METHOD: DI / LiguinoxPURGE WATER MANAGEMENT: ContainerizedSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9-26-14TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page 1 of 1

CLIENT: Southern Metals LOCATION: Restaurant Supply DATE: 9/22/14
WELL NO. JPMW-23 WEATHER: Sunny ~76°F SAMPLE TIME: 1340
REMARKS: 30 ft. Screen Sonde 02831el Horiba Handset 02831e2 SAMPLER(S): T. Nor

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 11.64 ft. WELL DEPTH: 49 ft.
LENGTH OF SATURATED ZONE: 37.80 linear ft. ONE WELL VOLUME: 5.9 gals.
THREE WELL VOLUMES = 17.7 gals. ACTUAL VOLUME EVACUATED: 1.7 gals.
PURGE METHOD: Bladder (002050) DEPTH OF PUMP INTAKE: 35 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1220								11.6	
1225	28.16	6.08	6.15	0.0	-7	10.15		11.8	Flow Cell not
1230	27.37	5.96	437	0.057	-45	9.40	60	11.9	
1240	25.46	5.74	257	0.151	-35	8.32	60	11.8	2400
1250	25.42	5.64	235	0.171	-22	7.29	70	11.8	
1300	25.89	5.63	209	0.171	22	6.36	70	11.8	
1310	26.13	5.59	209	0.170	28	6.67	70	11.8	
1320	26.25	5.58	198	0.167	35	7.07	70	11.8	
1330	26.38	5.65	198	0.167	30	6.54	70	11.8	
1340	26.46	5.66	200	0.166	27	6.00	70	11.8	

SAMPLE WITHDRAWAL METHOD: Bladder Pump (CPRM4 / Discharge 3.0/PST-20)

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ferrous Iron: 0.0 mg/L

Nitrate, Chloride/Sulfate, Sulfide, VOC, TOC, Methane, Ethane, Ethene

SAMPLE ID NUMBER(s): JPMW-23

DECON METHOD: DI / Liquinox

PURGE WATER MANAGEMENT: Containerized

SAMPLES DELIVERED TO: GCAL, Atlanta, GA

TRANSPORTER: GCAL

DATE: 9/22/14

TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: S. Metals LOCATION: Goodstone Property DATE: 9/22/14
WELL NO. GPMW-20 WEATHER: Sun ~72°F SAMPLE TIME: 1035
REMARKS: Horiba 028361 Sonde
028362 Handset SAMPLER(S): T. Nor
screen length 30ft.

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 11.85 ft. WELL DEPTH: 40 ft.
LENGTH OF SATURATED ZONE: 28.15 linear ft. ONE WELL VOLUME: 4.5 gals.
THREE WELL VOLUMES = 13.5 gals. ACTUAL VOLUME EVACUATED: 4.3 gals.
PURGE METHOD: Bladder Pump DEPTH OF PUMP INTAKE: ~25 ft.

WELL PURGE DATA:

(002080 motor 04542)

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0905	Pump Start							11.85	
0906	21.20	5.63	>1000	0.298	172	4.08	150	11.92	
0915	20.71	5.69	>1000	0.261	170	2.91	150	11.92 11.92	
0925	19.64	5.89	>1000	0.233	150	1.20	150	11.93	Flow cell cleared of
0935	19.63	5.87	>1000	0.233	162	1.04	150	11.93	Sediment
0945	19.64	5.84	726	0.234	170	0.61	150	11.93	Turb. not reading
0955	19.65	5.84	664	0.234	170	0.63	150	11.93	
1005	19.64	5.84	499	0.234	171	0.61	150	11.93	
1015	19.65	5.83	357	0.234	171	0.58	150	11.93	
1025	19.72	5.83	325	0.234	171	0.55	150	11.93	

SAMPLE WITHDRAWAL METHOD: (Cpm4 / 20 psi / Discharge 3.5) Bladder Pump

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1035	19.75	5.84	260	0.234	171	0.50	150	11.93
1045	19.76	5.85	200	0.235	170	0.51	150	11.93
1055	19.80	5.85	185	0.235	169	0.50	150	11.93

SAMPLE ID NUMBER(s): GPMW-20DECON METHOD: Liquinox / DI rinsePURGE WATER MANAGEMENT: ContainedSAMPLES DELIVERED TO: GCAL, Atlanta, GADATE: 9-28-14TRANSPORTER: GCALTIME: ~1700

Ferrous Iron: 0.0 mg/L
VOC, TOC
Chloride Sulfate
Nitrate Sulfide
Methane
Ethane Ethene

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: Southern Metals LOCATION: MIDTOWN WEST DATE: 9-29-14
WELL NO. MTMW-8 WEATHER: overcast ~70°F SAMPLE TIME: 1105
REMARKS: 25 ft. screen Collected ms/msd SAMPLER(S): Tela Dunagan

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 15.4 ft. WELL DEPTH: 40 ft.
LENGTH OF SATURATED ZONE: 24.6 linear ft. ONE WELL VOLUME: 3.9 gals.
THREE WELL VOLUMES = 11.7 gals. ACTUAL VOLUME EVACUATED: 3.4 gals.
PURGE METHOD: Bladder Pump (14051) DEPTH OF PUMP INTAKE: ~27.5 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0940								15.4	Dump Start
0945	21.47	5.54	>1000	0.219	305	6.09	190	15.5	
0955	20.55	5.61	>1000	0.195	310	3.75	150	15.6	1200
1005	20.46	5.60	>1000	0.200	328	3.19	150	15.6	
1015	20.47	5.61	800	0.198	332	3.21	150	15.6	
1025	20.49	5.57	247	0.202	341	2.60	150	15.6	
1035	20.51	5.57	253	0.203	343	2.50	150	15.6	
1045	20.56	5.55	163	0.202	343	2.42	150	15.6	
1055	20.50	5.59	147	0.204	342	2.41	150	15.6	
1105	20.48	5.55	148	0.201	342	2.41	150	15.6	

SAMPLE WITHDRAWAL METHOD: Bladder Pump (CPM 3) Discharge 3.0 (~25 PSI)

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

ms/msd collected VOC, TOC, Ethane, Methane, Ethene
Ferrous Iron: 0.0 mg/L Chloride Sulfate, Sulfide
Nitrate

SAMPLE ID NUMBER(s): MTMW-8DECON METHOD: Liquinox / DIPURGE WATER MANAGEMENT: ContainerizedSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9-29-14TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: Southern Metals LOCATION: Restaurant Property DATE: 9-29-14
WELL NO. JPMW-22 WEATHER: overcast ~70°F SAMPLE TIME: 1450
REMARKS: 30 ft. screen Horiba Sonde 028301 Hand set 028302 SAMPLER(S): Noreikas

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 13.4 ft. WELL DEPTH: 50 ft.
LENGTH OF SATURATED ZONE: 36.6 linear ft. ONE WELL VOLUME: 5.85 gals.
THREE WELL VOLUMES = 17.4 gals. IDH ACTUAL VOLUME EVACUATED: 5.6 gals.
PURGE METHOD: Bladder Pump (H051) DEPTH OF PUMP INTAKE: ~35 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1235								13.39	
1240	21.57	5.65	463	0.203	331	5.60	140	13.5	
1250	21.35	5.63	462	0.226	368	2.30	140	13.5	
1300	21.75	5.63	347	0.219	406	1.43	140	13.5	
1310	22.14	5.63	453	0.215	409	1.34	140	13.5	
1320	22.23	5.63	568	0.213	414	1.09	140	13.5	
1330	21.78	5.63	596	0.213	389	1.62	140	13.5	
1340	21.56	5.63	658	0.214	374	1.48	140	13.5	
1350	21.17	5.63	697	0.214	365	1.86	140	13.5	
1400	20.67	5.64	744	0.215	358	1.97	140	13.5	

SAMPLE WITHDRAWAL METHOD: Bladder pump (CPM3) Discharge 3.5/~23 PSI

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1410 20.42 5.62 574 0.211 389 1.24 140 13.5

~~1420~~
~~1430~~

→ Ferrous Iron: 0.0mg/L
VOC, TOC, Chloride Sulfate,
Sulfide, Nitrate
Methane ~~ETHANE~~ Ethane
Ethene

SAMPLE ID
NUMBER(S): JPMW-22

DECON METHOD: DI/Liquinox

PURGE WATER MANAGEMENT: Containerized

SAMPLES DELIVERED TO: GCAL, Atlanta, GA

TRANSPORTER: GCAL

DATE: 9-29-14

TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: _____ LOCATION: _____ DATE: _____

WELL NO. JPMW-22 WEATHER: _____ SAMPLE TIME: _____REMARKS: See page 1 SAMPLER(S): _____**WELL PURGING:**

WELL DIAMETER: _____ in. STATIC WATER LEVEL: _____ ft. WELL DEPTH: _____ ft.

LENGTH OF SATURATED ZONE: _____ linear ft. ONE WELL VOLUME : _____ gals.

THREE WELL VOLUMES = _____ gals. ACTUAL VOLUME EVACUATED: _____ gals.

PURGE METHOD: _____ DEPTH OF PUMP INTAKE: _____ ft.

WELL PURGE DATA:

COMMENTS

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
<u>1420</u>	<u>19.18</u>	<u>5.57</u>	<u>515</u>	<u>0.201</u>	<u>445</u>	<u>0.79</u>	<u>140</u>	<u>13.5</u>	
<u>1430</u>	<u>19.82</u>	<u>5.57</u>	<u>384</u>	<u>0.203</u>	<u>470</u>	<u>0.57</u>	<u>140</u>	<u>13.5</u>	
<u>1440</u>	<u>19.89</u>	<u>5.57</u>	<u>412</u>	<u>0.203</u>	<u>485</u>	<u>0.50</u>	<u>140</u>	<u>13.5</u>	
<u>1450</u>			<u>399</u>	<u>Sample collected</u>					
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

SAMPLE WITHDRAWAL METHOD: _____

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

See page 1SAMPLE ID
NUMBER(s): _____

DECON METHOD: _____

PURGE WATER MANAGEMENT: _____

SAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCAL

DATE: _____

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: Southern metals LOCATION: midtown west DATE: 9/30/14
WELL NO. MTMW-9 WEATHER: sun 73°F SAMPLE TIME: 1140
REMARKS: 20 ft. screen Bladder Pump ID 14051 SAMPLER(S): T. Noreikas

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 15.78 ft. WELL DEPTH: 35.5 ft.
LENGTH OF SATURATED ZONE: 19.7 linear ft. ONE WELL VOLUME: 3.1 gals.
THREE WELL VOLUMES = 9.3 gals. ACTUAL VOLUME EVACUATED: 5.98 gals.
PURGE METHOD: Bladder (14051) DEPTH OF PUMP INTAKE: 25.5 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0955								15.8	Pump Start
1000	23.76	4.86	1160	1.98	303	10.28	200	15.9	
1010	23.07	5.61	338	0.214	318	8.11	200	15.9	
1020	22.68	5.60	265	0.210	323	7.12	200	15.9	
1030	22.55	5.57	236	0.208	326	6.84	200	15.9	
1040	22.59	5.54	170	0.203	329	6.27	200	15.9	
1050	22.95	5.51	139	0.202	331	5.85	200	15.9	
1100	23.20	5.49	130	0.199	331	5.34	200	15.9	
1110	23.62	5.47	114	0.199	330	5.31	200	15.9	
1120	23.81	5.46	97.0	0.198	330	5.23	200	15.9	

SAMPLE WITHDRAWAL METHOD: Bladder Pump (CPMA) / Discharge 3.5 / ~23 PSI

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1130 23.40 5.47 106 0.195 328 5.24 200 15.9

1140 22.90 5.47 101 0.195 329 5.22 200 15.9

SAMPLE ID NUMBER(S): MTMW-9DECON METHOD: DI / LiguinoxPURGE WATER MANAGEMENT: ContainerizedSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9/30/14TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

Ferric Iron: 0.0 mg/L
VOC, TOC, Nitrate
Methane, Ethane,
Ethene, Chloride,
Sulfate, Sulfide,



GROUNDWATER SAMPLING LOG

Page 1 of 1

CLIENT: Southern Metals LOCATION: Daltile DATE: 9-23-14
WELL NO. RPMW-24 WEATHER: Partly cloudy ~75°F -- 80°F SAMPLE TIME: _____
REMARKS: DUP-1 collected SAMPLER(S): T. Noreikas
30 ft. Screen

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 17.4 ft. WELL DEPTH: 50 ft.
LENGTH OF SATURATED ZONE: 32.6 linear ft. ONE WELL VOLUME: 5.2 gals.
THREE WELL VOLUMES = 15.6 gals. ACTUAL VOLUME EVACUATED: 3.38 gals.
PURGE METHOD: Bladder Pump DEPTH OF PUMP INTAKE: ~35 ft.

WELL PURGE DATA:										COMMENTS
TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)		
1235	Pump Start								17.5	
1245	28.43 27.1	5.95	>1000	0.307	339	5.07	130	17.5		
1255	25.68	5.92	0	0.318	346	3.81	130	17.5		
1305	24.41	5.88	0.0	0.326	352	2.49	130	17.5	Turbidity	
1315	24.47	5.88	0.0	0.318	351	2.45	130	17.5	is incorrect	
1325	24.61	5.89	0.0	0.317	347	2.41	130	17.5		
1335	24.99	5.90	0.0	0.310	342	2.27	130	17.5		
1345	25.21	5.92	0.0	0.304	339	2.23	130	17.5		
1355	24.96	5.93	0.0	0.300	339	2.29	130	17.5		
1405										

SAMPLE WITHDRAWAL METHOD: Bladder Pump (Cpm4 / Discharge 3.5 / ~30 PSI)

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Nitrate, Sulfide, Chloride / Sulfate, VOC, TOC, Methane, Ethene, Ethane

Ferrous Iron: 0.0 mg/L

SAMPLE ID NUMBER(S): RPMW-24

DECON METHOD: Liquinox / DI rinse

PURGE WATER MANAGEMENT: Containerized

SAMPLES DELIVERED TO: GCAL, Atlanta, GA

TRANSPORTER: GCAL

DATE: 9-23-14

TIME: ~1700

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

Horiba: sonde: U28361
Handset: 028362



GROUNDWATER SAMPLING LOG

Page 1 of 1

CLIENT: SME LOCATION: Southern Metals Finishing DATE: 9/17/14
WELL NO. SMFMW-5 WEATHER: Sunny, ~75F SAMPLE TIME: 1027
REMARKS: MP10 @ 5psi SAMPLER(S): DM

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 14.3 ft. WELL DEPTH: 26.6 ft.
LENGTH OF SATURATED ZONE: 12.3 linear ft. ONE WELL VOLUME: 1.97 gals.
THREE WELL VOLUMES = 6 gals. ACTUAL VOLUME EVACUATED: 2 gals.
PURGE METHOD: QED Sample Pro w/ MP10 DEPTH OF PUMP INTAKE: 20.5 ft.

WELL PURGE DATA:

TIME	TEMP (°C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	DTW draw down (ft)	COMMENTS
<u>0935</u>	<u>Pump On</u>								
<u>0937</u>	<u>19.20</u>	<u>4.18</u>	<u>0.0</u>	<u>0.255</u>	<u>222</u>	<u>3.95</u>	<u>72</u>	<u>14.40</u>	<u>MP10 @ 5psi, CPM6</u>
<u>0947</u>	<u>18.79</u>	<u>4.38</u>	<u>0.0</u>	<u>0.199</u>	<u>225</u>	<u>3.41</u>	<u>70</u>	<u>14.45</u>	
<u>0957</u>	<u>18.89</u>	<u>4.41</u>	<u>0.00</u>	<u>0.185</u>	<u>231</u>	<u>3.20</u>	<u>70</u>	<u>14.45</u>	
<u>1007</u>	<u>18.91</u>	<u>4.43</u>	<u>0.00</u>	<u>0.180</u>	<u>234</u>	<u>3.17</u>	<u>70</u>	<u>14.45</u>	
<u>1017</u>	<u>18.91</u>	<u>4.48</u>	<u>0.00</u>	<u>0.175</u>	<u>234</u>	<u>3.15</u>	<u>70</u>	<u>14.45</u>	
<u>1027</u>	<u>18.89</u>	<u>4.47</u>	<u>0.00</u>	<u>0.170</u>	<u>237</u>	<u>3.14</u>	<u>70</u>	<u>14.45</u>	<u>Fe²⁺ = 0.0</u>

SAMPLE WITHDRAWAL METHOD: QED Sample Pro with MP10 Controller

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

VOCs = 3-40mL Clear (HCL) VOA's, TOC = 2-40mL Amber VOA's, Met/semi/Ethane/Ethene = 2-40mL Clear VOA's
Chloride/Sulfate = 500mL Plastic (Unpreserved), Sulfide = 500mL Plastic (zinc acetate, sodium hydroxide)
Nitrate = 250mL Plastic

SAMPLE ID

NUMBER(s): SMFMW-5DECON METHOD: Liquinox Solution bath, Distilled water rinsePURGE WATER MANAGEMENT: 55 gal drumSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9/17/14

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page ____ of ____

CLIENT: SMP LOCATION: DOBBINS PROPERTY DATE: 9/18/14
WELL NO. DPMW-35 WEATHER: Sunny, ~83F SAMPLE TIME: 1330
REMARKS: _____ SAMPLER(S): DM

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 27.30 ft. WELL DEPTH: 30 ft.
LENGTH OF SATURATED ZONE: 2.7 linear ft. ONE WELL VOLUME: 0.4 gals.
THREE WELL VOLUMES = 1.3 gals. ACTUAL VOLUME EVACUATED: ~0.75 gals.
PURGE METHOD: QED Sample Pro w/ MPIO Controller DEPTH OF PUMP INTAKE: 28.80 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	<u>DTW</u> draw down (ft)	COMMENTS
<u>1040</u>	<u>Pump on @ CPM6, 27 PSI</u>								
<u>1100</u>	<u>24.70</u>	<u>5.21</u>	<u>0.00</u>	<u>0.271</u>	<u>133</u>	<u>9.38</u>	<u>30</u>	<u>28.80</u>	<u>Top of Pump</u>
<u>1120</u>	<u>26.23</u>	<u>5.05</u>	<u>0.00</u>	<u>0.262</u>	<u>134</u>	<u>9.11</u>	<u>30</u>	<u>28.80</u>	<u>Pumped dry</u>
<u>Allowed well to recharge and collected sample @ 1330 hrs</u>									<u>Fe²⁺ = 0.0</u>
	<u>R</u>								

SAMPLE WITHDRAWAL METHOD: QED Sample Pro with MPIO Controller

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

VOCs = 3-40 mL Clear VOAs (HCl), TOC = 2-40 mL Amber VOAs (HCl), Methane/Ethane/Ethene = 2-40 mL Clear VOAs (HCl)
Sulfide = 500 mL Plastic (Zinc acetate / Sodium hydroxide), Chloride/sulfate = 500 mL (Unpreserved)
Nitrate = 250 mL (Unpreserved)

SAMPLE ID

NUMBER(s): DPMW-35DECON METHOD: Liquinox solution bath, Distilled water rinsePURGE WATER MANAGEMENT: 55 gallon DrumSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9/18/14

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page ____ of ____

CLIENT: SME LOCATION: Southern Metals Finishing DATE: 9/17/14 - 9/18/14
WELL NO. SMEDR-3 WEATHER: Sunny, ~80F SAMPLE TIME: 0900
REMARKS: 6 SAMPLER(S): Dm

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 16.35 ft. WELL DEPTH: 53.5 ft.
LENGTH OF SATURATED ZONE: 32.15 linear ft. ONE WELL VOLUME: 5.9 gals.
THREE WELL VOLUMES = 18 gals. ACTUAL VOLUME EVACUATED: 18 gals.
PURGE METHOD: GED Sample Pro w/ MP10 DEPTH OF PUMP INTAKE: 52.25 ft ← Center of screened interval

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
<u>1240</u> 1150	<u>Pump On</u>								
<u>1248</u>	<u>20.78</u>	<u>5.48</u>	<u>0.00</u>	<u>0.342</u>	<u>208</u>	<u>5.78</u>	<u>32</u>	<u>17.30</u> 16.55	
<u>1258</u>	<u>21.19</u>	<u>5.51</u>	<u>0.00</u>	<u>0.343</u>	<u>204</u>	<u>5.02</u>	<u>32</u>	<u>17.40</u>	<u>Increased pumping rate</u>
<u>1310</u>	<u>18.63</u>	<u>5.43</u>	<u>0.00</u>	<u>0.345</u>	<u>210</u>	<u>4.68</u>	<u>380</u> 600	<u>21.4</u>	<u>for 3vol Protocol</u>
<u>1318</u>	<u>18.32</u>	<u>5.30</u>	<u>0.00</u>	<u>0.346</u>	<u>217</u>	<u>4.97</u>	<u>500</u>	<u>25.3</u>	
<u>1327</u>	<u>18.19</u>	<u>5.32</u>	<u>0.00</u>	<u>0.347</u>	<u>216</u>	<u>4.00</u>	<u>500</u>	<u>39.10</u>	
<u>1357</u>	<u>18.21</u>	<u>5.30</u>	<u>0.00</u>	<u>0.341</u>	<u>215</u>	<u>3.99</u>	<u>500</u>	<u>45.00</u>	
<u>1457</u>	<u>18.34</u>	<u>5.26</u>	<u>0.00</u>	<u>0.334</u>	<u>214</u>	<u>3.19</u>	<u>500</u>	<u>51.50</u>	<u>Pumped dry</u>
<u>Allowed well to recharge overnight. Sampled @ 0900 on 9/18/14. Fe²⁺ = 0.0</u>									

SAMPLE WITHDRAWAL METHOD: GED Sample Pro with MP10 Controller

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

VOCs = 3-40mL Clear VOA (HCL), TOC = 2-40mL Amber VOA (HCL), Methane/ethane/ethene (2-40mL)
Nitrate = 250mL Plastic (Unpreserved), Sulfide = 500mL Plastic (zinc acetate/sodium hydroxide)
Chloride/sulfate = 500mL Plastic (Unpreserved)

SAMPLE ID

NUMBER(s): SMEDR-3DECON METHOD: Liquinox solution bath, distilled water rinsePURGE WATER MANAGEMENT: 55 gal drumSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9/18/14

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page 1 of 2CLIENT: SMF LOCATION: Southern Metals Finishing DATE: 9/16/15WELL NO. SMFMW-1D WEATHER: Sunny, ~78F SAMPLE TIME: _____REMARKS: _____ SAMPLER(S): DPM

WELL PURGING: WELL DIAMETER: 4 in. STATIC WATER LEVEL: 18.34 ft. WELL DEPTH: 96.5 ft.
LENGTH OF SATURATED ZONE: 78.16 linear ft. ONE WELL VOLUME: 51 gals.
THREE WELL VOLUMES = 152 gals. ACTUAL VOLUME EVACUATED: 5 gals.
PURGE METHOD: Bladder Pump DEPTH OF PUMP INTAKE: 92 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	^{DTW} draw down (ft)	COMMENTS
<u>1110</u>	<u>Pump On</u>								
<u>1115</u>	<u>21.80</u>	<u>5.09</u>	<u>0.00</u>	<u>0.282</u>	<u>194</u>	<u>2.95</u>	<u>250+</u>	<u>18.45</u>	<u>slowed pump</u>
<u>1125</u>	<u>20.73</u>	<u>4.80</u>	<u>0.00</u>	<u>0.275</u>	<u>207</u>	<u>1.57</u>	<u>70</u>	<u>18.47</u>	<u>1</u>
<u>1135</u>	<u>20.75</u>	<u>4.93</u>	<u>0.00</u>	<u>0.278</u>	<u>199</u>	<u>1.57</u>	<u>70</u>	<u>18.45</u>	
<u>1145</u>	<u>21.35</u>	<u>4.96</u>	<u>0.00</u>	<u>0.275</u>	<u>197</u>	<u>1.72</u>	<u>70</u>	<u>18.45</u>	
<u>1155</u>	<u>21.42</u>	<u>4.99</u>	<u>0.00</u>	<u>0.275</u>	<u>195</u>	<u>1.66</u>	<u>70</u>	<u>18.45</u>	
<u>1205</u>	<u>21.52</u>	<u>5.04</u>	<u>0.00</u>	<u>0.274</u>	<u>192</u>	<u>1.40</u>	<u>70</u>	<u>18.45</u>	
<u>1215</u>	<u>21.54</u>	<u>5.08</u>	<u>0.00</u>	<u>0.274</u>	<u>189</u>	<u>1.54</u>	<u>70</u>	<u>18.45</u>	
<u>1225</u>	<u>22.10</u>	<u>5.11</u>	<u>0.00</u>	<u>0.270</u>	<u>187</u>	<u>1.40</u>	<u>70</u>	<u>18.45</u>	

SAMPLE WITHDRAWAL METHOD: _____

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

VOCs = 3 40mL VOA's (HCl), TOCs = 2-40mL NOAs (HCl), Sulfide = 50mL Plastic (Zinc Acetate)
Chloride/Sulfate = 50mL Plastic (Unpreserved), Nitrate = 250mL Plastic (Unpreserved)
Methane, Ethane, Ethylene = 40mL VOA's (HCl)

SAMPLE ID

NUMBER(s): SMFMW-1DDECON METHOD: Liquinox Solution + Distilled Water RinsePURGE WATER MANAGEMENT: 55 gal drumsSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9/18/14

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page 2 of 2

CLIENT: SME LOCATION: Southern Metals Finishing DATE: 9/16/15
WELL NO. SMEFW-1D WEATHER: Sunny, ~78F SAMPLE TIME: 1245
REMARKS: _____ SAMPLER(S): DPM

WELL PURGING:

WELL DIAMETER: _____ in. STATIC WATER LEVEL: _____ ft. WELL DEPTH: _____ ft.

LENGTH OF SATURATED ZONE: _____ linear ft.

ONE WELL VOLUME: _____ gals.

THREE WELL VOLUMES = _____ gals.

ACTUAL VOLUME EVACUATED: _____ gals.

PURGE METHOD: _____

DEPTH OF PUMP INTAKE: _____ ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	<u>DTW</u> draw down (ft)	COMMENTS
<u>1235</u>	<u>22.18</u>	<u>5.14</u>	<u>0.00</u>	<u>0.270</u>	<u>186</u>	<u>1.39</u>	<u>70</u>	<u>18.45</u>	
<u>1245</u>	<u>21.75</u>	<u>5.14</u>	<u>0.00</u>	<u>0.272</u>	<u>186</u>	<u>1.38</u>	<u>70</u>	<u>18.45</u>	<u>Fe²⁺ 0.0</u>
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

SAMPLE WITHDRAWAL METHOD: _____

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

SAMPLE ID
NUMBER(s): _____

DECON METHOD: _____

PURGE WATER MANAGEMENT: _____

SAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9/16/14

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page ____ of ____

CLIENT: SME LOCATION: Goodstone Property DATE: 9/22/14
WELL NO. GPMW-18 WEATHER: Overcast, ~75F SAMPLE TIME: _____
REMARKS: _____ SAMPLER(S): DM

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 10.94 ft. WELL DEPTH: 40 ft.
LENGTH OF SATURATED ZONE: 29.06 linear ft. ONE WELL VOLUME: 4.6 gals.
THREE WELL VOLUMES = 14 gals. ACTUAL VOLUME EVACUATED: 5 gals.
PURGE METHOD: QED Sample Pro W/ MPI0 DEPTH OF PUMP INTAKE: 25.47 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	DTW draw down (ft)	COMMENTS
0940	Pump on @ GPMW-18 @ ~15 psi 8/2 ~ R/D								
0942	23.73	5.57	0.00	0.327	138	5.98	60	11.00	
0952	22.97	5.59	0.00	0.249	126	4.05	60	11.00	
1002	22.66	5.55	0.00	0.237	126	3.94	60	11.00	
1012	22.51	5.56	0.00	0.229	124	3.80	60	11.00	
1022	22.57	5.56	0.00	0.228	120	3.60	60	11.00	
1032	22.51	5.57	0.00	0.227	114	3.46	60	11.00	
1042	23.27	5.59	0.00	0.227	108	3.32	60	11.00	
1052	23.59	5.61	0.00	0.226	102	3.30	60	11.00	Fe ²⁺ = 0.0
1102	23.55	5.63	0.00	0.226	100	3.31	60	11.00	

SAMPLE WITHDRAWAL METHOD: QED Sample Pro Pump with MPI0 Controller

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

VOCs = 3-40mL Clear VOA (HCl), TOC = 2-40mL Amber VOA (HCl), Methane/Ethane/Ethane = 2-40mL Clear VOA (HCl)
Sulfide = 500mL Plastic (Zinc acetate / Sodium hydroxide), Chloride/sulfate = 500mL Plastic (Unpreserved), Nitrate = 500mL Plastic (Unpreserved)

SAMPLE ID
NUMBER(s): GPMW-18

DECON METHOD: Liquinox solution bath, distilled water rinse

PURGE WATER MANAGEMENT: 55 gal drum

SAMPLES DELIVERED TO: GCAL, Atlanta, GA

TRANSPORTER: GCAL

DATE: 9/22/14

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page 1 of 1

CLIENT: SME LOCATION: Goodstone Property DATE: 9/19/14
WELL NO. GPMW-11 WEATHER: Sunny, ~80F SAMPLE TIME: 1018
REMARKS: Submerged Screen SAMPLER(S): DM

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 12.94 ft. WELL DEPTH: 39 ft.
LENGTH OF SATURATED ZONE: 24.06 linear ft. ONE WELL VOLUME: 4.2 gals.
THREE WELL VOLUMES = 12.5 gals. ACTUAL VOLUME EVACUATED: 3 gals.
PURGE METHOD: QED Sample Pro w/ MP10 DEPTH OF PUMP INTAKE: 26.5 ft. center of screened interval

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	DTW draw down (ft)	COMMENTS
0905	Pump On								
0908	20.50	5.49	----	0.206	93	10.37	70	13.10	
0918	20.42	5.71	----	0.204	92	10.50	70	13.10	*Stopped pump to
0935	Restarted pump								
0938	21.85	4.10	0.00	0.227	145	16.89	70	12.90	recal Horiba, replace
0948	20.86	6.22	0.00	0.216	130	16.96	70	13.10	bladder & reset hose
0958	20.74	6.28	0.00	0.206	131	16.87	70	13.20	connections
1008	20.42	6.26	0.00	0.205	134	16.89	70	13.20	
1018	20.60	6.22	0.00	0.206	136	17.00	70	13.25	Ge ²⁺ = 0.0

SAMPLE WITHDRAWAL METHOD: QED Sample Pro Pump w/ MP10 Controller, yellow lined tubing

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

VOCs = 3-40mL Clear VOA's (HCl), TOC = 2-40mL Amber VOA's (HCl), Methane/Ethane/Ethane = 2-40mL Clear VOA's (HCl)
Sulfide = 500mL Plastic (zinc acetate/sodium hydroxide), Nitrate = 250mL (Unpreserved), Sulfate = 500mL (Unpreserved)

SAMPLE ID
NUMBER(s): SME GPMW-11

DECON METHOD: Liquinox solution bath & distilled water rinse

PURGE WATER MANAGEMENT: 55 gal drum

SAMPLES DELIVERED TO: GCAL, Atlanta, GA

TRANSPORTER: GCAL

DATE: 9/19/14

TIME: 1130

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

11306857

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CLIENT: SME LOCATION: FORMER REYNOLDS PROP DATE: 9/22
WELL NO. RPMW-14 WEATHER: Sunny, ~78F SAMPLE TIME: 1455
REMARKS: _____ SAMPLER(S): DM

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 26.35 ft. WELL DEPTH: 50 ft.
LENGTH OF SATURATED ZONE: 23.65 linear ft. ONE WELL VOLUME: 3.8 gals.
THREE WELL VOLUMES = 11.4 gals. ACTUAL VOLUME EVACUATED: 4 gals.
PURGE METHOD: GED Sample Pro w/MP10 DEPTH OF PUMP INTAKE: 38 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	<u>DTW</u> draw down (ft)	COMMENTS
1320									Pump On @ CPM6, 25 psi, R/D = 8/2
1345	28.07	5.99	0.00	0.307	75	3.62	70	26.55	
1355	27.38	5.92	0.00	0.332	79	3.50	70	26.60	
1415	22.66	5.74	0.00	0.333	92	3.01	70	26.60	
1425	22.71	5.69	0.00	0.330	94	2.95	70	26.60	
1435	22.69	5.73	0.00	0.327	91	2.85	70	26.60	
1445	22.65	5.77	0.00	0.323	88	2.89	70	26.60	
1455	22.69	5.74	0.00	0.315	89	2.88	70	26.60	CO ₂ = 0.0

SAMPLE WITHDRAWAL METHOD: GED Sample Pro Pump with MP10 Controller + Teflon-lined tubing
LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

VOCs = 3-40 mL VOA's (HCl), TOC = 2-40 mL Amber VOA's (HCl), Methane, ethane, ethene = 2-40 mL Clean VOA's (HCl)
Sulfide = 500 mL Plastiic (ZnAc + NaOH), Nitrate = 250 mL Plastiic (Unpreserved), Chloride & Sulfate = 500 mL Plastiic (Unpreserved)

SAMPLE ID
NUMBER(s): RPMW-14

DECON METHOD: Liquinox solution bath, distilled water rinse

PURGE WATER MANAGEMENT: 55 gallon drum

SAMPLES DELIVERED TO: GCAL, Atlanta, GA

TRANSPORTER: GCAL

DATE: 9/22/14

TIME: 1500

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page ____ of ____

CLIENT: SMF LOCATION: DOBBINS PROPERTY DATE: 9/22/14
WELL NO. DPMW-27 WEATHER: Sunny, 27°F SAMPLE TIME: 1100
REMARKS: _____ SAMPLER(S): DML

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 40.39 ft. WELL DEPTH: 50 ft.
LENGTH OF SATURATED ZONE: 5.41 linear ft. ONE WELL VOLUME: 1.5 gals.
THREE WELL VOLUMES = 4.5 gals. ACTUAL VOLUME EVACUATED: 2 gals.
PURGE METHOD: QED Sample Pump / MP10 DEPTH OF PUMP INTAKE: 45.25 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	<u>DTW</u> draw down (ft)	COMMENTS
<u>0920</u>	<u>Pump On @ CPM6, 20 psi, R/D = 8/2</u>								
<u>0930</u>	<u>20.43</u>	<u>5.07</u>	<u>0.00</u>	<u>0.227</u>	<u>166</u>	<u>5.35</u>	<u>50</u>	<u>40.45</u>	
<u>0950</u>	<u>20.49</u>	<u>5.05</u>	<u>0.00</u>	<u>0.176</u>	<u>171</u>	<u>3.86</u>	<u>50</u>	<u>40.45</u>	
<u>1000</u>	<u>20.53</u>	<u>4.99</u>	<u>0.00</u>	<u>0.172</u>	<u>174</u>	<u>3.66</u>	<u>50</u>	<u>40.50</u>	
<u>1010</u>	<u>20.55</u>	<u>4.96</u>	<u>0.00</u>	<u>0.171</u>	<u>176</u>	<u>3.51</u>	<u>50</u>	<u>40.50</u>	
<u>1020</u>	<u>20.68</u>	<u>4.98</u>	<u>0.00</u>	<u>0.169</u>	<u>179</u>	<u>3.43</u>	<u>50</u>	<u>40.50</u>	
<u>1030</u>	<u>20.86</u>	<u>4.95</u>	<u>0.00</u>	<u>0.179</u>	<u>179</u>	<u>3.35</u>	<u>50</u>	<u>40.50</u>	
<u>1040</u>	<u>21.13</u>	<u>4.97</u>	<u>0.00</u>	<u>0.166</u>	<u>174</u>	<u>3.28</u>	<u>50</u>	<u>40.50</u>	
<u>1050</u>	<u>21.32</u>	<u>4.98</u>	<u>0.00</u>	<u>0.165</u>	<u>168</u>	<u>3.24</u>	<u>50</u>	<u>40.50</u>	
<u>1100</u>	<u>21.50</u>	<u>4.96</u>	<u>0.00</u>	<u>0.165</u>	<u>164</u>	<u>3.19</u>	<u>50</u>	<u>40.50</u>	<u>Fe²⁺ = 0.0</u>

SAMPLE WITHDRAWAL METHOD: QED Sample Pump - Bladder Pump with MP10 Controller

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

VOCs = 3-40mL Clear VOCs (HCL), TOC = 2-40mL VOCs, Methane/Ethane/Ethylene = 2-40mL Clear VOCs (HCL)
Sulfide = 500mL Plastic (ZnAc + NaOH), Chloride + Sulfate = 500mL Plastic (HCL), Nitrate = 250mL Plastic (HCL)

SAMPLE ID

NUMBER(S): DPMW-27DECON METHOD: Liquinox solution bath, distilled water, rinsePURGE WATER MANAGEMENT: 55 gallon drumSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9/22/14TIME: 1500

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

CLIENT: SMF LOCATION: MIDTOWN WEST PROPERTY DATE: 9/25/14

WELL NO. MTWMMW-10 WEATHER: Bercast, ~70 SAMPLE TIME: 1038

REMARKS: _____ SAMPLER(S): *Dm*

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 15.60 ft. WELL DEPTH: 35.5 ft.

LENGTH OF SATURATED ZONE: 19.9 linear ft. ONE WELL VOLUME: 3.2 gals.

THREE WELL VOLUMES = 9.6 gals. ACTUAL VOLUME EVACUATED: 3 gals.

PURGE METHOD: GED Sample Pro w/ MP10 DEPTH OF PUMP INTAKE: 25.5 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	☒ draw down (ft)	COMMENTS
0924	Pump On @ 10 psi, R/D = 8/2								
0928	19.35	5.33	0.00	0.268	140	2.22	90	15.86	
0938	19.56	5.47	0.00	0.254	139	1.92	90	15.75	
0948	19.65	5.44	0.00	0.251	142	1.82	90	15.75	
0958	19.72	5.45	0.00	0.250	140	1.73	90	15.75	
1008	19.80	5.43	0.00	0.249	140	1.67	90	15.75	
1018	19.89	5.42	0.00	0.249	138	1.63	90	15.75	
1028	19.92	5.43	0.00	0.249	135	1.64	90	15.75	
1038	19.98	5.44	0.00	0.249	134	1.65	90	15.75	Fe ²⁺ = 0.0

SAMPLE WITHDRAWAL METHOD: QED Sample Pro Bladder Pump, MP10 controller, Teflon-lined tubing

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

VOCs = 3-40 mL Clear VOA's (HCl), TOC = 2-40 mL Amber VOA's (HCl), Methane/Ethane/Ethane = 2-40 mL Clear VOA's (HCl)

Sulfide = 500 mL Plastic (ZnAc + NaOH), Chloride + Sulfate = 500 mL Plastic (4C), Nitrate = 250 mL Plastic (4C)

SAMPLE ID

NUMBER(s): ACTWMMU-10

DECON METHOD: Ligumox solution bath, distilled water rinse

PURGE WATER MANAGEMENT: 55 gal drum

SAMPLES DELIVERED TO: GCAL, Atlanta, GA

TRANSPORTER: GCAL

DATE: 9/25/14

TIME: _____

CASING CAPACITY (gallons/linear foot)

$$1'' = 0.04, 2'' = 0.16, 4'' = 0.65, 6'' = 1.47, 8'' = 2.6, 10'' = 4.08, 12'' = 5.87$$

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: SMF LOCATION: N-WEST HOA DATE: 9/29/14
WELL NO. HOAMW-5I WEATHER: Overcast, ~75F SAMPLE TIME: _____
REMARKS: Submerged Screen SAMPLER(S): DM

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 18.65 ft. WELL DEPTH: 38 ft.
LENGTH OF SATURATED ZONE: 19.35 linear ft. ONE WELL VOLUME: 3 gals.
THREE WELL VOLUMES = 9 gals. ACTUAL VOLUME EVACUATED: 3 gals.
PURGE METHOD: _____ DEPTH OF PUMP INTAKE: 35.5 ft. ← Center of screened interval

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
<u>1318</u> <u>70</u>	<u>Pump On</u>								
<u>1320</u>	<u>20.83</u>	<u>9.17</u>	<u>17.4</u>	<u>0.352</u>	<u>158</u>	<u>6.23</u>	<u>70</u>	<u>18.68</u>	
<u>1330</u>	<u>20.61</u>	<u>6.05</u>	<u>1.0</u>	<u>0.265</u>	<u>287</u>	<u>6.06</u>	<u>70</u>	<u>18.69</u>	
<u>1340</u>	<u>20.53</u>	<u>5.98</u>	<u>0.0</u>	<u>0.256</u>	<u>297</u>	<u>5.75</u>	<u>70</u>	<u>18.70</u>	
<u>1350</u>	<u>20.52</u>	<u>5.82</u>	<u>0.0</u>	<u>0.248</u>	<u>306</u>	<u>5.36</u>	<u>70</u>	<u>18.71</u>	
<u>1400</u>	<u>20.45</u>	<u>5.84</u>	<u>0.0</u>	<u>0.244</u>	<u>312</u>	<u>5.10</u>	<u>70</u>	<u>18.71</u>	
<u>1410</u>	<u>20.43</u>	<u>5.83</u>	<u>0.0</u>	<u>0.243</u>	<u>310</u>	<u>5.01</u>	<u>70</u>	<u>18.71</u>	
<u>1420</u>	<u>20.42</u>	<u>5.84</u>	<u>0.0</u>	<u>0.245</u>	<u>311</u>	<u>5.00</u>	<u>70</u>	<u>18.71</u>	<u>10⁻² = 0.0</u>

SAMPLE WITHDRAWAL METHOD: _____

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

_____SAMPLE ID
NUMBER(s): _____

DECON METHOD: _____

PURGE WATER MANAGEMENT: _____

SAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCAL

DATE: _____

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: SME LOCATION: N-WEST HOA DATE: 9/29/14
WELL NO. HOAMW-5 WEATHER: Misty, ~75F SAMPLE TIME: _____
REMARKS: _____ SAMPLER(S): DM

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 18.45 ft. WELL DEPTH: 35 ft.
LENGTH OF SATURATED ZONE: 16.55 linear ft. ONE WELL VOLUME: 2.6 gals.
THREE WELL VOLUMES = 268 gals. ACTUAL VOLUME EVACUATED: 3 gals.
PURGE METHOD: _____ DEPTH OF PUMP INTAKE: 26.75 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	<u>DTW</u> draw down (ft)	COMMENTS
<u>1157</u> <u>Pump On</u>									
<u>1200</u>	<u>20.44</u>	<u>5.64</u>	<u>0.00</u>	<u>0.230</u>	<u>316</u>	<u>11.28</u>	<u>70</u>	<u>18.58</u>	
<u>1210</u>	<u>20.22</u>	<u>5.66</u>	<u>0.00</u>	<u>0.226</u>	<u>333</u>	<u>9.54</u>	<u>70</u>	<u>18.63</u>	
<u>1220</u>	<u>20.22</u>	<u>5.67</u>	<u>0.00</u>	<u>0.225</u>	<u>315</u>	<u>9.03</u>	<u>70</u>	<u>18.63</u>	
<u>1230</u>	<u>20.21</u>	<u>5.67</u>	<u>0.00</u>	<u>0.226</u>	<u>318</u>	<u>7.63</u>	<u>70</u>	<u>18.63</u>	
<u>1240</u>	<u>20.26</u>	<u>5.68</u>	<u>0.00</u>	<u>0.226</u>	<u>317</u>	<u>7.14</u>	<u>70</u>	<u>18.63</u>	
<u>1250</u>	<u>20.29</u>	<u>5.47</u>	<u>0.00</u>	<u>0.225</u>	<u>319</u>	<u>6.82</u>	<u>70</u>	<u>18.64</u>	
<u>1300</u>	<u>20.24</u>	<u>5.64</u>	<u>0.00</u>	<u>0.226</u>	<u>321</u>	<u>6.79</u>	<u>70</u>	<u>18.64</u>	
<u>1310</u>	<u>20.24</u>	<u>5.64</u>	<u>0.00</u>	<u>0.226</u>	<u>323</u>	<u>6.74</u>	<u>70</u>	<u>18.64</u>	<u>Fe²⁺ = 0.0</u>

SAMPLE WITHDRAWAL METHOD: _____

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

SAMPLE ID

NUMBER(s): _____

DECON METHOD: _____

PURGE WATER MANAGEMENT: _____

SAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCAL

DATE: _____

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: SMF LOCATION: M-WEST HOA DATE: 9/29/14
WELL NO. HOAMW-3 WEATHER: Windy, ~70F SAMPLE TIME: 1038
REMARKS: _____ SAMPLER(S): DM

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 17.00 ft. WELL DEPTH: 40 ft.
LENGTH OF SATURATED ZONE: 23 linear ft. ONE WELL VOLUME: 3.68 gals.
THREE WELL VOLUMES = 11.04 gals. ACTUAL VOLUME EVACUATED: 3 gals.
PURGE METHOD: _____ DEPTH OF PUMP INTAKE: 28.5 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	<u>DM</u> draw down (ft)	COMMENTS
<u>0933</u>	<u>Pump On CPM6, 15 psi, R/D = 8/2</u>								
<u>0938</u>	<u>18.76</u>	<u>5.75</u>	<u>16.2</u>	<u>0.276</u>	<u>220</u>	<u>4.93</u>	<u>70</u>	<u>17.12</u>	
<u>0948</u>	<u>19.48</u>	<u>5.70</u>	<u>0.0</u>	<u>0.237</u>	<u>239</u>	<u>4.24</u>	<u>70</u>	<u>17.15</u>	
<u>0958</u>	<u>19.45</u>	<u>5.75</u>	<u>0.0</u>	<u>0.233</u>	<u>250</u>	<u>3.98</u>	<u>70</u>	<u>17.16</u>	
<u>1008</u>	<u>19.45</u>	<u>5.72</u>	<u>0.0</u>	<u>0.233</u>	<u>255</u>	<u>3.94</u>	<u>70</u>	<u>17.16</u>	
<u>1019</u>	<u>19.48</u>	<u>5.75</u>	<u>0.0</u>	<u>0.233</u>	<u>263</u>	<u>3.94</u>	<u>70</u>	<u>17.16</u>	
<u>1025</u>	<u>19.51</u>	<u>5.73</u>	<u>0.0</u>	<u>0.233</u>	<u>276</u>	<u>3.82</u>	<u>70</u>	<u>17.16</u>	
<u>1038</u>	<u>19.51</u>	<u>5.73</u>	<u>0.0</u>	<u>0.233</u>	<u>280</u>	<u>3.93</u>	<u>70</u>	<u>17.16</u>	<u>Fe²⁺ = 0.0</u>

SAMPLE WITHDRAWAL METHOD: _____

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

SAMPLE ID

NUMBER(s): _____

DECON METHOD: _____

PURGE WATER MANAGEMENT: _____

SAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCAL

DATE: _____

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: SME LOCATION: MIDTOWN WEST PROPERTY DATE: 9/24/14
WELL NO. MTW MW-12 WEATHER: _____ SAMPLE TIME: 1155
REMARKS: _____ SAMPLER(S): DM

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 14.55 ft. WELL DEPTH: 38 ft.
LENGTH OF SATURATED ZONE: 23.45 linear ft. ONE WELL VOLUME: 3.8 gals.
THREE WELL VOLUMES = 11.3 gals. ACTUAL VOLUME EVACUATED: 4 gals.
PURGE METHOD: _____ DEPTH OF PUMP INTAKE: 26.25 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	<i>DM</i> draw down (ft)	COMMENTS
1022	Pump On @ CPML, 20 psi, R/D = 8 1/2								
1024	20.43	5.71	0.00	0.357	118	2.39	40	14.55	Orange Colloidal Matter
1034	21.10	5.76	0.00	0.336	108	1.68	40	14.60	
1044	21.87	5.80	0.00	0.335	105	1.95	40	14.60	
1055	22.57	5.80	0.00	0.331	101	2.08	40	14.60	Orange, Colloidal Matter dissipated
1104	22.03	5.70	0.00	0.325	92	1.24	40	14.60	
1114	22.00	5.79	0.00	0.323	86	1.17	40	14.65	
1124	21.90	5.75	0.00	0.322	79	1.13	40	14.65	
1134	21.82	5.77	0.00	0.321	73	1.06	40	14.65	
1144	21.85	5.74	0.00	0.321	66	1.05	40	14.65	
1155	21.93	5.74	0.02	0.318	60	1.03	40	14.65	FOBT = 8.0

SAMPLE WITHDRAWAL METHOD: _____

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

SAMPLE ID

NUMBER(s): _____

DECON METHOD: _____

PURGE WATER MANAGEMENT: _____

SAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCAL

DATE: _____

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

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CLIENT: SME LOCATION: MIDTOWN WEST PROPERTY DATE: 9/26/14
WELL NO. MTWMW-7I WEATHER: Cloudy, ~70F SAMPLE TIME: 1102
REMARKS: Submerged Screen SAMPLER(S): PM

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 16.00 ft. WELL DEPTH: 30 ft.
LENGTH OF SATURATED ZONE: 14 linear ft. ONE WELL VOLUME: 2.24 gals.
THREE WELL VOLUMES = 6.72 gals. ACTUAL VOLUME EVACUATED: 2 gals.
PURGE METHOD: QED Sample Pro w/MP10 DEPTH OF PUMP INTAKE: 27.5 ft. ← center of screen interval

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0550	Pump on @ CPMG, 15psi, R/D = 8/2								
0752	18.52	5.62	0.00	0.385	150	2.07	60	16.15	
1002	18.00	6.05	0.00	0.317	105	1.52	60	16.20	
1012	17.78	6.05	0.00	0.311	72	1.16	60	16.20	
1022	17.82	6.06	0.00	0.318	58	1.08	60	16.20	
1032	17.84	6.07	0.00	0.305	35	0.99	60	16.21	
1042	17.90	6.05	0.06	0.308	26	0.94	60	16.21	
1052	17.98	6.07	0.00	0.308	19	0.90	60	16.21	
1102	18.02	6.08	0.00	0.307	14	0.89	60	16.21	Fe ²⁺ = 0.0

SAMPLE WITHDRAWAL METHOD: QED Sample Pro Bladder Pump, MP10, 1/2" Non-lined tubing

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

VOCs = _____

SAMPLE ID

NUMBER(s): _____

DECON METHOD: _____

PURGE WATER MANAGEMENT: _____

SAMPLES DELIVERED TO: GCAL, Atlanta, GA

TRANSPORTER: GCAL

DATE: _____

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87.

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)



GROUNDWATER SAMPLING LOG

Page 1 of 1

CLIENT: SMF LOCATION: MIDTOWN WEST PROPERTY DATE: 9/26/14
WELL NO. MTWMMW-7 WEATHER: Cloudy ~ 70F SAMPLE TIME: 1128
REMARKS: _____ SAMPLER(S): DM

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 15.80 ft. WELL DEPTH: 40 ft.
LENGTH OF SATURATED ZONE: 24.2 linear ft. ONE WELL VOLUME: 3.9 gals.
THREE WELL VOLUMES = 11.6 gals. ACTUAL VOLUME EVACUATED: 4 gals.
PURGE METHOD: Peristaltic DEPTH OF PUMP INTAKE: 27.9 ft.

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
<u>1015</u>	<u>Pump On</u>								
<u>1018</u>	<u>19.25</u>	<u>6.56</u>	<u>202</u>	<u>0.431</u>	<u>27</u>	<u>1.88</u>	<u>120</u>	<u>15.95</u>	
<u>1028</u>	<u>19.51</u>	<u>6.58</u>	<u>167</u>	<u>0.392</u>	<u>17</u>	<u>1.67</u>	<u>120</u>	<u>15.98</u>	
<u>1038</u>	<u>19.64</u>	<u>6.56</u>	<u>126</u>	<u>0.366</u>	<u>15</u>	<u>0.93</u>	<u>120</u>	<u>15.95</u>	
<u>1048</u>	<u>19.73</u>	<u>6.60</u>	<u>91.2</u>	<u>0.357</u>	<u>11</u>	<u>0.86</u>	<u>120</u>	<u>15.95</u>	
<u>1058</u>	<u>19.87</u>	<u>6.57</u>	<u>78.1</u>	<u>0.346</u>	<u>12</u>	<u>0.78</u>	<u>120</u>	<u>15.95</u>	
<u>1108</u>	<u>20.15</u>	<u>6.57</u>	<u>69.9</u>	<u>0.335</u>	<u>9</u>	<u>0.72</u>	<u>120</u>	<u>15.95</u>	
<u>1118</u>	<u>20.12</u>	<u>6.58</u>	<u>62.3</u>	<u>0.338</u>	<u>10</u>	<u>0.65</u>	<u>120</u>	<u>15.95</u>	
<u>1128</u>	<u>20.11</u>	<u>6.57</u>	<u>64.7</u>	<u>0.335</u>	<u>11</u>	<u>0.70</u>	<u>120</u>	<u>15.95</u>	<u>EC²⁺ = 0.0</u>

SAMPLE WITHDRAWAL METHOD:

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Peristaltic Pump, Teflon-lined tubing
RED Sample Pro Bladder Pump, NPT, Teflon-lined tubing
VOCs = 3-40mL Clear VOA's (HCl), TOC = 2-40mL Amber VOA's (HCl), Methane/Ethane/Ethene =
2-40mL Clear VOA's (HCl), Sulfide = 500mL Plastic (zinc acetate/NaOH), Chloride/Sulfate = 500mL Inorganic
Nitrate = 250mL Unpreserved

SAMPLE ID

NUMBER(S): MTWMMW-7DECON METHOD: Lixinox solution bath / Distilled water rinsePURGE WATER MANAGEMENT: 55 gal DrumSAMPLES DELIVERED TO: GCAL, Atlanta, GATRANSPORTER: GCALDATE: 9/26/14

TIME: _____

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH (+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

APPENDIX B
LAB REPORTS – ON CD



December 15, 2014

GCAL, LLC
7979 Innovation Drive
Baton Rouge, LA 70820

Stipulation of Approval for Commercial Laboratories

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

Laboratory:	Gulf Coast Analytical Laboratories 7979 GSRI Avenue Baton Rouge, LA 70820 (225)769-4900
Primary Accrediting Authority:	Louisiana Department of Environmental Quality
Accreditation ID:	01955
Scope:	CWA: Metals, General Chemistry, Volatile Organics, Extractable Organics, Pesticides, Herbicides, PCBs Solid and Chemical Materials: Metals, General Chemistry, Volatile Organics, Extractable Organics, Pesticides, Herbicides, PCBs Biological Tissues: Metals, Volatile Organics, Extractable Organics, Pesticides, Herbicides, PCBs
Effective:	July 1, 2014
Expiration:	June 30, 2015

Any question regarding this stipulation of approval may be directed to GCAL at (225)769-4900. Thank you for your business and do not hesitate to contact me if I can be of further assistance.

Sincerely,

Allison M. Naquin
Mon Dec 15 2014 11:54:39

A handwritten signature in blue ink that reads 'Allison Naquin'. The signature is written over a faint, large 'GCAL' watermark.

Allison Naquin, Director of Quality and Technical Services

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

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

Report Date 10/23/2014

GCAL Report 214091710



Deliver To AMEC E&I
396 Plasters Ave NE
Atlanta, GA 30324
770-547-4409

Attn Daniel Morris

Project Woodall Creek MNA #1

Case Narrative

Client: AMEC Environment & Infrastructure, Inc. **Report:** 214091710

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

This report was revised on 10/23/14. The client ID for sample 21409171002 (SMFMW-1D).

CONVENTIONALS

In the EPA 9056A analysis, samples 21409171001 (SMFPI-1) and 21409171002 (SMFMW-1D) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

Laboratory Endorsement

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

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

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

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

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

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

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


Karen Melrose/Method Data Unit

Authorized Signature

GCAL REPORT 214091710

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THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409171001	SMFPI-1	Water	09/16/2014 11:20	09/17/2014 09:15
21409171002	SMFMW-1D	Water	09/16/2014 12:45	09/17/2014 09:15
21409171003	TRIP BLANK	Water	09/16/2014 11:20	09/17/2014 09:15

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409171001	SMFPI-1	Water	09/16/2014 11:20	09/17/2014 09:15

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	47.3	2.00	0.500	mg/L
14797-55-8	Nitrate	17.4	2.00	0.500	mg/L
14808-79-8	Sulfate	58.0	2.00	0.500	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	11.5	5.00	0.193	ug/L
79-01-6	Trichloroethene	0.629J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	4.04J	5.00	0.103	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.9	1.0	0.30	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409171002	SMFMW-1D	Water	09/16/2014 12:45	09/17/2014 09:15

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	2.66	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	1.63J	5.00	0.208	ug/L
127-18-4	Tetrachloroethene	1.50J	5.00	0.193	ug/L
79-01-6	Trichloroethene	4.85J	5.00	0.161	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.5	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	25.7	2.00	0.500	mg/L
14808-79-8	Sulfate	26.0	2.00	0.500	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409171003	TRIP BLANK	Water	09/16/2014 11:20	09/17/2014 09:15

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
78-93-3	2-Butanone	2.21J	5.00	0.142	ug/L
67-64-1	Acetone	7.29	5.00	0.193	ug/L
67-66-3	Chloroform	0.937J	5.00	0.155	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409171001	SMFPI-1	Water	09/16/2014 11:20	09/17/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/19/2014 01:07	JCK	541317

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	11.5	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.629J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	4.04J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409171001	SMFPI-1	Water	09/16/2014 11:20	09/17/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/19/2014 01:07	JCK	541317

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	46.2	ug/L	92	78 - 130
1868-53-7	Dibromofluoromethane	50	49.9	ug/L	100	77 - 127
2037-26-5	Toluene d8	50	52.4	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.1	ug/L	98	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/26/2014 12:57	JAR	541855

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	33.4	ug/L	82	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 12:20	KGL2	541733

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.9	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 10:40	DMT	541559

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/17/2014 15:55	CLA	541173

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	47.3	2.00	0.500	mg/L
14797-55-8	Nitrate	17.4	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409171001	SMFPI-1	Water	09/16/2014 11:20	09/17/2014 09:15

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/17/2014 15:55	CLA	541173

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	Sulfate	58.0	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409171002	SMFMW-1D	Water	09/16/2014 12:45	09/17/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/19/2014 01:28	JCK	541317

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	1.63J	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	1.50J	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	4.85J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409171002	SMFMW-1D	Water	09/16/2014 12:45	09/17/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/19/2014 01:28	JCK	541317

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	46.5	ug/L	93	78 - 130
1868-53-7	Dibromofluoromethane	50	50.2	ug/L	100	77 - 127
2037-26-5	Toluene d8	50	52.2	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.7	ug/L	99	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/26/2014 13:12	JAR	541855

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	24.5	ug/L	60	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 13:12	KGL2	541733

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.5	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 10:40	DMT	541559

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409171002	SMFMW-1D	Water	09/16/2014 12:45	09/17/2014 09:15

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/17/2014 16:13	CLA	541173

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	2.66	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/18/2014 08:58	CLA	541173

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	25.7	2.00	0.500	mg/L
14808-79-8	Sulfate	26.0	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409171003	TRIP BLANK	Water	09/16/2014 11:20	09/17/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/19/2014 01:48	JCK	541317

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	2.21J	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	7.29	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.937J	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409171003	TRIP BLANK	Water	09/16/2014 11:20	09/17/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/19/2014 01:48	JCK	541317

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	46.7	ug/L	93	78 - 130
1868-53-7	Dibromofluoromethane	50	52.9	ug/L	106	77 - 127
2037-26-5	Toluene d8	50	52.8	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.4	ug/L	101	71 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch		541317	Client ID	MB541317		LCS541317		LCSD541317		RPD		
Prep Batch	N/A		GCAL ID	1361165	1361166	1361167					Limit	
			Sample Type	Method Blank	LCS	LCS						
			Analytical Date	09/18/2014 21:38	09/18/2014 20:14	09/18/2014 20:35						
			Matrix	Water	Water	Water						
EPA 8260B				Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD
				Result	RDL	Added			Limits			Limit
67-64-1	Acetone			0.193U	0.193	50.0	43.9	88	44 - 156	41.9	84	5
75-27-4	Bromodichloromethane			0.083U	0.083	50.0	50.5	101	74 - 125	46.0	92	9
75-25-2	Bromoform			0.215U	0.215	50.0	52.5	105	64 - 122	47.3	95	10
74-83-9	Bromomethane			0.427U	0.427	50.0	52.2	104	47 - 138	46.0	92	13
75-15-0	Carbon disulfide			0.190U	0.190	50.0	51.9	104	69 - 136	45.3	91	14
56-23-5	Carbon tetrachloride			0.248U	0.248	50.0	55.4	111	76 - 128	47.7	95	15
75-00-3	Chloroethane			0.235U	0.235	50.0	48.5	97	62 - 141	42.2	84	14
136777-61-2	m,p-Xylene			0.123U	0.123	100	101	101	74 - 126	88.6	89	13
67-66-3	Chloroform			0.155U	0.155	50.0	51.7	103	75 - 122	43.9	88	16
74-87-3	Chloromethane			0.144U	0.144	50.0	49.4	99	59 - 132	44.4	89	11
124-48-1	Dibromochloromethane			0.054U	0.054	50.0	52.9	106	71 - 123	47.6	95	11
75-71-8	Dichlorodifluoromethane			0.145U	0.145	50.0	56.9	114	58 - 140	50.6	101	12
75-34-3	1,1-Dichloroethane			0.171U	0.171	50.0	49.7	99	74 - 127	44.1	88	12
107-06-2	1,2-Dichloroethane			0.116U	0.116	50.0	50.1	100	71 - 129	45.5	91	10
156-59-2	cis-1,2-Dichloroethene			0.103U	0.103	50.0	51.2	102	73 - 130	44.0	88	15
156-60-5	trans-1,2-Dichloroethene			0.077U	0.077	50.0	46.6	93	69 - 132	46.2	92	1
75-09-2	Methylene chloride			0.149U	0.149	50.0	46.3	93	68 - 132	45.7	91	1
78-87-5	1,2-Dichloropropane			0.150U	0.150	50.0	50.7	101	72 - 128	46.5	93	9
10061-01-5	cis-1,3-Dichloropropene			0.124U	0.124	50.0	48.0	96	71 - 132	43.7	87	9
10061-02-6	trans-1,3-Dichloropropene			0.128U	0.128	50.0	46.9	94	71 - 131	42.6	85	10
100-41-4	Ethylbenzene			0.109U	0.109	50.0	54.3	109	74 - 126	47.8	96	13
591-78-6	2-Hexanone			0.122U	0.122	50.0	50.7	101	50 - 135	46.5	93	9
98-82-8	Isopropylbenzene (Cumene)			0.130U	0.130	50.0	49.8	100	71 - 125	44.2	88	12
78-93-3	2-Butanone			0.142U	0.142	50.0	50.1	100	58 - 137	42.0	84	18
108-10-1	4-Methyl-2-pentanone			0.120U	0.120	50.0	52.5	105	57 - 132	45.4	91	15
100-42-5	Styrene			0.089U	0.089	50.0	48.8	98	71 - 127	44.0	88	10
127-18-4	Tetrachloroethene			0.193U	0.193	50.0	51.3	103	68 - 128	46.3	93	10
79-34-5	1,1,2,2-Tetrachloroethane			0.109U	0.109	50.0	46.6	93	70 - 122	43.6	87	7
120-82-1	1,2,4-Trichlorobenzene			0.105U	0.105	50.0	52.6	105	61 - 135	51.1	102	3
71-55-6	1,1,1-Trichloroethane			0.123U	0.123	50.0	55.1	110	76 - 126	46.0	92	18
79-00-5	1,1,2-Trichloroethane			0.159U	0.159	50.0	49.9	100	72 - 121	45.8	92	9
75-69-4	Trichlorofluoromethane			0.157U	0.157	50.0	53.6	107	72 - 136	46.6	93	14
75-01-4	Vinyl chloride			0.127U	0.127	50.0	52.8	106	68 - 132	45.7	91	14

GC/MS Volatiles Quality Control Summary

Analytical Batch	541317	Client ID	MB541317		LCS541317		LCS541317		
Prep Batch	N/A	GCAL ID	1361165		1361166		1361167		
		Sample Type	Method Blank		LCS		LCS		
		Analytical Date	09/18/2014 21:38		09/18/2014 20:14		09/18/2014 20:35		
		Matrix	Water		Water		Water		
EPA 8260B			ug/L	Spike	Result	% R	Control	Result	RPD
			RD	Added			Limits % R		Limit
95-47-6	o-Xylene		0.055U	50.0	49.9	100	73 - 130	44.3	89
96-12-8	1,2-Dibromo-3-chloropropane		0.194U	50.0	50.5	101	57 - 121	46.7	93
106-93-4	1,2-Dibromoethane		0.102U	50.0	50.3	101	70 - 124	46.4	93
108-05-4	Vinyl acetate		0.151U	50.0	44.1	88	54 - 147	37.7	75
1634-04-4	tert-Butyl methyl ether (MTBE)		0.078U	50.0	47.5	95	71 - 125	48.3	97
1330-20-7	Xylene (total)		0.179U	150	150	100	74 - 127	133	89
108-87-2	Methylcyclohexane		0.143U	50.0	55.6	111	67 - 138	50.0	100
110-82-7	Cyclohexane		0.337U	50.0	51.0	102	69 - 132	41.7	83
79-20-9	Methyl Acetate		0.159U	50.0	44.0	88	57 - 139	41.3	83
76-13-1	Trichlorotrifluoroethane		0.158U	50.0	54.1	108	72 - 136	46.4	93
110-75-8	2-Chloroethylvinyl ether		0.146U	50.0	52.6	105	56 - 124	47.8	96
541-73-1	1,3-Dichlorobenzene		0.138U	50.0	51.3	103	74 - 126	48.5	97
106-46-7	1,4-Dichlorobenzene		0.083U	50.0	48.9	98	72 - 122	45.6	91
95-50-1	1,2-Dichlorobenzene		0.135U	50.0	51.3	103	71 - 126	48.3	97
75-35-4	1,1-Dichloroethene		0.208U	50.0	51.9	104	69 - 129	45.5	91
71-43-2	Benzene		0.111U	50.0	52.5	105	70 - 129	45.5	91
79-01-6	Trichloroethene		0.161U	50.0	53.7	107	76 - 129	48.5	97
108-88-3	Toluene		0.122U	50.0	50.4	101	72 - 120	44.8	90
108-90-7	Chlorobenzene		0.083U	50.0	51.4	103	74 - 123	46.1	92
Surrogate									
460-00-4	4-Bromofluorobenzene		47.1	50	53.3	107	78 - 130	51.2	102
1868-53-7	Dibromofluoromethane		49.5	50	52.2	104	77 - 127	49	98
2037-26-5	Toluene d8		52.4	50	50.7	101	76 - 134	49.2	98
17060-07-0	1,2-Dichloroethane-d4		49.8	50	48.7	97	71 - 127	48.6	97

General Chromatography Quality Control Summary

Analytical Batch Prep Batch	541855 N/A	Client ID GCAL ID		ug/L RDL	Spike Added	LCS541855 1363744 LCS 09/26/2014 11:36 Water				LCSD541855 1363745 LCSD 09/26/2014 11:44 Water			
		Sample Type	Analytical Date			Units Result	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
74-82-8		Methane		0.435	17.5	0.435U	12.8	73	39 - 120	11.9	68	7	27
74-85-1		Ethene		0.071	3.06	0.071U	2.78	91	45 - 134	2.61	85	6	25
74-84-0		Ethane		0.087	3.28	0.087U	2.72	83	45 - 128	2.56	78	6	29
Surrogate 115-07-1		Propene		62	40.5	25.3	27.7	68	40 - 143	26.1	64		

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541733 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541733 1363267 Method Blank 09/25/2014 11:51 Water	mg/L RDL	0.30	Units Result	0.30U	Spike Added	50.0	LCS541733 1363268 LCS 09/25/2014 10:54 Water		
										Result	% R	Control Limits % R
C-012	Total Organic Carbon									52.2	104	80 - 120

Analytical Batch Prep Batch	541733 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	DPMW-2I 21409241701 SAMPLE 09/25/2014 15:14 Water	mg/L RDL	0.30	Units Result	1.0	Spike Added	50.0	1362872MS 1363680 MS 09/25/2014 15:40 Water		
										Result	% R	Control Limits % R
C-012	Total Organic Carbon									54.5	107	75 - 125
										55.4	109	25

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541559 1362255 Method Blank 09/23/2014 10:40 Water		LCS541559 1362256 LCS 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Spike Added	Control Limits % R
18496-25-8	Sulfide		2.00U	2.00	25.0	25.8 103 80 - 120

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFPI-1 21409171001 SAMPLE 09/23/2014 10:40 Water		1360394MS 1362257 MS 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Spike Added	Control Limits % R
18496-25-8	Sulfide		0.000	2.00	25.0	26.4 106 75 - 125

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFMW-1D 21409171002 SAMPLE 09/23/2014 10:40 Water		1360395DUP 1362258 DUP 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Result	RPD Limit
18496-25-8	Sulfide		0.000	2.00	0.000	0 25

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541173 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541173 1360326 Method Blank 09/17/2014 15:21 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
EPA 9056A								
16887-00-6	Chloride		0.050U	0.050	2.50	2.40	96	80 - 120
14797-55-8	Nitrate		0.079J	0.050	2.50	2.55	102	80 - 120
14808-79-8	Sulfate		0.050U	0.050	2.50	2.47	99	80 - 120

Analytical Batch Prep Batch	541173 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	ME-27B 21409166101 SAMPLE 09/18/2014 09:15 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	1360200MSD 1360329 MSD 09/18/2014 09:50 Water
EPA 9056A									
14808-79-8	Sulfate		105	1.00	50.0	152	93	80 - 120	151
									93
									0
									15

Analytical Batch Prep Batch	541173 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	BC-16 21409166301 SAMPLE 09/18/2014 00:03 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	1360222MSD 1360331 MSD 09/18/2014 00:38 Water
EPA 9056A									
14808-79-8	Sulfate		0.760	0.250	12.5	11.8	88	80 - 120	11.8
									88
									0
									15

CHAIN OF CUSTODY RECORD

Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214091710

Due Date: 09/26/14



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

Report to:

Client: AMEL EXI
Address: 1075 Big Shanty Rd NW
Atlanta, GA 30144
Contact: daniel.morris@ame.com
Phone: 770-547-4409
E-mail: daniel.morris@ame.com

Bill to:

Client: AMEC
Address: DEFAULT
Contact: _____
Phone: _____
E-mail: _____

P.O. Number	Project Name/Number
-------------	---------------------

Project Name/Number
Woodall Creek MNA #1

Sampled By:

Daniel Morris x Teta Morickas

Matrix	Date	Time (2400)	Comp	Grab	Sample Description	No Con- tainers	Preservative
W	9/16	1120		X	SMFMW-SMFEPI-1	10	
W	9/16	1245		X	SMFMW-1D*	10	
W	9/16	1120		X	Trip Blank	3	

Air Bill No:

1/A

7771 7554 4565

*sample ID updated 10/22 per client (SIF)

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

Tested by: (Signature)

Date: / / Time:

Received by: (Signature)

1

22

5/19/15 fsh

61602

more.

—

Attestation signed by: 

Date: 7/1/00 Time:

Received by: (Signature)

1

11747E

12/17/20

9/16/15 1530

20

*)

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

Matrix¹: W = water, S = solid, L = liquid, T = tissue

Requires prior approval. rush charges may apply.

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

Revision 1

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214091710		CHECKLIST		YES	NO	NA
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX	Were all samples received using proper thermal preservation?	☒	☒	☐	
Profile Number 249065	Received By Saucier, Charlotte M.	When used, were all custody seals intact?	☒	☒	☐	
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/17/14	Were all samples received in proper containers?	☒	☒	☐	
		Were all samples received using proper chemical preservation?	☒	☒	☐	
		Was preservative added to any container at the lab?	☐	☒	☐	
		Were all containers received in good condition?	☒	☒	☐	
		Were all VOA vials received with no head space?	☒	☒	☐	
		Do all sample labels match the Chain of Custody?	☒	☒	☐	
		Did the Chain of Custody list the sampling technician?	☒	☒	☐	
		Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐	☒	☐	
COOLERS		DISCREPANCIES		LAB PRESERVATIONS		
Airbill 7711 7554 4565	Thermometer ID: E22	Temp(°C) 4.5	None	None		
NOTES						



CHAIN OF CUSTODY RECORD

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

Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214091710

Due Date: 09/26/14



Report to:						Bill to:						Analytical Requests & Method										GCAL use only:					
Client: <u>AMEC E&I</u>						Client: _____						VOCs 8260 TOC Methane/ethane/ethene Chloride/Sulfate NITRATE Sulfide Zinc acetate/ Sodium hydroxide										Custody Seal <u>249065</u>					
Address: <u>1075 Big Shanty Rd NW</u>						Address: <u>AMEC</u>																used ☒ yes ☐ no <u>line 1</u>					
Contact: <u>daniel.morris@amec.com</u>						Contact: _____																intact ☒ yes ☐ no					
Phone: <u>770-547-4409</u>						Phone: _____																Temperature °C <u>4.5 E22</u>					
E-mail: <u>daniel.morris@amec.com</u>						E-mail: _____																☐ Dissolved Analysis Requested					
P.O. Number _____						Project Name/Number <u>Woodall Creek MNA #1</u>																☐ Field filtered					
Sampled By: <u>Daniel Morris & Tela Norickas</u>																										☐ Lab filtered	
Matrix ¹	Date	Time (2400)	Comp	Grab	Sample Description	No Con-tainers ↓	H ₂ O	H ₂ O	H ₂ O	H ₂ O	H ₂ O	H ₂ O	H ₂ O	H ₂ O	H ₂ O	H ₂ O	H ₂ O	Preservative									
W	9/16	1120		X	SMFMW - SMFPI-1	10	X	X	X	X	X	X	X	X	X	X	X	1									
W	9/16	1245		X	SMFMW - 1	10	X	X	X	X	X	X	X	X	X	X	X	2									
W	9/16	1120		X	Trip Blank	3	X											3									
& Daisy 9/16/15																											
Air Bill No: <u>N/A</u> <u>7711 7554 4565</u>																											
Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote)																											
Relinquished by: (Signature) <u>Daisy</u>						Date: <u>9/16/15</u> Time: <u>1454</u>						Received by: (Signature) <u>Wendy</u>						Date: <u>9/16/15</u> Time: <u>1454</u>						Note: <u>* NITRATE *</u>			
Relinquished by: (Signature) <u>Daniel Morris</u>						Date: <u>9/16/15</u> Time: <u>1530</u>						Received by: (Signature) _____						Date: _____ Time: _____									
Relinquished by: (Signature) <u>Joel</u>						Date: <u>9/17/14</u> Time: <u>915</u>						Received by: (Signature) <u>Gaucier</u>						Date: <u>9/17/14</u> Time: <u>915</u>						By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.			

Matrix¹: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

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

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214091710			CHECKLIST	YES	NO	NA
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX		Were all samples received using proper thermal preservation?	☒	☐	☐
			When used, were all custody seals intact?	☒	☐	☐
			Were all samples received in proper containers?	☒	☐	☐
Profile Number 249065	Received By Saucier, Charlotte M.		Were all samples received using proper chemical preservation?	☒	☐	☐
			Was preservative added to any container at the lab?	☐	☒	☐
			Were all containers received in good condition?	☒	☐	☐
			Were all VOA vials received with no head space?	☒	☐	☐
			Do all sample labels match the Chain of Custody?	☒	☐	☐
			Did the Chain of Custody list the sampling technician?	☒	☐	☐
			Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐	☒	☐
Line Item(s) 1 - Water TCL VOCs			Receive Date(s) 09/17/14			
COOLERS			DISCREPANCIES	LAB PRESERVATIONS		
Airbill	Thermometer ID: E22	Temp(°C)	None	None		
7711 7554 4565		4.5				
NOTES						

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

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

Report Date 10/06/2014

GCAL Report 214091812



Deliver To AMEC E&I
396 Plasters Ave NE
Atlanta, GA 30324
770-547-4409

Attn Daniel Morris

Project Woodall Creek MNA#1

Case Narrative

Client: AMEC Environment & Infrastructure, Inc. **Report:** 214091812

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

CONVENTIONALS

In the EPA 9056A analysis, sample 21409181201 (SMFMW-5) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

Laboratory Endorsement

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

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

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

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

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

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

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



Karen Melrose, Quality Manager

Authorized Signature

GCAL REPORT 214091812

THIS REPORT CONTAINS 16 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409181201	SMFMW-5	Water	09/17/2014 10:27	09/18/2014 09:15

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409181201	SMFMW-5	Water	09/17/2014 10:27	09/18/2014 09:15

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.616	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	9.52	5.00	0.193	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.9	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	22.8	2.00	0.500	mg/L
14808-79-8	Sulfate	30.1	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409181201	SMFMW-5	Water	09/17/2014 10:27	09/18/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/19/2014 15:16	ALC	541333

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	9.52	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409181201	SMFMW-5	Water	09/17/2014 10:27	09/18/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/19/2014 15:16	ALC	541333

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.3	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	50	50	ug/L	100	77 - 127
2037-26-5	Toluene d8	50	52.8	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.1	ug/L	100	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 14:44	JAR	542085

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	41.4	ug/L	102	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 13:38	KGL2	541733

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.9	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 10:40	DMT	541559

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409181201	SMFMW-5	Water	09/17/2014 10:27	09/18/2014 09:15

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/18/2014 17:06	CLA	541279

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.616	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/18/2014 21:09	CLA	541279

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	22.8	2.00	0.500	mg/L
14808-79-8	Sulfate	30.1	2.00	0.500	mg/L

GC/MS Volatiles Quality Control Summary

Analytical Batch		541333	Client ID	MB541333		LCS541333		LCSD541333	
Prep Batch		N/A	GCAL ID	1361235	1361236	1361237			
Sample Type		Method Blank	Result		Result	Result	% R	RPD	RPD Limit
Analytical Date		09/19/2014 11:46	ug/L	Spike Added	Control Limits % R	Control Limits % R	Result	% R	RPD Limit
Matrix		Water	RDL						
EPA 8260B									
67-64-1	Acetone	0.193U	0.193	50.0	50.6	101	44 - 156	46.4	93
75-27-4	Bromodichloromethane	0.083U	0.083	50.0	53.4	107	74 - 125	53.1	106
75-25-2	Bromoform	0.215U	0.215	50.0	55.4	111	64 - 122	55.5	111
74-83-9	Bromomethane	0.427U	0.427	50.0	52.8	106	47 - 138	52.0	104
75-15-0	Carbon disulfide	0.190U	0.190	50.0	51.2	102	69 - 136	51.3	103
56-23-5	Carbon tetrachloride	0.248U	0.248	50.0	56.1	112	76 - 128	59.7	119
75-00-3	Chloroethane	0.235U	0.235	50.0	48.7	97	62 - 141	48.2	96
136777-61-2	m,p-Xylene	0.123U	0.123	100	103	103	74 - 126	102	102
67-66-3	Chloroform	0.155U	0.155	50.0	52.0	104	75 - 122	54.6	109
74-87-3	Chloromethane	0.144U	0.144	50.0	51.5	103	59 - 132	50.7	101
124-48-1	Dibromochloromethane	0.054U	0.054	50.0	54.9	110	71 - 123	55.6	111
75-71-8	Dichlorodifluoromethane	0.145U	0.145	50.0	57.7	115	58 - 140	58.8	118
75-34-3	1,1-Dichloroethane	0.171U	0.171	50.0	49.7	99	74 - 127	52.8	106
107-06-2	1,2-Dichloroethane	0.116U	0.116	50.0	52.6	105	71 - 129	52.2	104
156-59-2	cis-1,2-Dichloroethene	0.103U	0.103	50.0	51.7	103	73 - 130	53.2	106
156-60-5	trans-1,2-Dichloroethene	0.077U	0.077	50.0	54.5	109	69 - 132	45.6	91
75-09-2	Methylene chloride	0.149U	0.149	50.0	46.4	93	68 - 132	45.5	91
78-87-5	1,2-Dichloropropane	0.150U	0.150	50.0	53.7	107	72 - 128	51.0	102
10061-01-5	cis-1,3-Dichloropropene	0.124U	0.124	50.0	49.5	99	71 - 132	48.6	97
10061-02-6	trans-1,3-Dichloropropene	0.128U	0.128	50.0	49.2	98	71 - 131	48.3	97
100-41-4	Ethylbenzene	0.109U	0.109	50.0	55.2	110	74 - 126	55.7	111
591-78-6	2-Hexanone	0.122U	0.122	50.0	49.2	98	50 - 135	50.3	101
98-82-8	Isopropylbenzene (Cumene)	0.130U	0.130	50.0	51.2	102	71 - 125	51.8	104
78-93-3	2-Butanone	0.142U	0.142	50.0	48.4	97	58 - 137	52.0	104
108-10-1	4-Methyl-2-pentanone	0.120U	0.120	50.0	48.2	96	57 - 132	49.8	100
100-42-5	Styrene	0.089U	0.089	50.0	52.0	104	71 - 127	50.7	101
127-18-4	Tetrachloroethene	0.193U	0.193	50.0	54.1	108	68 - 128	55.4	111
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	0.109	50.0	47.9	96	70 - 122	48.6	97
120-82-1	1,2,4-Trichlorobenzene	0.105U	0.105	50.0	55.8	112	61 - 135	56.0	112
71-55-6	1,1,1-Trichloroethane	0.123U	0.123	50.0	54.7	109	76 - 126	57.3	115
79-00-5	1,1,2-Trichloroethane	0.159U	0.159	50.0	53.8	108	72 - 121	52.4	105
75-69-4	Trichlorofluoromethane	0.157U	0.157	50.0	53.3	107	72 - 136	54.6	109
75-01-4	Vinyl chloride	0.127U	0.127	50.0	52.1	104	68 - 132	51.7	103

GC/MS Volatiles Quality Control Summary

Analytical Batch		541333	Client ID		MB541333		LCS541333		LCSD541333		RPD		
Prep Batch		N/A	GCAL ID	1361235	1361236	1361237	LCS		LCSD		RPD	Limit	
			Sample Type	Method Blank			09/19/2014 09:52		09/19/2014 10:33				
			Analytical Date	09/19/2014 11:46			Water		Water				
			Matrix	Water									
EPA 8260B													
95-47-6	o-Xylene			0.055U	0.055	50.0	50.3	101	73 - 130	51.0	102	1	30
96-12-8	1,2-Dibromo-3-chloropropane			0.194U	0.194	50.0	50.1	100	57 - 121	52.9	106	5	30
106-93-4	1,2-Dibromoethane			0.102U	0.102	50.0	52.6	105	70 - 124	53.2	106	1	30
108-05-4	Vinyl acetate			0.151U	0.151	50.0	62.7	125	54 - 147	65.5	131	4	30
1634-04-4	tert-Butyl methyl ether (MTBE)			0.078U	0.078	50.0	56.1	112	71 - 125	47.0	94	18	30
1330-20-7	Xylene (total)			0.179U	0.179	150	153	102	74 - 127	153	102	0	30
108-87-2	Methylcyclohexane			0.143U	0.143	50.0	57.5	115	67 - 138	57.1	114	1	30
110-82-7	Cyclohexane			0.337U	0.337	50.0	52.5	105	69 - 132	54.6	109	4	30
79-20-9	Methyl Acetate			0.159U	0.159	50.0	44.6	89	57 - 139	40.1	80	11	30
76-13-1	Trichlorotrifluoroethane			0.158U	0.158	50.0	53.8	108	72 - 136	55.4	111	3	30
110-75-8	2-Chloroethylvinyl ether			0.146U	0.146	50.0	54.0	108	56 - 124	51.7	103	4	30
541-73-1	1,3-Dichlorobenzene			0.138U	0.138	50.0	53.3	107	74 - 126	53.8	108	1	30
106-46-7	1,4-Dichlorobenzene			0.083U	0.083	50.0	50.8	102	72 - 122	50.8	102	0	30
95-50-1	1,2-Dichlorobenzene			0.135U	0.135	50.0	53.4	107	71 - 126	53.2	106	0	30
75-35-4	1,1-Dichloroethene			0.208U	0.208	50.0	50.6	101	69 - 129	52.2	104	3	20
71-43-2	Benzene			0.111U	0.111	50.0	52.9	106	70 - 129	53.8	108	2	20
79-01-6	Trichloroethene			0.161U	0.161	50.0	55.3	111	76 - 129	54.7	109	1	20
108-88-3	Toluene			0.122U	0.122	50.0	52.0	104	72 - 120	51.7	103	1	20
108-90-7	Chlorobenzene			0.083U	0.083	50.0	53.3	107	74 - 123	52.8	106	1	20
Surrogate													
460-00-4	4-Bromofluorobenzene			46.7	93	50	52.8	106	78 - 130	52.9	106		
1868-53-7	Dibromofluoromethane			50.8	102	50	51.6	103	77 - 127	53.6	107		
2037-26-5	Toluene d8			54.1	108	50	48.8	98	76 - 134	49.9	100		
17060-07-0	1,2-Dichloroethane-d4			49.5	99	50	49.3	99	71 - 127	49.7	99		

General Chromatography Quality Control Summary

Analytical Batch		542085	Client ID		MB542085		LCS542085	
Prep Batch		N/A	GCAL ID		1364848		1364849	
			Sample Type		Method Blank		LCS	
			Analytical Date		09/30/2014 14:08		09/30/2014 14:19	
			Matrix		Water		Water	
EPA RSK-175								
74-82-8	Methane			Units Result	ug/L RDL	Spike Added	Result	Control Limits % R
74-85-1	Ethene			0.435U	0.435	17.5	15.0	86
74-84-0	Ethane			0.071U	0.071	3.06	2.91	95
Surrogate				0.087U	0.087	3.28	3.16	96
115-07-1	Propene			29.7	73	40.5	34.4	85
								40 - 143

Analytical Batch		542085	Client ID		WP003/WW-1 MW-255		WP003/WW-1 MW-255-MS		WP003/WW-1 MW-255-MSD			
Prep Batch		N/A	GCAL ID		21409180609		21409180610		21409180611			
			Sample Type		SAMPLE		MS		MSD			
			Analytical Date		09/30/2014 15:41		09/30/2014 15:55		09/30/2014 15:58			
			Matrix		Water		Water		Water			
EPA RSK-175			Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	Limit
74-82-8	Methane		3.71	0.435	17.5	23.1	111	39 - 120	20.9	98	10	27
74-85-1	Ethene		0.00	0.071	3.06	3.66	120	45 - 134	3.28	107	11	25
74-84-0	Ethane		0.00	0.087	3.28	3.96	121	45 - 128	3.51	107	12	29
Surrogate												
115-07-1	Propene				40.5	36.3	90	40 - 143	32.2	80		

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541733 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541733 1363267 Method Blank 09/25/2014 11:51 Water	mg/L RDL	0.30	Units Result	0.30U	Spike Added	50.0	LCS541733 1363268 LCS 09/25/2014 10:54 Water		
										Result	% R	Control Limits % R
C-012	Total Organic Carbon									52.2	104	80 - 120

Analytical Batch Prep Batch	541733 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	DPMW-2I 21409241701 SAMPLE 09/25/2014 15:14 Water	mg/L RDL	0.30	Units Result	1.0	Spike Added	50.0	1362872MS 1363680 MS 09/25/2014 15:40 Water			1362872MSD 1363681 MSD 09/25/2014 16:09 Water		
										Result	% R	Control Limits % R	Result	% R	RPD Limit
C-012	Total Organic Carbon									54.5	107	75 - 125	55.4	109	2 25

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541559 1362255 Method Blank 09/23/2014 10:40 Water		LCS541559 1362256 LCS 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Spike Added	Control Limits % R
18496-25-8	Sulfide		2.00U	2.00	25.0	25.8 103 80 - 120

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFPI-1 21409171001 SAMPLE 09/23/2014 10:40 Water		1360394MS 1362257 MS 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Spike Added	Control Limits % R
18496-25-8	Sulfide		0.000	2.00	25.0	26.4 106 75 - 125

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFMW-1 21409171002 SAMPLE 09/23/2014 10:40 Water		1360395DUP 1362258 DUP 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Result	RPD Limit
18496-25-8	Sulfide		0.000	2.00	0.000	0 25

General Chemistry Quality Control Summary

[illegible]

Analytical Batch		Client ID	mg/L		Spike		Control		RPD	
Prep Batch	541279	GCAL ID	Units	RDL	Added	Result	% R	Result	% R	Limit
N/A		Sample Type	Result							
		Analytical Date								
		Matrix								
EPA 9056A										
14797-55-8	Nitrate		0.079	0.050	2.50	2.48	96	2.48	96	15
14808-79-8	Sulfate		4.58	0.050	2.50	6.98	96	7.03	98	15



ANALYTICAL LABORATORIES, LLC

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

CHAIN OF CUSTODY RECORD

Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214091812

Due Date: 09/30/14



Report to:

Client: AMEC E + I
Address: 1075 Big Shanty Rd.
Ste. 100 Kennesaw, GA
Contact: Daniel Morris
Phone: 770-541-4409
E-mail: daniel-morris@amec.com

Bill to:

Client: AMEC
Address: 1075 Big Shanty Rd.
Ste. 100 Kennesaw, GA
Contact: Daniel Morris
Phone: 770-541-4409
E-mail: daniel-morris@amec.com

P.O. Number: —

Project Name/Number: Woodall Creek MNA #1

Sampled By: Daniel Morris

Matrix: W Date: 9/17/2014 Time: (2400) Comp: — Grab: — Sample Description: SMFMW-5

No. Containers: 10

Analytical Requests & Method

VOCs 8260
HCl TBC
HCl Methane, Ethane, Propane
HCl Chloride / Sulfate
NITRATE
Sulfide

GCAL use only:

Custody Seal used ☒ yes ☐ no
intact ☐ yes ☐ no

Temperature °C 32.022

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Preservative: 1

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

Air Bill No: 7711 8956 6717

Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☒ 1 week* ☒ Standard (Per Contract/Quote)

Note: NITRATE

Date: 9/17/14 Time: 1425

Date: 9/18/14 Time: 9:15

Date: 9/18/14 Time: 9:15

Date: 9/18/14 Time: 9:15

Date: 9/17/14 Time: 1425

Date: 9/18/14 Time: 9:15

Date: 9/18/14 Time: 9:15

Date: 9/18/14 Time: 9:15

Date: 9/18/14 Time: 9:15

Date: 9/17/14 Time: 1425

Date: 9/18/14 Time: 9:15

Date: 9/18/14 Time: 9:15

Date: 9/18/14 Time: 9:15

Date: 9/18/14 Time: 9:15

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

*Requires prior approval, rush charges may apply.

Matrix: W = water, S = solid, L = liquid, T = tissue

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



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214091812	
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX
Profile Number 249065	Received By Sayles, Jerome A.
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/18/14

CHECKLIST	YES	NO	NA
Were all samples received using proper thermal preservation?	☒	☐	☐
When used, were all custody seals intact?	☒	☐	☐
Were all samples received in proper containers?	☒	☐	☐
Were all samples received using proper chemical preservation?	☒	☐	☐
Was preservative added to any container at the lab?	☐	☒	☐
Were all containers received in good condition?	☒	☐	☐
Were all VOA vials received with no head space?	☒	☐	☐
Do all sample labels match the Chain of Custody?	☒	☐	☐
Did the Chain of Custody list the sampling technician?	☒	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐	☒	☐

COOLERS	
Airbill 7711 8956 6717	Thermometer ID: E22 Temp(°C) 3.2

DISCREPANCIES	LAB PRESERVATIONS
None	None

NOTES	
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ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

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

Report Date 10/01/2014

GCAL Report 214091835



Deliver To AMEC E&I
396 Plasters Ave NE
Atlanta, GA 30324
770-547-4409

Attn Daniel Morris

Project Woodall Creek MNA#1

Case Narrative

Client: AMEC Environment & Infrastructure, Inc. **Report:** 214091835

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

CONVENTIONALS

In the EPA 9056A analysis, sample 21409183501 (SMFDR-2) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

Nitrate was detected in the method blank for analytical batch 541279. The concentration was insignificant compared to the concentration detected in the sample.

Laboratory Endorsement

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

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

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

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

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

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

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


Curtis Ekker/Mgr of Data Del

Authorized Signature

GCAL REPORT 214091835

THIS REPORT CONTAINS 16 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409183501	SMFDR-2	Water	09/17/2014 12:50	09/18/2014 09:15

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409183501	SMFDR-2	Water	09/17/2014 12:50	09/18/2014 09:15

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	1.31J	5.00	0.208	ug/L
127-18-4	Tetrachloroethene	4.00J	5.00	0.193	ug/L
79-01-6	Trichloroethene	3.30J	5.00	0.161	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	0.50J	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	39.3	4.00	1.00	mg/L
14808-79-8	Sulfate	30.2	4.00	1.00	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	3.18	0.200	0.050	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409183501	SMFDR-2	Water	09/17/2014 12:50	09/18/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/19/2014 15:37	ALC	541333

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	1.31J	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	4.00J	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	3.30J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409183501	SMFDR-2	Water	09/17/2014 12:50	09/18/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/19/2014 15:37	ALC	541333

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.8	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	51.8	ug/L	104	77 - 127
2037-26-5	Toluene d8	50	53.6	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.9	ug/L	98	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 16:09	JAR	542085

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	32.9	ug/L	81	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2014 14:18	KGL2	541436

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	0.50J	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 10:40	DMT	541559

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409183501	SMFDR-2	Water	09/17/2014 12:50	09/18/2014 09:15

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/18/2014 17:23	CLA	541279

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	3.18	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	09/18/2014 21:27	CLA	541279

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	39.3	4.00	1.00	mg/L
14808-79-8	Sulfate	30.2	4.00	1.00	mg/L

GC/MS Volatiles Quality Control Summary

Analytical Batch		541333	Client ID		MB541333		LCS541333		LCSD541333			
Prep Batch		N/A	GCAL ID	1361235	1361236	1361237	LCS		LCS			
			Sample Type	Method Blank			09/19/2014 09:52		09/19/2014 10:33			
			Analytical Date	09/19/2014 11:46			Water		Water			
			Matrix	Water								
EPA 8260B												
			Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
			Result	RDL	Added			Limits % R			Limit	Limit
67-64-1	Acetone		0.193U	0.193	50.0	50.6	101	44 - 156	46.4	93	9	30
75-27-4	Bromodichloromethane		0.083U	0.083	50.0	53.4	107	74 - 125	53.1	106	1	30
75-25-2	Bromoform		0.215U	0.215	50.0	55.4	111	64 - 122	55.5	111	0	30
74-83-9	Bromomethane		0.427U	0.427	50.0	52.8	106	47 - 138	52.0	104	2	30
75-15-0	Carbon disulfide		0.190U	0.190	50.0	51.2	102	69 - 136	51.3	103	0	30
56-23-5	Carbon tetrachloride		0.248U	0.248	50.0	56.1	112	76 - 128	59.7	119	6	30
75-00-3	Chloroethane		0.235U	0.235	50.0	48.7	97	62 - 141	48.2	96	1	30
136777-61-2	m,p-Xylene		0.123U	0.123	100	103	103	74 - 126	102	102	1	30
67-66-3	Chloroform		0.155U	0.155	50.0	52.0	104	75 - 122	54.6	109	5	30
74-87-3	Chloromethane		0.144U	0.144	50.0	51.5	103	59 - 132	50.7	101	2	30
124-48-1	Dibromochloromethane		0.054U	0.054	50.0	54.9	110	71 - 123	55.6	111	1	30
75-71-8	Dichlorodifluoromethane		0.145U	0.145	50.0	57.7	115	58 - 140	58.8	118	2	30
75-34-3	1,1-Dichloroethane		0.171U	0.171	50.0	49.7	99	74 - 127	52.8	106	6	30
107-06-2	1,2-Dichloroethane		0.116U	0.116	50.0	52.6	105	71 - 129	52.2	104	1	30
156-59-2	cis-1,2-Dichloroethene		0.103U	0.103	50.0	51.7	103	73 - 130	53.2	106	3	30
156-60-5	trans-1,2-Dichloroethene		0.077U	0.077	50.0	54.5	109	69 - 132	45.6	91	18	30
75-09-2	Methylene chloride		0.149U	0.149	50.0	46.4	93	68 - 132	45.5	91	2	30
78-87-5	1,2-Dichloropropane		0.150U	0.150	50.0	53.7	107	72 - 128	51.0	102	5	30
10061-01-5	cis-1,3-Dichloropropene		0.124U	0.124	50.0	49.5	99	71 - 132	48.6	97	2	30
10061-02-6	trans-1,3-Dichloropropene		0.128U	0.128	50.0	49.2	98	71 - 131	48.3	97	2	30
100-41-4	Ethylbenzene		0.109U	0.109	50.0	55.2	110	74 - 126	55.7	111	1	30
591-78-6	2-Hexanone		0.122U	0.122	50.0	49.2	98	50 - 135	50.3	101	2	30
98-82-8	Isopropylbenzene (Cumene)		0.130U	0.130	50.0	51.2	102	71 - 125	51.8	104	1	30
78-93-3	2-Butanone		0.142U	0.142	50.0	48.4	97	58 - 137	52.0	104	7	30
108-10-1	4-Methyl-2-pentanone		0.120U	0.120	50.0	48.2	96	57 - 132	49.8	100	3	30
100-42-5	Styrene		0.089U	0.089	50.0	52.0	104	71 - 127	50.7	101	3	30
127-18-4	Tetrachloroethene		0.193U	0.193	50.0	54.1	108	68 - 128	55.4	111	2	30
79-34-5	1,1,2,2-Tetrachloroethane		0.109U	0.109	50.0	47.9	96	70 - 122	48.6	97	1	30
120-82-1	1,2,4-Trichlorobenzene		0.105U	0.105	50.0	55.8	112	61 - 135	56.0	112	0	30
71-55-6	1,1,1-Trichloroethane		0.123U	0.123	50.0	54.7	109	76 - 126	57.3	115	5	30
79-00-5	1,1,2-Trichloroethane		0.159U	0.159	50.0	53.8	108	72 - 121	52.4	105	3	30
75-69-4	Trichlorofluoromethane		0.157U	0.157	50.0	53.3	107	72 - 136	54.6	109	2	30
75-01-4	Vinyl chloride		0.127U	0.127	50.0	52.1	104	68 - 132	51.7	103	1	30

GC/MS Volatiles Quality Control Summary

Analytical Batch		541333	Client ID		MB541333		LCS541333		LCSD541333		RPD	
Prep Batch		N/A	GCAL ID	1361235	1361236	1361237	LCS		LCSD		RPD	Limit
			Sample Type	Method Blank			09/19/2014 09:52		09/19/2014 10:33			
			Analytical Date	09/19/2014 11:46			Water		Water			
			Matrix	Water								
EPA 8260B												
95-47-6	o-Xylene			0.055U	50.0	50.3	101	73 - 130	51.0	102	1	30
96-12-8	1,2-Dibromo-3-chloropropane			0.194U	50.0	50.1	100	57 - 121	52.9	106	5	30
106-93-4	1,2-Dibromoethane			0.102U	50.0	52.6	105	70 - 124	53.2	106	1	30
108-05-4	Vinyl acetate			0.151U	50.0	62.7	125	54 - 147	65.5	131	4	30
1634-04-4	tert-Butyl methyl ether (MTBE)			0.078U	50.0	56.1	112	71 - 125	47.0	94	18	30
1330-20-7	Xylene (total)			0.179U	150	153	102	74 - 127	153	102	0	30
108-87-2	Methylcyclohexane			0.143U	50.0	57.5	115	67 - 138	57.1	114	1	30
110-82-7	Cyclohexane			0.337U	50.0	52.5	105	69 - 132	54.6	109	4	30
79-20-9	Methyl Acetate			0.159U	50.0	44.6	89	57 - 139	40.1	80	11	30
76-13-1	Trichlorotrifluoroethane			0.158U	50.0	53.8	108	72 - 136	55.4	111	3	30
110-75-8	2-Chloroethylvinyl ether			0.146U	50.0	54.0	108	56 - 124	51.7	103	4	30
541-73-1	1,3-Dichlorobenzene			0.138U	50.0	53.3	107	74 - 126	53.8	108	1	30
106-46-7	1,4-Dichlorobenzene			0.083U	50.0	50.8	102	72 - 122	50.8	102	0	30
95-50-1	1,2-Dichlorobenzene			0.135U	50.0	53.4	107	71 - 126	53.2	106	0	30
75-35-4	1,1-Dichloroethene			0.208U	50.0	50.6	101	69 - 129	52.2	104	3	20
71-43-2	Benzene			0.111U	50.0	52.9	106	70 - 129	53.8	108	2	20
79-01-6	Trichloroethene			0.161U	50.0	55.3	111	76 - 129	54.7	109	1	20
108-88-3	Toluene			0.122U	50.0	52.0	104	72 - 120	51.7	103	1	20
108-90-7	Chlorobenzene			0.083U	50.0	53.3	107	74 - 123	52.8	106	1	20
Surrogate												
460-00-4	4-Bromofluorobenzene			46.7	50	52.8	106	78 - 130	52.9	106		
1868-53-7	Dibromofluoromethane			50.8	50	51.6	103	77 - 127	53.6	107		
2037-26-5	Toluene d8			54.1	50	48.8	98	76 - 134	49.9	100		
17060-07-0	1,2-Dichloroethane-d4			49.5	50	49.3	99	71 - 127	49.7	99		

General Chromatography Quality Control Summary

Analytical Batch Prep Batch	542085 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542085 1364848 Method Blank 09/30/2014 14:08 Water	LCS542085 1364849 LCS 09/30/2014 14:19 Water
EPA RSK-175				
74-82-8	Methane	Units Result	ug/L RDL	Spike Added
74-85-1	Ethene	0.435U	0.435	17.5
74-84-0	Ethane	0.071U	0.071	3.06
Surrogate		0.087U	0.087	3.28
115-07-1	Propene	29.7	73	40.5
				Control Limits % R
				% R
				Result
				39 - 120
				86
				15.0
				45 - 134
				95
				2.91
				45 - 128
				96
				3.16
				40 - 143
				85
				34.4

Analytical Batch Prep Batch	542085 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	WP003/MW-1 MW-255 21409180609 SAMPLE 09/30/2014 15:41 Water	WP003/MW-1 MW-255-MS 21409180610 MS 09/30/2014 15:55 Water	WP003/MW-1 MW-255-MSD 21409180611 MSD 09/30/2014 15:58 Water
EPA RSK-175					
74-82-8	Methane	Units Result	ug/L RDL	Spike Added	RPD Limit
74-85-1	Ethene	3.71	0.435	17.5	27
74-84-0	Ethane	0.00	0.071	3.06	25
Surrogate		0.00	0.087	3.28	29
115-07-1	Propene			40.5	
				Control Limits % R	
				% R	
				Result	
				39 - 120	
				111	
				23.1	
				45 - 134	
				120	
				3.66	
				45 - 128	
				121	
				3.96	
				40 - 143	
				90	
				36.3	
				32.2	
				107	
				107	
				107	
				80	

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541436 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541436 1361764 Method Blank 09/21/2014 11:23 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
EPA 9060A			Units Result	0.30U	0.30	48.9	98	80 - 120
C-012	Total Organic Carbon							

Analytical Batch Prep Batch	541436 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	O/F 005 2014-199,200 21409182202 SAMPLE 09/21/2014 12:06 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD Limit
EPA 9060A			Units Result	7.4	0.30	57.7	101	75 - 125	57.9	101	0
C-012	Total Organic Carbon										25

Analytical Batch Prep Batch	541436 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFDR-3 21409190601 SAMPLE 09/21/2014 18:26 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD Limit
EPA 9060A			Units Result	6.3	0.30	55.3	98	75 - 125	56.5	100	2
C-012	Total Organic Carbon										25

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541559 1362255 Method Blank 09/23/2014 10:40 Water		LCS541559 1362256 LCS 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Spike Added	Control Limits % R
18496-25-8	Sulfide		2.00U	2.00	25.0	25.8 103 80 - 120

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFPI-1 21409171001 SAMPLE 09/23/2014 10:40 Water		1360394MS 1362257 MS 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Spike Added	Control Limits % R
18496-25-8	Sulfide		0.000	2.00	25.0	26.4 106 75 - 125

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFMW-1 21409171002 SAMPLE 09/23/2014 10:40 Water		1360395DUP 1362258 DUP 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Result	RPD Limit
18496-25-8	Sulfide		0.000	2.00	0.000	0 25

General Chemistry Quality Control Summary

Analytical Batch 541279 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix		LCS541279 1360872 LCS 09/18/2014 13:02 Water			
	EPA 9056A		mg/L	Spike Added	Result	Control Limits % R
	16887-00-6 Chloride		0.050U	2.50	2.53	80 - 120
	14797-55-8 Nitrate		0.072J	2.50	2.67	80 - 120
Analytical Batch 541279 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix		WP003/WW-1 MW-255 21409180611 MSD 09/18/2014 15:56 Water			
	EPA 9056A		mg/L	Spike Added	Result	Control Limits % R
	14797-55-8 Nitrate		0.079	2.50	2.48	80 - 120
	14808-79-8 Sulfate		4.58	2.50	6.98	80 - 120
Analytical Batch 541279 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix		WP003/WW-1 MW-255-MSD 21409180611 MSD 09/18/2014 15:56 Water			
	EPA 9056A		mg/L	Spike Added	Result	Control Limits % R
	14797-55-8 Nitrate		0.079	2.50	2.48	80 - 120
	14808-79-8 Sulfate		4.58	2.50	6.98	80 - 120

CHAIN OF CUSTODY RECORD

Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214091835

Due Date: 09/30/14



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

Report to: Client: <u>Amec E+I</u> Address: <u>1075 Big Shanty Rd.</u> <u>St. Louis, Kansas, GA 30144</u> Contact: <u>Daniel Morris</u> Phone: <u>770-547-4409</u> E-mail: <u>daniel.morris@amec.com</u>				Bill to: Client: _____ Address: _____ Contact: _____ Phone: _____ E-mail: _____				Analytical Requests & Method									
P.O. Number: _____ Project Name/Number: <u>Woodall Creek MNA #1</u>		Sampled By: <u>Daniel Morris + Tela Noreikas</u>		Custody Seal used ☒ yes ☐ no intact ☐ yes ☐ no Temperature °C <u>3.2</u> E20													
Dissolved Analysis Requested ☐ Field filtered ☐ Lab filtered		Preservative <u>*</u>		Dissolved Analysis Requested ☐ Field filtered ☐ Lab filtered													
Matrix: <u>W</u> Date: <u>9/17</u> Time: <u>(2400)</u>		Sample Description: <u>SMFDR-3</u>		No. Containers: <u>10</u>		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: <u>W</u> Date: <u>9/17</u> Time: <u>1250</u>		Sample Description: <u>SMFDR-2</u>		No. Containers: <u>10</u>		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/Ethane/Ethylene		Chloride/Sulfate		Nitrate		Sulfide	
Matrix: _____ Date: _____ Time: _____		Sample Description: _____		No. Containers: _____		VOCs 8260		TOC		Methane/E							

Matrix¹: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

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

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

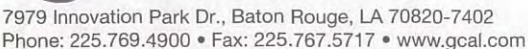


SAMPLE RECEIVING CHECKLIST



214091835

SAMPLE DELIVERY GROUP 214091835		CHECKLIST	
Client	Transport Method	YES	NO
4829 - AMEC Environment & Infrastructure, Inc.	FEDEX	☒	☐
Profile Number 249065	Received By Sayles, Jerome A.	☒	☐
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/18/14	☒	☐
Were all samples received using proper thermal preservation?		☒	☐
When used, were all custody seals intact?		☒	☐
Were all samples received in proper containers?		☒	☐
Were all samples received using proper chemical preservation?		☒	☐
Was preservative added to any container at the lab?		☐	☒
Were all containers received in good condition?		☒	☐
Were all VOA vials received with no head space?		☒	☐
Do all sample labels match the Chain of Custody?		☒	☐
Did the Chain of Custody list the sampling technician?		☒	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?		☐	☒
DISCREPANCIES		LAB PRESERVATIONS	
None		None	
COOLERS		NOTES	
Airbill 7711 8956 6717	Thermometer ID: E22 Temp(°C) 3.2		



Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214091835

Due Date: 09/30/14

[illegible]

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

Matrix¹: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

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



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214091835			CHECKLIST			YES	NO	NA
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX		Were all samples received using proper thermal preservation?	☒	☐	☐		
			When used, were all custody seals intact?	☒	☐	☐		
			Were all samples received in proper containers?	☒	☐	☐		
Profile Number 249065	Received By Sayles, Jerome A.		Were all samples received using proper chemical preservation?	☒	☐	☐		
			Was preservative added to any container at the lab?	☐	☒	☐		
			Were all containers received in good condition?	☒	☐	☐		
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/18/14		Were all VOA vials received with no head space?	☒	☐	☐		
			Do all sample labels match the Chain of Custody?	☒	☐	☐		
			Did the Chain of Custody list the sampling technician?	☒	☐	☐		
			Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐	☒	☐		
COOLERS			DISCREPANCIES		LAB PRESERVATIONS			
Airbill	Thermometer ID: E22	Temp(°C)	None		None			
7711 8956 6717		3.2						
NOTES								

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

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

Report Date 10/01/2014

GCAL Report 214091906



Deliver To AMEC E&I
396 Plasters Ave NE
Atlanta, GA 30324
770-547-4409

Attn Daniel Morris

Project Woodall Creek MNA#1

Case Narrative

Client: AMEC Environment & Infrastructure, Inc. **Report:** 214091906

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

CONVENTIONALS

In the EPA 9056A analysis, samples 21409190601 (SMFDR-3), 21409190602 (MPMW-15), 21409190603 (DPMW-3S) and 21409190604 (SMFMW-2) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

Laboratory Endorsement

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

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

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

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

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

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

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


Karen Miller/Ming Oatis Det

Authorized Signature

GCAL REPORT 214091906

THIS REPORT CONTAINS 30 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190601	SMFDR-3	Water	09/18/2014 09:00	09/19/2014 09:15
21409190602	MPMW-15	Water	09/18/2014 11:00	09/19/2014 09:15
21409190603	DPMW-3S	Water	09/18/2014 13:30	09/19/2014 09:15
21409190604	SMFMW-2	Water	09/18/2014 13:30	09/19/2014 09:15
21409190605	TRIP BLANK	Water	09/18/2014 09:00	09/19/2014 09:15

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190601	SMFDR-3	Water	09/18/2014 09:00	09/19/2014 09:15

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	24.0	2.00	0.500	mg/L
14797-55-8	Nitrate	10.1	2.00	0.500	mg/L
14808-79-8	Sulfate	38.2	2.00	0.500	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-34-3	1,1-Dichloroethane	0.411J	5.00	0.171	ug/L
127-18-4	Tetrachloroethene	158	5.00	0.193	ug/L
79-01-6	Trichloroethene	4.02J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	2.00J	5.00	0.103	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	6.3	1.0	0.30	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190602	MPMW-15	Water	09/18/2014 11:00	09/19/2014 09:15

EPA RSK-175

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	2.76	2.00	0.435	ug/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.078J	0.200	0.050	mg/L
14808-79-8	Sulfate	8.62	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	1.98J	5.00	0.193	ug/L
79-01-6	Trichloroethene	0.832J	5.00	0.161	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	4.8	1.0	0.30	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190602	MPMW-15	Water	09/18/2014 11:00	09/19/2014 09:15

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	8.82	1.00	0.250	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190603	DPMW-3S	Water	09/18/2014 13:30	09/19/2014 09:15

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.57	0.200	0.050	mg/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.2	1.0	0.30	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	4.47J	5.00	0.193	ug/L
79-01-6	Trichloroethene	0.398J	5.00	0.161	ug/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	11.0	2.00	0.500	mg/L
14808-79-8	Sulfate	75.1	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190604	SMFMW-2	Water	09/18/2014 13:30	09/19/2014 09:15

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	11.0	1.00	0.250	mg/L
14808-79-8	Sulfate	12.5	1.00	0.250	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-66-3	Chloroform	3.12J	5.00	0.155	ug/L
127-18-4	Tetrachloroethene	130	5.00	0.193	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190604	SMFMW-2	Water	09/18/2014 13:30	09/19/2014 09:15

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	27.2	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	4.74J	5.00	0.103	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.8	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	28.7	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190605	TRIP BLANK	Water	09/18/2014 09:00	09/19/2014 09:15

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
78-93-3	2-Butanone	2.27J	5.00	0.142	ug/L
67-66-3	Chloroform	0.774J	5.00	0.155	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190601	SMFDR-3	Water	09/18/2014 09:00	09/19/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/20/2014 11:41	ALC	541419

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.411J	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	158	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	4.02J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	2.00J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190601	SMFDR-3	Water	09/18/2014 09:00	09/19/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/20/2014 11:41	ALC	541419

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.9	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	50.5	ug/L	101	77 - 127
2037-26-5	Toluene d8	50	49	ug/L	98	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	54.4	ug/L	109	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 16:22	JAR	542085

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	40.7	ug/L	100	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2014 18:26	KGL2	541436

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	6.3	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 10:40	DMT	541559

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/19/2014 19:20	CLA	541364

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	24.0	2.00	0.500	mg/L
14797-55-8	Nitrate	10.1	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190601	SMFDR-3	Water	09/18/2014 09:00	09/19/2014 09:15

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/19/2014 19:20	CLA	541364

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	Sulfate	38.2	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190602	MPMW-15	Water	09/18/2014 11:00	09/19/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/20/2014 12:03	ALC	541419

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	1.98J	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.832J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190602	MPMW-15	Water	09/18/2014 11:00	09/19/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/20/2014 12:03	ALC	541419

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.3	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	50	50.4	ug/L	101	77 - 127
2037-26-5	Toluene d8	50	48.7	ug/L	97	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	54.2	ug/L	108	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 16:29	JAR	542085

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	2.76	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	39.5	ug/L	98	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2014 19:41	KGL2	541436

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	4.8	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 10:40	DMT	541559

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190602	MPMW-15	Water	09/18/2014 11:00	09/19/2014 09:15

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/19/2014 16:09	CLA	541364

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.078J	0.200	0.050	mg/L
14808-79-8	Sulfate	8.62	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	09/19/2014 19:38	CLA	541364

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	8.82	1.00	0.250	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190603	DPMW-3S	Water	09/18/2014 13:30	09/19/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/20/2014 12:26	ALC	541419

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	4.47J	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.398J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190603	DPMW-3S	Water	09/18/2014 13:30	09/19/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/20/2014 12:26	ALC	541419

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.2	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	50.8	ug/L	102	77 - 127
2037-26-5	Toluene d8	50	48.9	ug/L	98	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	55.4	ug/L	111	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 16:36	JAR	542085

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	36	ug/L	89	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2014 20:07	KGL2	541436

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.2	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 10:40	DMT	541559

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190603	DPMW-3S	Water	09/18/2014 13:30	09/19/2014 09:15

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/19/2014 16:26	CLA	541364
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		1.57	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/19/2014 19:55	CLA	541364
CAS#	Parameter		Result	RDL	MDL	Units
16887-00-6	Chloride		11.0	2.00	0.500	mg/L
14808-79-8	Sulfate		75.1	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190604	SMFMW-2	Water	09/18/2014 13:30	09/19/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/20/2014 12:48	ALC	541419

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	3.12J	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	130	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	27.2	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	4.74J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190604	SMFMW-2	Water	09/18/2014 13:30	09/19/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/20/2014 12:48	ALC	541419

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	50.5	ug/L	101	77 - 127
2037-26-5	Toluene d8	50	49.1	ug/L	98	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	55.7	ug/L	111	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 16:43	JAR	542085

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	39.4	ug/L	97	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2014 20:32	KGL2	541436

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.8	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 10:40	DMT	541559

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190604	SMFMW-2	Water	09/18/2014 13:30	09/19/2014 09:15

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	09/19/2014 20:13	CLA	541364

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	11.0	1.00	0.250	mg/L
14808-79-8	Sulfate	12.5	1.00	0.250	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	09/28/2014 23:02	DMT	541930

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	28.7	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190605	TRIP BLANK	Water	09/18/2014 09:00	09/19/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/20/2014 13:10	ALC	541419

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	2.27J	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.774J	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409190605	TRIP BLANK	Water	09/18/2014 09:00	09/19/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/20/2014 13:10	ALC	541419

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.7	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	50	50.3	ug/L	101	77 - 127
2037-26-5	Toluene d8	50	49.1	ug/L	98	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	56.2	ug/L	112	71 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch		541419	Client ID		MB541419		LCS541419		LCSD541419		RPD		
Prep Batch		N/A	GCAL ID	1361647	1361648	1361649	Method Blank	LCS	1361649	LCS	RPD	Limit	
Sample Type			Analytical Date		09/20/2014 11:19		09/20/2014 09:31		09/20/2014 09:53				
Matrix			Water		Water		Water		Water				
EPA 8260B													
			Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	Limit	
			Result	RDL	Added			Limits % R					
67-64-1	Acetone		0.193U	0.193	50.0	62.2	124	44 - 156	63.7	127	2	30	
75-27-4	Bromodichloromethane		0.083U	0.083	50.0	56.6	113	74 - 125	59.3	119	5	30	
75-25-2	Bromoform		0.215U	0.215	50.0	48.4	97	64 - 122	49.6	99	2	30	
74-83-9	Bromomethane		0.427U	0.427	50.0	48.8	98	47 - 138	48.1	96	1	30	
75-15-0	Carbon disulfide		0.190U	0.190	50.0	53.4	107	69 - 136	57.8	116	8	30	
56-23-5	Carbon tetrachloride		0.248U	0.248	50.0	60.2	120	76 - 128	63.2	126	5	30	
75-00-3	Chloroethane		0.235U	0.235	50.0	51.8	104	62 - 141	55.6	111	7	30	
136777-61-2	m,p-Xylene		0.123U	0.123	100	102	102	74 - 126	109	109	7	30	
67-66-3	Chloroform		0.155U	0.155	50.0	55.8	112	75 - 122	58.2	116	4	30	
74-87-3	Chloromethane		0.144U	0.144	50.0	52.4	105	59 - 132	57.0	114	8	30	
124-48-1	Dibromochloromethane		0.054U	0.054	50.0	50.9	102	71 - 123	52.9	106	4	30	
75-71-8	Dichlorodifluoromethane		0.145U	0.145	50.0	62.4	125	58 - 140	67.7	135	8	30	
75-34-3	1,1-Dichloroethane		0.171U	0.171	50.0	54.6	109	74 - 127	57.4	115	5	30	
107-06-2	1,2-Dichloroethane		0.116U	0.116	50.0	58.5	117	71 - 129	60.4	121	3	30	
156-59-2	cis-1,2-Dichloroethene		0.103U	0.103	50.0	54.5	109	73 - 130	57.5	115	5	30	
156-60-5	trans-1,2-Dichloroethene		0.077U	0.077	50.0	55.1	110	69 - 132	58.7	117	6	30	
75-09-2	Methylene chloride		0.149U	0.149	50.0	50.8	102	68 - 132	53.1	106	4	30	
78-87-5	1,2-Dichloropropane		0.150U	0.150	50.0	52.3	105	72 - 128	55.2	110	5	30	
10061-01-5	cis-1,3-Dichloropropene		0.124U	0.124	50.0	52.9	106	71 - 132	55.7	111	5	30	
10061-02-6	trans-1,3-Dichloropropene		0.128U	0.128	50.0	55.1	110	71 - 131	57.1	114	4	30	
100-41-4	Ethylbenzene		0.109U	0.109	50.0	50.0	100	74 - 126	53.0	106	6	30	
591-78-6	2-Hexanone		0.122U	0.122	50.0	53.4	107	50 - 135	54.3	109	2	30	
98-82-8	Isopropylbenzene (Cumene)		0.130U	0.130	50.0	53.6	107	71 - 125	57.1	114	6	30	
78-93-3	2-Butanone		0.142U	0.142	50.0	57.6	115	58 - 137	57.1	114	1	30	
108-10-1	4-Methyl-2-pentanone		0.120U	0.120	50.0	51.5	103	57 - 132	51.1	102	1	30	
100-42-5	Styrene		0.089U	0.089	50.0	50.7	101	71 - 127	53.2	106	5	30	
127-18-4	Tetrachloroethene		0.193U	0.193	50.0	50.5	101	68 - 128	53.2	106	5	30	
79-34-5	1,1,2,2-Tetrachloroethane		0.109U	0.109	50.0	47.9	96	70 - 122	49.6	99	3	30	
120-82-1	1,2,4-Trichlorobenzene		0.105U	0.105	50.0	52.6	105	61 - 135	55.4	111	5	30	
71-55-6	1,1,1-Trichloroethane		0.123U	0.123	50.0	56.9	114	76 - 126	60.3	121	6	30	
79-00-5	1,1,2-Trichloroethane		0.159U	0.159	50.0	47.3	95	72 - 121	49.6	99	5	30	
75-69-4	Trichlorofluoromethane		0.157U	0.157	50.0	59.1	118	72 - 136	62.8	126	6	30	
75-01-4	Vinyl chloride		0.127U	0.127	50.0	55.0	110	68 - 132	59.3	119	8	30	

GC/MS Volatiles Quality Control Summary

Analytical Batch		541419	Client ID		MB541419		LCS541419		LCSD541419		RPD		RPD	Limit
Prep Batch		N/A	GCAL ID	Sample Type	1361647	Method Blank	1361648	LCS	1361649	LCSD	% R	RPD		
			Analytical Date		09/20/2014 11:19		09/20/2014 09:31		09/20/2014 09:53					
			Matrix		Water		Water		Water					
EPA 8260B														
95-47-6		o-Xylene		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD		30
96-12-8		1,2-Dibromo-3-chloropropane		0.055U	0.055	50.0	51.4	103	73 - 130	54.7	109	6		30
106-93-4		1,2-Dibromoethane		0.194U	0.194	50.0	48.1	96	57 - 121	45.9	92	5		30
108-05-4		Vinyl acetate		0.102U	0.102	50.0	48.8	98	70 - 124	49.7	99	2		30
1634-04-4		tert-Butyl methyl ether (MTBE)		0.151U	0.151	50.0	55.6	111	54 - 147	58.1	116	4		30
1330-20-7		Xylene (total)		0.078U	0.078	50.0	53.4	107	71 - 125	54.8	110	3		30
108-87-2		Methylcyclohexane		0.179U	0.179	150	153	102	74 - 127	164	109	7		30
110-82-7		Cyclohexane		0.143U	0.143	50.0	53.8	108	67 - 138	59.0	118	9		30
79-20-9		Methyl Acetate		0.337U	0.337	50.0	56.2	112	69 - 132	60.4	121	7		30
76-13-1		Trichlorotrifluoroethane		0.159U	0.159	50.0	48.6	97	57 - 139	48.7	97	0		30
110-75-8		2-Chloroethylvinyl ether		0.158U	0.158	50.0	55.0	110	72 - 136	59.3	119	8		30
541-73-1		1,3-Dichlorobenzene		0.146U	0.146	50.0	37.2	74	56 - 124	42.3	85	13		30
106-46-7		1,4-Dichlorobenzene		0.138U	0.138	50.0	51.6	103	74 - 126	53.8	108	4		30
95-50-1		1,2-Dichlorobenzene		0.083U	0.083	50.0	50.4	101	72 - 122	52.7	105	4		30
75-35-4		1,1-Dichloroethene		0.135U	0.135	50.0	51.1	102	71 - 126	53.3	107	4		30
71-43-2		Benzene		0.208U	0.208	50.0	52.7	105	69 - 129	56.4	113	7		20
79-01-6		Trichloroethene		0.111U	0.111	50.0	52.5	105	70 - 129	55.5	111	6		20
108-88-3		Toluene		0.161U	0.161	50.0	53.0	106	76 - 129	56.3	113	6		20
108-90-7		Chlorobenzene		0.122U	0.122	50.0	49.7	99	72 - 120	52.6	105	6		20
Surrogate				0.083U	0.083	50.0	50.0	100	74 - 123	52.4	105	5		20
460-00-4		4-Bromofluorobenzene		48.1	96	50	48.4	97	78 - 130	49.3	99			
1868-53-7		Dibromofluoromethane		49.8	100	50	50.9	102	77 - 127	50.5	101			
2037-26-5		Toluene d8		49.2	98	50	48.8	98	76 - 134	48.9	98			
17060-07-0		1,2-Dichloroethane-d4		53.4	107	50	54.9	110	71 - 127	53.7	107			

General Chromatography Quality Control Summary

Analytical Batch		542085	Client ID		MB542085		LCS542085		
Prep Batch		N/A	GCAL ID		1364848		1364849		
			Sample Type		Method Blank		LCS		
			Analytical Date		09/30/2014 14:08		09/30/2014 14:19		
			Matrix		Water		Water		
EPA RSK-175			Units Result		ug/L	Spike Added	Result	% R	Control Limits % R
74-82-8	Methane		0.435U		0.435	17.5	15.0	86	39 - 120
74-85-1	Ethene		0.071U		0.071	3.06	2.91	95	45 - 134
74-84-0	Ethane		0.087U		0.087	3.28	3.16	96	45 - 128
Surrogate									
115-07-1	Propene		29.7		73	40.5	34.4	85	40 - 143

Analytical Batch		542085	Client ID		WP003/WW-1 MW-255		WP003/WW-1 MW-255-MS		WP003/WW-1 MW-255-MSD			
Prep Batch		N/A	GCAL ID		21409180609		21409180610		21409180611			
			Sample Type		SAMPLE		MS		MSD			
			Analytical Date		09/30/2014 15:41		09/30/2014 15:55		09/30/2014 15:58			
			Matrix		Water		Water		Water			
EPA RSK-175			Units	ug/L	Spike	Control	Result	% R	Result	% R	RPD	Limit
74-82-8			Result	RDL	Added	Limits						
74-85-1			3.71	0.435	17.5	39 - 120	23.1	111	20.9	98	10	27
74-84-0			0.00	0.071	3.06	45 - 134	3.66	120	3.28	107	11	25
Surrogate			0.00	0.087	3.28	45 - 128	3.96	121	3.51	107	12	29
115-07-1					40.5	40 - 143	36.3	90	32.2	80		

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541436 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541436 1361764 Method Blank 09/21/2014 11:23 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
EPA 9060A	Total Organic Carbon		0.30U	0.30	50.0	48.9	98	80 - 120
C-012								

Analytical Batch Prep Batch	541436 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	O/F 005 2014-199,200 21409182202 SAMPLE 09/21/2014 12:06 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD Limit
EPA 9060A	Total Organic Carbon			7.4	0.30	50.0	101	75 - 125	57.7	101	0
C-012									57.9	101	25

Analytical Batch Prep Batch	541436 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFDR-3 21409190601 SAMPLE 09/21/2014 18:26 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD Limit
EPA 9060A	Total Organic Carbon			6.3	0.30	50.0	98	75 - 125	55.3	100	2
C-012									56.5	100	25

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541559 1362255 Method Blank 09/23/2014 10:40 Water		LCS541559 1362256 LCS 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Spike Added	Control Limits % R
18496-25-8	Sulfide		2.00U	2.00	25.0	% R 103 80 - 120

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFPI-1 21409171001 SAMPLE 09/23/2014 10:40 Water		1360394MS 1362257 MS 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Spike Added	Control Limits % R
18496-25-8	Sulfide		0.000	2.00	25.0	% R 106 75 - 125

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFMW-1 21409171002 SAMPLE 09/23/2014 10:40 Water		1360395DUP 1362258 DUP 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Result	RPD Limit
18496-25-8	Sulfide		0.000	2.00	0.000	0 25

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541364 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541364 1361432 Method Blank 09/19/2014 15:34 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
EPA 9056A								
16887-00-6	Chloride		0.050U	0.050	2.50	2.37	95	80 - 120
14797-55-8	Nitrate		0.050U	0.050	2.50	2.41	96	80 - 120
14808-79-8	Sulfate		0.050U	0.050	2.50	2.47	99	80 - 120

Analytical Batch Prep Batch	541364 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	WP003/MW-1 MW-255 21409180609 SAMPLE 09/19/2014 17:36 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	WP003/MW-1 MW-255-MSD 21409180611 MSD 09/19/2014 18:11 Water
EPA 9056A									
16887-00-6	Chloride		12.5	0.500	25.0	36.7	97	80 - 120	

Analytical Batch Prep Batch	541930 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541930 1364302 Method Blank 09/28/2014 11:43 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
EPA 9056A								
16887-00-6	Chloride		0.050U	0.050	2.50	2.33	93	80 - 120

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541930 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFMW-2 21409190604 SAMPLE 09/28/2014 23:02 Water	mg/L RDL	Spike Added	1361233MS				1361233MSD			
						1364306 MS 09/28/2014 23:19 Water	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
16887-00-6	Chloride		Units Result	28.7	1.00	50.0	81.2	105	80 - 120	81.2	105	0	15



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

Due Date: 10/01/14



Report to:				Bill to:				Analytical Requests & Method				GCAL use only:			
Client: AMEL EXI				Client: AMEL EXI				Custody Seal				used ☐ yes ☐ no			
Address: 1075 Big Shanty Rd				Address: 1075 Big Shanty Rd				intact ☐ yes ☐ no				Temperature °C 3.9 2.7			
Contact: Kenneth, Cal 30144				Contact: Kenneth, Cal 30144				Temperature °C 3.9 2.7				E24			
Phone: 770-547-4469				Phone: 770-547-4469				Temperature °C 3.9 2.7				E24			
E-mail: daniel.morris@ames.com				E-mail: daniel.morris@ames.com				Temperature °C 3.9 2.7				E24			
P.O. Number				Project Name/Number				Dissolved Analysis Requested				☐ Field filtered			
Sampled By: Daniel Morris & Tela Monckas				Woodall Creek MNA #1				☐ Lab filtered							
Matrix				Time (2400)				Comp				Grab			
Sample Description				No. Containers				Hel VOCs				Hel TOC			
Hel VOCs				Hel TOC				Hel Methane/ethane/ethane				Hel Chloride/Sulfate			
Hel Chloride/Sulfate				Hel Sulfide				Hel Nitrate				Preservative			
Hel Nitrate				Hel Sulfide				Hel Chloride/Sulfate				Hel Sulfide			
Hel Sulfide				Hel Chloride/Sulfate				Hel Nitrate				Hel Sulfide			
Hel Chloride/Sulfate				Hel Nitrate				Hel Sulfide				Hel Chloride/Sulfate			
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Hel Nitrate				Hel Sulfide				Hel Chloride/Sulfate				Hel Sulfide			
Hel Sulfide				Hel Chloride/Sulfate				Hel Nitrate				Hel Sulfide			



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214091906	
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX
Profile Number 249065	Received By Saucier, Charlotte M.
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/19/14

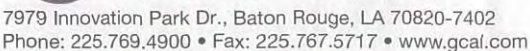
CHECKLIST			
	YES	NO	NA
Were all samples received using proper thermal preservation?	☒	☐	☐
When used, were all custody seals intact?	☒	☐	☐
Were all samples received in proper containers?	☒	☐	☐
Were all samples received using proper chemical preservation?	☒	☐	☐
Was preservative added to any container at the lab?	☐	☒	☐
Were all containers received in good condition?	☒	☐	☐
Were all VOA vials received with no head space?	☒	☐	☐
Do all sample labels match the Chain of Custody?	☒	☐	☐
Did the Chain of Custody list the sampling technician?	☒	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐	☒	☐

COOLERS	
Airbill 7712 0686 4844	Thermometer ID: E24 Temp(°C) 3.9 2.7

DISCREPANCIES	
None	

LAB PRESERVATIONS	
None	

NOTES	
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Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214091906



Due Date: 10/01/14

[illegible]

Matrix¹: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

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

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214091906			CHECKLIST			
			YES	NO	NA	
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX		☒	☐	☐	Were all samples received using proper thermal preservation?
			☒	☐	☐	When used, were all custody seals intact?
Profile Number 249065	Received By Saucier, Charlotte M.		☒	☐	☐	Were all samples received in proper containers?
			☒	☐	☐	Were all samples received using proper chemical preservation?
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/19/14		☐	☒	☐	Was preservative added to any container at the lab?
			☒	☐	☐	Were all containers received in good condition?
			☒	☐	☐	Were all VOA vials received with no head space?
			☒	☐	☐	Do all sample labels match the Chain of Custody?
			☒	☐	☐	Did the Chain of Custody list the sampling technician?
			☐	☒	☐	Was the COC maintained i.e. all signatures, dates and time of receipt included?
COOLERS			DISCREPANCIES		LAB PRESERVATIONS	
Airbill	Thermometer ID: E24	Temp(°C)	None		None	
7712 0686 4844		3.9 2.7				
NOTES						

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

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

Report Date 10/02/2014

GCAL Report 214092004



Deliver To AMEC E&I
396 Plasters Ave NE
Atlanta, GA 30324
770-547-4409

Attn Daniel Morris

Project Woodall Creek MNA#1

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.

Report: 214092004

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

CONVENTIONALS

In the EPA 9056A analysis, samples 21409200401 (SMFMW-18) and 21409200402 (GPMW-11) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

In the EPA 9060A analysis, sample 21409200401 (SMFMW-18) had to be diluted in order to bracket the Total Carbon and/or Total Inorganic Carbon concentrations within the calibration range of the instrument. The Total Organic Carbon is based on the difference between the Total Carbon and the Inorganic Carbon. The dilution is reflected in the elevated reporting limit.

Nitrate was detected in the method blank for analytical batch 541420. The concentration was insignificant compared to the concentration detected in the sample.

A MS/MSD could not be reported for HBN 541420. A LCS/LCSD is included for review.

Laboratory Endorsement

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

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

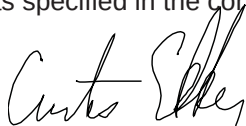
J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

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

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

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

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



Curtis Ekker/Mgr of Data Del

Authorized Signature

GCAL REPORT 214092004

THIS REPORT CONTAINS 22 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409200401	SMFMW-18	Water	09/19/2014 11:00	09/20/2014 09:30
21409200402	GPMW-11	Water	09/19/2014 10:18	09/20/2014 09:30
21409200403	TRIP BLANK	Water	09/19/2014 00:00	09/20/2014 09:30

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409200401	SMFMW-18	Water	09/19/2014 11:00	09/20/2014 09:30

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	48.3	4.00	1.00	mg/L
14797-55-8	Nitrate	15.3	4.00	1.00	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	Sulfate	516	20.0	5.00	mg/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	29.5	20.0	6.0	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	1.51J	5.00	0.193	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409200402	GPMW-11	Water	09/19/2014 10:18	09/20/2014 09:30

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.94	0.200	0.050	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	20.5	2.00	0.500	mg/L
14808-79-8	Sulfate	33.6	2.00	0.500	mg/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	0.35J	1.0	0.30	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-66-3	Chloroform	0.551J	5.00	0.155	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409200402	GPMW-11	Water	09/19/2014 10:18	09/20/2014 09:30

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	7.94	5.00	0.193	ug/L
79-01-6	Trichloroethene	1.14J	5.00	0.161	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409200403	TRIP BLANK	Water	09/19/2014 00:00	09/20/2014 09:30

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
78-93-3	2-Butanone	2.05J	5.00	0.142	ug/L
67-64-1	Acetone	6.30	5.00	0.193	ug/L
67-66-3	Chloroform	1.03J	5.00	0.155	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409200401	SMFMW-18	Water	09/19/2014 11:00	09/20/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2014 10:36	ALC	541440

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	1.51J	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409200401	SMFMW-18	Water	09/19/2014 11:00	09/20/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2014 10:36	ALC	541440

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.9	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	50	50.5	ug/L	101	77 - 127
2037-26-5	Toluene d8	50	54.9	ug/L	110	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	51.2	ug/L	102	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 16:50	JAR	542085

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	25.1	ug/L	62	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	09/22/2014 07:34	JEM	541436

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	29.5	20.0	6.0	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 10:40	DMT	541559

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409200401	SMFMW-18	Water	09/19/2014 11:00	09/20/2014 09:30

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	09/20/2014 13:05	CLA	541420

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	48.3	4.00	1.00	mg/L
14797-55-8	Nitrate	15.3	4.00	1.00	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			100	09/20/2014 14:15	CLA	541420

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	Sulfate	516	20.0	5.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409200402	GPMW-11	Water	09/19/2014 10:18	09/20/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2014 10:57	ALC	541440

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.551J	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	7.94	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	1.14J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409200402	GPMW-11	Water	09/19/2014 10:18	09/20/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2014 10:57	ALC	541440

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.1	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	52.1	ug/L	104	77 - 127
2037-26-5	Toluene d8	50	53.8	ug/L	108	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.1	ug/L	98	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 17:01	JAR	542085

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	38.3	ug/L	95	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2014 23:38	KGL2	541436

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	0.35J	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 10:40	DMT	541559

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409200402	GPMW-11	Water	09/19/2014 10:18	09/20/2014 09:30

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/20/2014 13:40	CLA	541420
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		1.94	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/20/2014 13:57	CLA	541420
CAS#	Parameter		Result	RDL	MDL	Units
16887-00-6	Chloride		20.5	2.00	0.500	mg/L
14808-79-8	Sulfate		33.6	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409200403	TRIP BLANK	Water	09/19/2014 00:00	09/20/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2014 11:18	ALC	541440

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	2.05J	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	6.30	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	1.03J	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409200403	TRIP BLANK	Water	09/19/2014 00:00	09/20/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2014 11:18	ALC	541440

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.3	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	50	52	ug/L	104	77 - 127
2037-26-5	Toluene d8	50	56	ug/L	112	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.6	ug/L	101	71 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch		541440	Client ID		MB541440		LCS541440		LCSD541440			
Prep Batch		N/A	GCAL ID		1361778		1361779		1361780			
			Sample Type		Method Blank		LCS		LCSD			
			Analytical Date		09/21/2014 10:15		09/21/2014 07:45		09/21/2014 08:06			
			Matrix		Water		Water		Water			
EPA 8260B			Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	Limit
			Result	RDL	Added			Limits % R				
67-64-1	Acetone		0.193U	0.193	50.0	40.6	81	44 - 156	43.8	88	8	30
75-27-4	Bromodichloromethane		0.083U	0.083	50.0	53.3	107	74 - 125	52.6	105	1	30
75-25-2	Bromoform		0.215U	0.215	50.0	54.1	108	64 - 122	56.3	113	4	30
74-83-9	Bromomethane		0.427U	0.427	50.0	45.0	90	47 - 138	48.9	98	8	30
75-15-0	Carbon disulfide		0.190U	0.190	50.0	50.5	101	69 - 136	49.4	99	2	30
56-23-5	Carbon tetrachloride		0.248U	0.248	50.0	56.4	113	76 - 128	54.4	109	4	30
75-00-3	Chloroethane		0.235U	0.235	50.0	47.0	94	62 - 141	45.8	92	3	30
136777-61-2	m,p-Xylene		0.123U	0.123	100	102	102	74 - 126	102	102	0	30
67-66-3	Chloroform		0.155U	0.155	50.0	54.9	110	75 - 122	50.1	100	9	30
74-87-3	Chloromethane		0.144U	0.144	50.0	47.5	95	59 - 132	47.6	95	0	30
124-48-1	Dibromochloromethane		0.054U	0.054	50.0	54.7	109	71 - 123	55.8	112	2	30
75-71-8	Dichlorodifluoromethane		0.145U	0.145	50.0	56.5	113	58 - 140	56.9	114	1	30
75-34-3	1,1-Dichloroethane		0.171U	0.171	50.0	56.1	112	74 - 127	52.6	105	6	30
107-06-2	1,2-Dichloroethane		0.116U	0.116	50.0	49.5	99	71 - 129	50.0	100	1	30
156-59-2	cis-1,2-Dichloroethene		0.103U	0.103	50.0	58.6	117	73 - 130	50.5	101	15	30
156-60-5	trans-1,2-Dichloroethene		0.077U	0.077	50.0	52.5	105	69 - 132	50.7	101	3	30
75-09-2	Methylene chloride		0.149U	0.149	50.0	51.4	103	68 - 132	50.0	100	3	30
78-87-5	1,2-Dichloropropane		0.150U	0.150	50.0	50.4	101	72 - 128	51.3	103	2	30
10061-01-5	cis-1,3-Dichloropropene		0.124U	0.124	50.0	48.8	98	71 - 132	48.6	97	0	30
10061-02-6	trans-1,3-Dichloropropene		0.128U	0.128	50.0	47.7	95	71 - 131	48.5	97	2	30
100-41-4	Ethylbenzene		0.109U	0.109	50.0	55.3	111	74 - 126	54.9	110	1	30
591-78-6	2-Hexanone		0.122U	0.122	50.0	41.8	84	50 - 135	45.7	91	9	30
98-82-8	Isopropylbenzene (Cumene)		0.130U	0.130	50.0	49.7	99	71 - 125	50.1	100	1	30
78-93-3	2-Butanone		0.142U	0.142	50.0	40.4	81	58 - 137	42.2	84	4	30
108-10-1	4-Methyl-2-pentanone		0.120U	0.120	50.0	42.2	84	57 - 132	45.4	91	7	30
100-42-5	Styrene		0.089U	0.089	50.0	50.9	102	71 - 127	50.8	102	0	30
127-18-4	Tetrachloroethene		0.193U	0.193	50.0	54.8	110	68 - 128	56.9	114	4	30
79-34-5	1,1,2,2-Tetrachloroethane		0.109U	0.109	50.0	44.0	88	70 - 122	45.8	92	4	30
120-82-1	1,2,4-Trichlorobenzene		0.105U	0.105	50.0	54.4	109	61 - 135	55.2	110	1	30
71-55-6	1,1,1-Trichloroethane		0.123U	0.123	50.0	51.8	104	76 - 126	51.6	103	0	30
79-00-5	1,1,2-Trichloroethane		0.159U	0.159	50.0	50.4	101	72 - 121	52.8	106	5	30
75-69-4	Trichlorofluoromethane		0.157U	0.157	50.0	52.1	104	72 - 136	51.2	102	2	30
75-01-4	Vinyl chloride		0.127U	0.127	50.0	49.3	99	68 - 132	50.3	101	2	30

GC/MS Volatiles Quality Control Summary

Analytical Batch		541440	Client ID		MB541440		LCS541440		LCSD541440		RPD		RPD	Limit
Prep Batch		N/A	GCAL ID		1361778		1361779		1361780		R		RPD	
			Sample Type		Method Blank		LCS		LCS					
			Analytical Date		09/21/2014 10:15		09/21/2014 07:45		09/21/2014 08:06					
			Matrix		Water		Water		Water					
EPA 8260B														
95-47-6		o-Xylene			0.055U	50.0		49.0	98	73 - 130	49.4	99	1	30
96-12-8		1,2-Dibromo-3-chloropropane			0.194U	50.0		45.9	92	57 - 121	52.1	104	13	30
106-93-4		1,2-Dibromoethane			0.102U	50.0		50.5	101	70 - 124	52.3	105	4	30
108-05-4		Vinyl acetate			0.151U	50.0		59.0	118	54 - 147	54.1	108	9	30
1634-04-4		tert-Butyl methyl ether (MTBE)			0.078U	50.0		52.7	105	71 - 125	53.2	106	1	30
1330-20-7		Xylene (total)			0.179U	150		151	101	74 - 127	151	101	0	30
108-87-2		Methylcyclohexane			0.143U	50.0		58.2	116	67 - 138	56.5	113	3	30
110-82-7		Cyclohexane			0.337U	50.0		55.0	110	69 - 132	45.2	90	20	30
79-20-9		Methyl Acetate			0.159U	50.0		41.8	84	57 - 139	42.6	85	2	30
76-13-1		Trichlorotrifluoroethane			0.158U	50.0		55.0	110	72 - 136	52.8	106	4	30
110-75-8		2-Chloroethylvinyl ether			0.146U	50.0		46.3	93	56 - 124	47.7	95	3	30
541-73-1		1,3-Dichlorobenzene			0.138U	50.0		53.4	107	74 - 126	52.5	105	2	30
106-46-7		1,4-Dichlorobenzene			0.083U	50.0		51.0	102	72 - 122	51.2	102	0	30
95-50-1		1,2-Dichlorobenzene			0.135U	50.0		52.3	105	71 - 126	52.6	105	1	30
75-35-4		1,1-Dichloroethene			0.208U	50.0		51.1	102	69 - 129	50.5	101	1	20
71-43-2		Benzene			0.111U	50.0		51.7	103	70 - 129	51.7	103	0	20
79-01-6		Trichloroethene			0.161U	50.0		56.5	113	76 - 129	57.9	116	2	20
108-88-3		Toluene			0.122U	50.0		50.6	101	72 - 120	50.8	102	0	20
108-90-7		Chlorobenzene			0.083U	50.0		53.6	107	74 - 123	53.9	108	1	20
Surrogate														
460-00-4		4-Bromofluorobenzene			49	50		52.8	106	78 - 130	54.1	108		
1868-53-7		Dibromofluoromethane			50	50		51.9	104	77 - 127	51.4	103		
2037-26-5		Toluene d8			54.9	50		48.5	97	76 - 134	49.7	99		
17060-07-0		1,2-Dichloroethane-d4			48.7	50		49.1	98	71 - 127	47.8	96		

LCSD541440
1361780
LCSD
09/21/2014 08:06
Water

LCS541440
1361779
LCS
09/21/2014 07:45
Water

MB541440
1361778
Method Blank
09/21/2014 10:15
Water

General Chromatography Quality Control Summary

Analytical Batch	542085	Client ID	MB542085	LCS542085		
Prep Batch	N/A	GCAL ID	1364848	1364849		
		Sample Type	Method Blank	LCS		
		Analytical Date	09/30/2014 14:08	09/30/2014 14:19		
		Matrix	Water	Water		
EPA RSK-175		Units	ug/L	Spike	Result	Control
		Result	RDL	Added	% R	Limits % R
74-82-8	Methane	0.435U	0.435	17.5	15.0	39 - 120
74-85-1	Ethene	0.071U	0.071	3.06	2.91	45 - 134
74-84-0	Ethane	0.087U	0.087	3.28	3.16	45 - 128
Surrogate						
115-07-1	Propene	29.7	73	40.5	34.4	40 - 143

Analytical Batch	542085	Client ID	WP003/WW-1 MW-255	WP003/WW-1 MW-255-MS		
Prep Batch	N/A	GCAL ID	21409180609	21409180610		
		Sample Type	SAMPLE	MS		
		Analytical Date	09/30/2014 15:41	09/30/2014 15:55		
		Matrix	Water	Water		
EPA RSK-175		Units	ug/L	Spike	Result	Control
		Result	RDL	Added	% R	Limits % R
74-82-8	Methane	3.71	0.435	17.5	23.1	39 - 120
74-85-1	Ethene	0.00	0.071	3.06	3.66	45 - 134
74-84-0	Ethane	0.00	0.087	3.28	3.96	45 - 128
Surrogate						
115-07-1	Propene			40.5	36.3	40 - 143

		Result	% R	Control	Result	% R	RPD
				Limits % R			Limit
74-82-8	Methane	20.9	98	39 - 120	20.9	98	27
74-85-1	Ethene	3.28	107	45 - 134	3.28	107	25
74-84-0	Ethane	3.51	107	45 - 128	3.51	107	29
Surrogate							
115-07-1	Propene	32.2	80	40 - 143	32.2	80	

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541436 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541436 1361764 Method Blank 09/21/2014 11:23 Water	mg/L RDL	Spike Added	LCS541436 1361765 LCS 09/21/2014 09:47 Water		
						Result	% R	Control Limits % R
C-012	Total Organic Carbon		0.30U	0.30	50.0	48.9	98	80 - 120

Analytical Batch Prep Batch	541436 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFDR-3 21409190601 SAMPLE 09/21/2014 18:26 Water	mg/L RDL	Spike Added	1361230MS 1361768 MS 09/21/2014 18:51 Water			1361230MSD 1361769 MSD 09/21/2014 19:15 Water		
						Result	% R	Control Limits % R	Result	% R	RPD Limit
C-012	Total Organic Carbon		6.3	0.30	50.0	55.3	98	75 - 125	56.5	100	2

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541559 1362255 Method Blank 09/23/2014 10:40 Water		LCS541559 1362256 LCS 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Spike Added	Control Limits % R
18496-25-8	Sulfide		2.00U	2.00	25.0	25.8 103 80 - 120

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFPI-1 21409171001 SAMPLE 09/23/2014 10:40 Water		1360394MS 1362257 MS 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Spike Added	Control Limits % R
18496-25-8	Sulfide		0.000	2.00	25.0	26.4 106 75 - 125

Analytical Batch Prep Batch	541559 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SMFMW-1 21409171002 SAMPLE 09/23/2014 10:40 Water		1360395DUP 1362258 DUP 09/23/2014 10:40 Water	
SM 4500-S2 F-2011			Units Result	mg/L RDL	Result	RPD Limit
18496-25-8	Sulfide		0.000	2.00	0.000	0 25

General Chemistry Quality Control Summary

Analytical Batch		541420	Client ID		MB541420		LCS541420		LCSD541420		RPD	
Prep Batch		N/A	GCAL ID		1361652		1361653		1361921		Limit	
			Sample Type		Method Blank		LCS		LCSD			
			Analytical Date		09/20/2014 07:56		09/20/2014 07:39		09/20/2014 15:59			
			Matrix		Water		Water		Water			
EPA 9056A												
16887-00-6	Chloride			Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits	% R	Result	
14797-55-8	Nitrate			0.050U	0.050	2.50	2.40	96	80 - 120	99	2.48	3
14808-79-8	Sulfate			0.071J	0.050	2.50	2.37	95	80 - 120	98	2.44	3
				0.050U	0.050	2.50	2.41	97	80 - 120	100	2.49	3

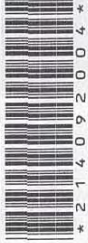


Client ID: 4829 - AMEC Environment & Infrastructure, Inc.
SDG: 214092004
Due Date: 10/01/14

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



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214092004		CHECKLIST		YES	NO	NA
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX	Were all samples received using proper thermal preservation?	☒	☐	☐	
		When used, were all custody seals intact?	☒	☐	☐	
		Were all samples received in proper containers?	☒	☐	☐	
Profile Number 249065	Received By Saucier, Charlotte M.	Were all samples received using proper chemical preservation?	☒	☐	☐	
		Was preservative added to any container at the lab?	☐	☒	☐	
		Were all containers received in good condition?	☒	☐	☐	
		Were all VOA vials received with no head space?	☒	☐	☐	
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/20/14	Do all sample labels match the Chain of Custody?	☒	☐	☐	
		Did the Chain of Custody list the sampling technician?	☒	☐	☐	
		Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐	☒	☐	
COOLERS		LAB PRESERVATIONS				
Airbill 7712 1685 0919	Thermometer ID: E22	None				
	Temp(°C) 2.1					
NOTES						



CHAIN OF CUSTODY RECORD

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

Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214092004



Due Date: 10/01/14

Report to:						Bill to:						Analytical Requests & Method						GCAL use only:			
Client: <u>AMEC EXI</u>						Client: _____						GCAL use only: Custody Seal used ☒ yes ☐ no intact ☒ yes ☐ no Temperature °C <u>2.1 FZZ</u> ☐ Dissolved Analysis Requested ☐ Field filtered ☐ Lab filtered									
Address: <u>1075 Big Shanty Rd</u>						Address: <u>AMEC</u>															
Contact: <u>Daniel Morris</u>						Contact: <u>DEAL</u>															
Phone: <u>404-852-4002</u>						Phone: _____															
E-mail: <u>daniel.morris@amec.com</u>						E-mail: _____															
P.O. Number		Project Name/Number																			
		<u>Woodall Creek MNA #1</u>																			
Sampled By: <u>Daniel Morris & Tela Morickas</u>																					
Matrix¹	Date	Time (2400)	Comp	Grab	Sample Description	No Con-tainers ↓	Hel	Hel	Hel	4C	4C	4C	4C	4C	4C	Preservative					
W	9/19	1100		X	SMEMW-18	10	X	X	X	X	X	X	X	X	X	1					
W	9/19	1018		X	CPMW-11	10	X	X	X	X	X	X	X	X	X	2					
W	9/19	—		—	TRIP BLANK	2	X									3					
<u>A. Dany</u>																					
Air Bill No: <u>7712 1685 0919</u>																					
Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote)																					
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Date:		Time:		Note: <u>*NITRATE*</u>									
<u>A. Dany</u>		<u>9/19/14</u>		<u>0916</u>		<u>Hubro Amez</u>		<u>9/19/14</u>		<u>11:15</u>											
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Date:		Time:											
<u>Hubro Amez</u>		<u>9/19/14</u>																			
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Date:		Time:		By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.									
<u>Ed EX</u>		<u>9/20/14</u>		<u>930</u>		<u>Chaucier</u>		<u>9/20/14</u>		<u>930</u>											

Matrix¹: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

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

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT



SAMPLE DELIVERY GROUP 214092004		
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX	
Profile Number 249065	Received By Saucier, Charlotte M.	
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/20/14	

CHECKLIST	YES	NO	NA
Were all samples received using proper thermal preservation?	☒	☐	☐
When used, were all custody seals intact?	☒	☐	☐
Were all samples received in proper containers?	☒	☐	☐
Were all samples received using proper chemical preservation?	☒	☐	☐
Was preservative added to any container at the lab?	☐	☒	☐
Were all containers received in good condition?	☒	☐	☐
Were all VOA vials received with no head space?	☒	☐	☐
Do all sample labels match the Chain of Custody?	☒	☐	☐
Did the Chain of Custody list the sampling technician?	☒	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐	☒	☐

COOLERS		
Airbill	Thermometer ID: E22	Temp(°C)
7712 1685 0919		2.1

DISCREPANCIES	LAB PRESERVATIONS
None	None

NOTES

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

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

Report Date 10/03/2014

GCAL Report 214092313



Deliver To AMEC E&I
396 Plasters Ave NE
Atlanta, GA 30324
770-547-4409

Attn Daniel Morris

Project Woodall Creek MNA#1

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.

Report: 214092313

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

VOLATILES MASS SPECTROMETRY

In the 8260_W analysis for analytical batch 541678, the %D/%Drift is outside $\pm 40\%$ for Vinyl Acetate in the CCV. The response is high and this analyte was not detected in the associated samples.

In the EPA 8260B analysis, sample (s) 21409231301 (GPMW-18) and 21409231304 (RPMW-14) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilution is reflected in elevated detection limits.

In the EPA 8260B analysis for analytical batch 541678, the LCS and/or LCSD recoveries are above the upper control limit for Vinyl acetate. This compound was not detected in the associated samples.

VOLATILES GAS CHROMATOGRAPHY

In the EPA RSK-175 analysis, sample 21409231303(JPMW-23) had to be diluted to bracket the concentration of target analyte(s) within the calibration range of the instrument.

CONVENTIONALS

In the EPA 9056A analysis, sample (s) 21409231301 (GPMW-18), 21409231302 (GPMW-20), 21409231303 (JPMW-23) and 21409231304 (RPMW-14) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

MISCELLANEOUS

For Sample (s) 21409231301 (GPMW-18), 21409231302 (GPMW-20), 21409231303 (JPMW-23), and 21409231304 (RPMW-14) a date, time of collection or sample ID discrepancy between a container label and the chain of custody was noted at receipt.

Laboratory Endorsement

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

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

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

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

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

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

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


Curtis Ekker/Mgr of Data Del

Authorized Signature

GCAL REPORT 214092313

THIS REPORT CONTAINS  Curtis Ekker/Mgr of Data Del PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231301	GPMW-18	Water	09/22/2014 11:02	09/23/2014 09:15
21409231302	GPMW-20	Water	09/22/2014 10:55	09/23/2014 09:15
21409231303	JPMW-23	Water	09/22/2014 13:40	09/23/2014 09:15
21409231304	RPMW-14	Water	09/22/2014 14:55	09/23/2014 09:15

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231301	GPMW-18	Water	09/22/2014 11:02	09/23/2014 09:15

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.31	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	1.09J	10.0	0.416	ug/L
67-66-3	Chloroform	3.10J	10.0	0.310	ug/L
127-18-4	Tetrachloroethene	284	10.0	0.385	ug/L
79-01-6	Trichloroethene	69.5	10.0	0.323	ug/L
156-59-2	cis-1,2-Dichloroethene	156	10.0	0.207	ug/L
156-60-5	trans-1,2-Dichloroethene	1.16J	10.0	0.154	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.7	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	28.6	2.00	0.500	mg/L
14808-79-8	Sulfate	12.6	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231302	GPMW-20	Water	09/22/2014 10:55	09/23/2014 09:15

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.62	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	28.1	5.00	0.193	ug/L
79-01-6	Trichloroethene	4.54J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	5.30	5.00	0.103	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231302	GPMW-20	Water	09/22/2014 10:55	09/23/2014 09:15

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	31.4	2.00	0.500	mg/L
14808-79-8	Sulfate	19.8	2.00	0.500	mg/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	3.3	1.0	0.30	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231303	JPMW-23	Water	09/22/2014 13:40	09/23/2014 09:15

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.441	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	1.07J	5.00	0.208	ug/L
71-43-2	Benzene	0.673J	5.00	0.111	ug/L
67-66-3	Chloroform	1.54J	5.00	0.155	ug/L
127-18-4	Tetrachloroethene	96.2	5.00	0.193	ug/L
79-01-6	Trichloroethene	26.1	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	22.3	5.00	0.103	ug/L

EPA RSK-175

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	222	20.0	4.35	ug/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	8.57	2.00	0.500	mg/L
14808-79-8	Sulfate	18.1	2.00	0.500	mg/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	6.2	1.0	0.30	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231304	RPMW-14	Water	09/22/2014 14:55	09/23/2014 09:15

EPA RSK-175

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	2.43	2.00	0.435	ug/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	4.12	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	934	25.0	0.963	ug/L
79-01-6	Trichloroethene	327	25.0	0.807	ug/L
156-59-2	cis-1,2-Dichloroethene	9.67J	25.0	0.517	ug/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	18.3	2.00	0.500	mg/L
14808-79-8	Sulfate	28.8	2.00	0.500	mg/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.5	1.0	0.30	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231301	GPMW-18	Water	09/22/2014 11:02	09/23/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	09/24/2014 17:03	ALC	541678

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.246U	10.0	0.246	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.218U	10.0	0.218	ug/L
79-00-5	1,1,2-Trichloroethane	0.318U	10.0	0.318	ug/L
75-34-3	1,1-Dichloroethane	0.342U	10.0	0.342	ug/L
75-35-4	1,1-Dichloroethene	1.09J	10.0	0.416	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.210U	10.0	0.210	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.388U	10.0	0.388	ug/L
106-93-4	1,2-Dibromoethane	0.205U	10.0	0.205	ug/L
95-50-1	1,2-Dichlorobenzene	0.270U	10.0	0.270	ug/L
107-06-2	1,2-Dichloroethane	0.232U	10.0	0.232	ug/L
78-87-5	1,2-Dichloropropane	0.301U	10.0	0.301	ug/L
541-73-1	1,3-Dichlorobenzene	0.275U	10.0	0.275	ug/L
106-46-7	1,4-Dichlorobenzene	0.166U	10.0	0.166	ug/L
78-93-3	2-Butanone	0.284U	10.0	0.284	ug/L
110-75-8	2-Chloroethylvinyl ether	0.291U	10.0	0.291	ug/L
591-78-6	2-Hexanone	0.245U	10.0	0.245	ug/L
108-10-1	4-Methyl-2-pentanone	0.240U	10.0	0.240	ug/L
67-64-1	Acetone	0.387U	10.0	0.387	ug/L
71-43-2	Benzene	0.222U	10.0	0.222	ug/L
75-27-4	Bromodichloromethane	0.167U	10.0	0.167	ug/L
75-25-2	Bromoform	0.430U	10.0	0.430	ug/L
74-83-9	Bromomethane	0.854U	10.0	0.854	ug/L
75-15-0	Carbon disulfide	0.380U	10.0	0.380	ug/L
56-23-5	Carbon tetrachloride	0.496U	10.0	0.496	ug/L
108-90-7	Chlorobenzene	0.166U	10.0	0.166	ug/L
75-00-3	Chloroethane	0.470U	10.0	0.470	ug/L
67-66-3	Chloroform	3.10J	10.0	0.310	ug/L
74-87-3	Chloromethane	0.287U	10.0	0.287	ug/L
110-82-7	Cyclohexane	0.674U	10.0	0.674	ug/L
124-48-1	Dibromochloromethane	0.108U	10.0	0.108	ug/L
75-71-8	Dichlorodifluoromethane	0.290U	10.0	0.290	ug/L
100-41-4	Ethylbenzene	0.218U	10.0	0.218	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.260U	10.0	0.260	ug/L
79-20-9	Methyl Acetate	0.319U	10.0	0.319	ug/L
108-87-2	Methylcyclohexane	0.287U	10.0	0.287	ug/L
75-09-2	Methylene chloride	0.298U	10.0	0.298	ug/L
100-42-5	Styrene	0.179U	10.0	0.179	ug/L
127-18-4	Tetrachloroethene	284	10.0	0.385	ug/L
108-88-3	Toluene	0.244U	10.0	0.244	ug/L
79-01-6	Trichloroethene	69.5	10.0	0.323	ug/L
75-69-4	Trichlorofluoromethane	0.314U	10.0	0.314	ug/L
76-13-1	Trichlorotrifluoroethane	0.316U	10.0	0.316	ug/L
108-05-4	Vinyl acetate	0.302U	10.0	0.302	ug/L
75-01-4	Vinyl chloride	0.254U	10.0	0.254	ug/L
1330-20-7	Xylene (total)	0.358U	30.0	0.358	ug/L
156-59-2	cis-1,2-Dichloroethene	156	10.0	0.207	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.248U	10.0	0.248	ug/L
136777-61-2	m,p-Xylene	0.247U	20.0	0.247	ug/L
95-47-6	o-Xylene	0.111U	10.0	0.111	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.155U	10.0	0.155	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231301	GPMW-18	Water	09/22/2014 11:02	09/23/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	09/24/2014 17:03	ALC	541678

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	1.16J	10.0	0.154	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.255U	10.0	0.255	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	91.4	ug/L	91	78 - 130
1868-53-7	Dibromofluoromethane	100	109	ug/L	109	77 - 127
2037-26-5	Toluene d8	100	114	ug/L	114	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	98	ug/L	98	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 14:26	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	56.7	ug/L	140	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/29/2014 17:58	JEM	541843

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.7	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 14:00	DMT	541947

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231301	GPMW-18	Water	09/22/2014 11:02	09/23/2014 09:15

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 14:19	DMT	541628
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		1.31	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/25/2014 16:42	CLA	541732
CAS#	Parameter		Result	RDL	MDL	Units
16887-00-6	Chloride		28.6	2.00	0.500	mg/L
14808-79-8	Sulfate		12.6	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231302	GPMW-20	Water	09/22/2014 10:55	09/23/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/24/2014 17:23	ALC	541678

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	28.1	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	4.54J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	5.30	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231302	GPMW-20	Water	09/22/2014 10:55	09/23/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/24/2014 17:23	ALC	541678

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.1	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	50	50.1	ug/L	100	77 - 127
2037-26-5	Toluene d8	50	56.1	ug/L	112	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.8	ug/L	100	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 14:38	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	53.4	ug/L	132	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/29/2014 18:19	JEM	541843

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	3.3	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 14:00	DMT	541947

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231302	GPMW-20	Water	09/22/2014 10:55	09/23/2014 09:15

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 14:37	DMT	541628

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.62	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/25/2014 17:00	CLA	541732

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	31.4	2.00	0.500	mg/L
14808-79-8	Sulfate	19.8	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231303	JPMW-23	Water	09/22/2014 13:40	09/23/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/24/2014 17:44	ALC	541678

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	1.07J	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.673J	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	1.54J	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	96.2	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	26.1	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	22.3	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231303	JPMW-23	Water	09/22/2014 13:40	09/23/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/24/2014 17:44	ALC	541678

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	46.1	ug/L	92	78 - 130
1868-53-7	Dibromofluoromethane	50	51.8	ug/L	104	77 - 127
2037-26-5	Toluene d8	50	54.8	ug/L	110	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.5	ug/L	101	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 14:44	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	43.1	ug/L	106	40 - 143

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/02/2014 15:25	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	222	20.0	4.35	ug/L

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/29/2014 18:40	JEM	541843

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	6.2	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 14:00	DMT	541947

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231303	JPMW-23	Water	09/22/2014 13:40	09/23/2014 09:15

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 14:54	DMT	541628

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.441	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/02/2014 00:28	DMT	542159

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	8.57	2.00	0.500	mg/L
14808-79-8	Sulfate	18.1	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231304	RPMW-14	Water	09/22/2014 14:55	09/23/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	09/24/2014 18:05	ALC	541678

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.615U	25.0	0.615	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.546U	25.0	0.546	ug/L
79-00-5	1,1,2-Trichloroethane	0.795U	25.0	0.795	ug/L
75-34-3	1,1-Dichloroethane	0.856U	25.0	0.856	ug/L
75-35-4	1,1-Dichloroethene	1.04U	25.0	1.04	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.526U	25.0	0.526	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.971U	25.0	0.971	ug/L
106-93-4	1,2-Dibromoethane	0.512U	25.0	0.512	ug/L
95-50-1	1,2-Dichlorobenzene	0.674U	25.0	0.674	ug/L
107-06-2	1,2-Dichloroethane	0.581U	25.0	0.581	ug/L
78-87-5	1,2-Dichloropropane	0.752U	25.0	0.752	ug/L
541-73-1	1,3-Dichlorobenzene	0.689U	25.0	0.689	ug/L
106-46-7	1,4-Dichlorobenzene	0.416U	25.0	0.416	ug/L
78-93-3	2-Butanone	0.711U	25.0	0.711	ug/L
110-75-8	2-Chloroethylvinyl ether	0.729U	25.0	0.729	ug/L
591-78-6	2-Hexanone	0.612U	25.0	0.612	ug/L
108-10-1	4-Methyl-2-pentanone	0.600U	25.0	0.600	ug/L
67-64-1	Acetone	0.967U	25.0	0.967	ug/L
71-43-2	Benzene	0.555U	25.0	0.555	ug/L
75-27-4	Bromodichloromethane	0.417U	25.0	0.417	ug/L
75-25-2	Bromoform	1.08U	25.0	1.08	ug/L
74-83-9	Bromomethane	2.14U	25.0	2.14	ug/L
75-15-0	Carbon disulfide	0.950U	25.0	0.950	ug/L
56-23-5	Carbon tetrachloride	1.24U	25.0	1.24	ug/L
108-90-7	Chlorobenzene	0.414U	25.0	0.414	ug/L
75-00-3	Chloroethane	1.18U	25.0	1.18	ug/L
67-66-3	Chloroform	0.775U	25.0	0.775	ug/L
74-87-3	Chloromethane	0.718U	25.0	0.718	ug/L
110-82-7	Cyclohexane	1.69U	25.0	1.69	ug/L
124-48-1	Dibromochloromethane	0.270U	25.0	0.270	ug/L
75-71-8	Dichlorodifluoromethane	0.724U	25.0	0.724	ug/L
100-41-4	Ethylbenzene	0.545U	25.0	0.545	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.651U	25.0	0.651	ug/L
79-20-9	Methyl Acetate	0.797U	25.0	0.797	ug/L
108-87-2	Methylcyclohexane	0.717U	25.0	0.717	ug/L
75-09-2	Methylene chloride	0.745U	25.0	0.745	ug/L
100-42-5	Styrene	0.447U	25.0	0.447	ug/L
127-18-4	Tetrachloroethene	934	25.0	0.963	ug/L
108-88-3	Toluene	0.609U	25.0	0.609	ug/L
79-01-6	Trichloroethene	327	25.0	0.807	ug/L
75-69-4	Trichlorofluoromethane	0.785U	25.0	0.785	ug/L
76-13-1	Trichlorotrifluoroethane	0.790U	25.0	0.790	ug/L
108-05-4	Vinyl acetate	0.755U	25.0	0.755	ug/L
75-01-4	Vinyl chloride	0.636U	25.0	0.636	ug/L
1330-20-7	Xylene (total)	0.894U	75.0	0.894	ug/L
156-59-2	cis-1,2-Dichloroethene	9.67J	25.0	0.517	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.621U	25.0	0.621	ug/L
136777-61-2	m,p-Xylene	0.617U	50.0	0.617	ug/L
95-47-6	o-Xylene	0.277U	25.0	0.277	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.389U	25.0	0.389	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231304	RPMW-14	Water	09/22/2014 14:55	09/23/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	09/24/2014 18:05	ALC	541678

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.385U	25.0	0.385	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.639U	25.0	0.639	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	250	228	ug/L	91	78 - 130
1868-53-7	Dibromofluoromethane	250	268	ug/L	107	77 - 127
2037-26-5	Toluene d8	250	271	ug/L	108	76 - 134
17060-07-0	1,2-Dichloroethane-d4	250	254	ug/L	102	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 15:31	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	2.43	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	36.1	ug/L	89	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/29/2014 19:01	JEM	541843

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.5	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 14:00	DMT	541947

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409231304	RPMW-14	Water	09/22/2014 14:55	09/23/2014 09:15

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/23/2014 18:24	DMT	541628
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		4.12	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/02/2014 00:45	DMT	542159
CAS#	Parameter		Result	RDL	MDL	Units
16887-00-6	Chloride		18.3	2.00	0.500	mg/L
14808-79-8	Sulfate		28.8	2.00	0.500	mg/L

GC/MS Volatiles Quality Control Summary

Analytical Batch		541678	Client ID		MB541678		LCS541678		LCSD541678		RPD	
Prep Batch		N/A	GCAL ID	1362938	1362939	1362940	LCS		LCSD		Limit	
Sample Type		Method Blank	Units		ug/L	Spike	Result		Result		RPD	
Analytical Date		09/24/2014 12:08	Result		RDL	Added	Control		Control		Limit	
Matrix		Water					% R		% R		Limit	
EPA 8260B												
67-64-1	Acetone		0.193U	0.193	50.0	44.4	89	44 - 156	38.7	77	14	30
75-27-4	Bromodichloromethane		0.083U	0.083	50.0	52.6	105	74 - 125	50.1	100	5	30
75-25-2	Bromoform		0.215U	0.215	50.0	51.2	102	64 - 122	54.0	108	5	30
74-83-9	Bromomethane		0.427U	0.427	50.0	46.5	93	47 - 138	48.6	97	4	30
75-15-0	Carbon disulfide		0.190U	0.190	50.0	48.6	97	69 - 136	46.9	94	4	30
56-23-5	Carbon tetrachloride		0.248U	0.248	50.0	55.0	110	76 - 128	56.6	113	3	30
75-00-3	Chloroethane		0.235U	0.235	50.0	45.4	91	62 - 141	43.8	88	4	30
136777-61-2	m,p-Xylene		0.123U	0.123	100	98.3	98	74 - 126	99.8	100	2	30
67-66-3	Chloroform		0.155U	0.155	50.0	54.0	108	75 - 122	58.1	116	7	30
74-87-3	Chloromethane		0.144U	0.144	50.0	45.8	92	59 - 132	45.7	91	0	30
124-48-1	Dibromochloromethane		0.054U	0.054	50.0	52.7	105	71 - 123	53.5	107	2	30
75-71-8	Dichlorodifluoromethane		0.145U	0.145	50.0	52.7	105	58 - 140	52.2	104	1	30
75-34-3	1,1-Dichloroethane		0.171U	0.171	50.0	52.4	105	74 - 127	51.3	103	2	30
107-06-2	1,2-Dichloroethane		0.116U	0.116	50.0	50.3	101	71 - 129	50.0	100	1	30
156-59-2	cis-1,2-Dichloroethene		0.103U	0.103	50.0	54.1	108	73 - 130	54.5	109	1	30
156-60-5	trans-1,2-Dichloroethene		0.077U	0.077	50.0	50.8	102	69 - 132	40.9	82	22	30
75-09-2	Methylene chloride		0.149U	0.149	50.0	48.9	98	68 - 132	42.0	84	15	30
78-87-5	1,2-Dichloropropane		0.150U	0.150	50.0	50.7	101	72 - 128	49.5	99	2	30
10061-01-5	cis-1,3-Dichloropropene		0.124U	0.124	50.0	48.0	96	71 - 132	47.1	94	2	30
10061-02-6	trans-1,3-Dichloropropene		0.128U	0.128	50.0	47.0	94	71 - 131	46.5	93	1	30
100-41-4	Ethylbenzene		0.109U	0.109	50.0	54.0	108	74 - 126	54.3	109	1	30
591-78-6	2-Hexanone		0.122U	0.122	50.0	41.4	83	50 - 135	46.2	92	11	30
98-82-8	Isopropylbenzene (Cumene)		0.130U	0.130	50.0	48.2	96	71 - 125	48.9	98	1	30
78-93-3	2-Butanone		0.142U	0.142	50.0	41.2	82	58 - 137	47.8	96	15	30
108-10-1	4-Methyl-2-pentanone		0.120U	0.120	50.0	43.2	86	57 - 132	48.0	96	11	30
100-42-5	Styrene		0.089U	0.089	50.0	49.4	99	71 - 127	49.4	99	0	30
127-18-4	Tetrachloroethene		0.193U	0.193	50.0	53.4	107	68 - 128	53.0	106	1	30
79-34-5	1,1,2,2-Tetrachloroethane		0.109U	0.109	50.0	45.8	92	70 - 122	47.8	96	4	30
120-82-1	1,2,4-Trichlorobenzene		0.105U	0.105	50.0	51.6	103	61 - 135	51.7	103	0	30
71-55-6	1,1,1-Trichloroethane		0.123U	0.123	50.0	51.4	103	76 - 126	53.7	107	4	30
79-00-5	1,1,2-Trichloroethane		0.159U	0.159	50.0	51.0	102	72 - 121	51.7	103	1	30
75-69-4	Trichlorofluoromethane		0.157U	0.157	50.0	50.9	102	72 - 136	49.1	98	4	30
75-01-4	Vinyl chloride		0.127U	0.127	50.0	47.8	96	68 - 132	47.5	95	1	30

GC/MS Volatiles Quality Control Summary

Analytical Batch		541678	Client ID		MB541678		LCS541678		LCSD541678		RPD		Limit	
Prep Batch		N/A	GCAL ID		1362938		1362939		1362940		RPD			
			Sample Type		Method Blank		LCS		LCSD					
			Analytical Date		09/24/2014 12:08		09/24/2014 10:32		09/24/2014 10:53					
			Matrix		Water		Water		Water					
EPA 8260B														
95-47-6	o-Xylene				0.055U	0.055	50.0	47.6	95	73 - 130	48.5	97	2	30
96-12-8	1,2-Dibromo-3-chloropropane				0.194U	0.194	50.0	44.8	90	57 - 121	49.7	99	10	30
106-93-4	1,2-Dibromoethane				0.102U	0.102	50.0	49.7	99	70 - 124	51.6	103	4	30
108-05-4	Vinyl acetate				0.151U	0.151	50.0	120	240*	54 - 147	120	240*	0	30
1634-04-4	tert-Butyl methyl ether (MTBE)				0.078U	0.078	50.0	52.2	104	71 - 125	42.9	86	20	30
1330-20-7	Xylene (total)				0.179U	0.179	150	146	97	74 - 127	148	99	1	30
108-87-2	Methylcyclohexane				0.143U	0.143	50.0	55.5	111	67 - 138	52.9	106	5	30
110-82-7	Cyclohexane				0.337U	0.337	50.0	50.6	101	69 - 132	51.9	104	3	30
79-20-9	Methyl Acetate				0.159U	0.159	50.0	41.3	83	57 - 139	33.3	67	21	30
76-13-1	Trichlorotrifluoroethane				0.158U	0.158	50.0	53.1	106	72 - 136	49.8	100	6	30
110-75-8	2-Chloroethylvinyl ether				0.146U	0.146	50.0	46.6	93	56 - 124	48.5	97	4	30
541-73-1	1,3-Dichlorobenzene				0.138U	0.138	50.0	52.5	105	74 - 126	51.7	103	2	30
106-46-7	1,4-Dichlorobenzene				0.083U	0.083	50.0	49.2	98	72 - 122	49.2	98	0	30
95-50-1	1,2-Dichlorobenzene				0.135U	0.135	50.0	50.9	102	71 - 126	51.1	102	0	30
75-35-4	1,1-Dichloroethene				0.208U	0.208	50.0	49.1	98	69 - 129	47.5	95	3	20
71-43-2	Benzene				0.111U	0.111	50.0	51.2	102	70 - 129	52.0	104	2	20
79-01-6	Trichloroethene				0.161U	0.161	50.0	55.7	111	76 - 129	53.0	106	5	20
108-88-3	Toluene				0.122U	0.122	50.0	49.7	99	72 - 120	49.9	100	0	20
108-90-7	Chlorobenzene				0.083U	0.083	50.0	52.1	104	74 - 123	52.7	105	1	20
Surrogate														
460-00-4	4-Bromofluorobenzene				45.8	92	50	50.2	100	78 - 130	50.4	101		
1868-53-7	Dibromofluoromethane				52	104	50	51.7	103	77 - 127	54.2	108		
2037-26-5	Toluene d8				55.1	110	50	49	98	76 - 134	50.5	101		
17060-07-0	1,2-Dichloroethane-d4				50	100	50	48.5	97	71 - 127	50.2	100		

GC/MS Volatiles Quality Control Summary

Analytical Batch Prep Batch		541678 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix		14-173 JET PAD SUMP SLUDGE 21409220701 SAMPLE 09/24/2014 13:23 Solid		1361937MS 1362941 MS 09/24/2014 14:04 Solid		1361937MSD 1362942 MSD 09/24/2014 14:25 Solid			
EPA 8260B			Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	Limit
56-23-5	Carbon tetrachloride		0.00	9.92	2000	2230	112	71 - 133	2290	115	3	30
67-66-3	Chloroform		0.00	6.20	2000	2070	104	74 - 124	2240	112	8	30
107-06-2	1,2-Dichloroethane		0.00	4.64	2000	2090	105	68 - 126	1980	99	5	30
78-93-3	2-Butanone		44.0	5.68	2000	1940	95	47 - 142	2080	102	7	30
127-18-4	Tetrachloroethene		0.00	7.70	2000	2110	106	70 - 127	2130	107	1	30
75-01-4	Vinyl chloride		45.0	5.09	2000	2090	102	67 - 131	2040	100	2	30
75-35-4	1,1-Dichloroethene		0.00	8.32	2000	2130	107	68 - 129	2060	103	3	20
71-43-2	Benzene		0.00	4.44	2000	2100	105	73 - 128	2020	101	4	20
79-01-6	Trichloroethene		0.00	6.46	2000	2290	115	78 - 127	2180	109	5	20
108-90-7	Chlorobenzene		0.00	3.31	2000	2120	106	75 - 121	2100	105	1	20
Surrogate												
460-00-4	4-Bromofluorobenzene				2000	2010	101	62 - 127	2000	100		
1868-53-7	Dibromofluoromethane				2000	2060	103	65 - 130	2190	110		
2037-26-5	Toluene d8				2000	1930	97	71 - 132	1930	97		
17060-07-0	1,2-Dichloroethane-d4				2000	1950	98	62 - 125	1980	99		

Analytical Batch 541678 Prep Batch N/A		Client ID GCAL ID Sample Type Analytical Date Matrix		CALMEDIA ACT ALUMINA (TCLP) 21409231401 SAMPLE 09/24/2014 13:44 Solid		1362313MS 1362943 MS 09/24/2014 14:46 Solid			
EPA 8260B				Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R
56-23-5	Carbon tetrachloride			0.00	9.92	2000	2210	111	71 - 133
67-66-3	Chloroform			0.00	6.20	2000	2120	106	74 - 124
107-06-2	1,2-Dichloroethane			0.00	4.64	2000	2100	105	68 - 126
78-93-3	2-Butanone			0.00	5.68	2000	1970	99	47 - 142
127-18-4	Tetrachloroethene			0.00	7.70	2000	2210	111	70 - 127
75-01-4	Vinyl chloride			0.00	5.09	2000	1930	97	67 - 131
75-35-4	1,1-Dichloroethene			0.00	8.32	2000	2050	103	68 - 129
71-43-2	Benzene			212	4.44	2000	2390	109	73 - 128
79-01-6	Trichloroethene			0.00	6.46	2000	2150	108	78 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch		541678	Client ID		CALMEDIA ACT ALUMINA (TCLP) 21409231401 SAMPLE 09/24/2014 13:44 Solid	1362313MS 1362943 MS 09/24/2014 14:46 Solid
Prep Batch		N/A	GCAL ID			
			Sample Type			
			Analytical Date			
			Matrix			
EPA 8260B						
108-90-7	Chlorobenzene			Units Result	ug/L RDL	Spike Added
				0.00	3.31	2000
Surrogate						
460-00-4	4-Bromofluorobenzene					2000
1868-53-7	Dibromofluoromethane					2000
2037-26-5	Toluene d8					2000
17060-07-0	1,2-Dichloroethane-d4					2000

General Chromatography Quality Control Summary

Analytical Batch		542224	Client ID		MB542224		LCS542224		LCS542224		LCS542224	
Prep Batch		N/A	GCAL ID		1365547		1365548		1365549		1365549	
			Sample Type		Method Blank		LCS		LCS		LCS	
			Analytical Date		10/02/2014 13:18		10/02/2014 14:09		10/02/2014 14:09		10/02/2014 14:18	
			Matrix		Water		Water		Water		Water	
EPA RSK-175			Units Result		ug/L RDL		Spike Added		Result		Control Limits % R	
74-82-8	Methane		0.435U		0.435		17.5		15.9		91	
74-85-1	Ethene		0.071U		0.071		3.06		3.24		106	
74-84-0	Ethane		0.087U		0.087		3.28		3.60		110	
Surrogate												
115-07-1	Propene		46.8		116		40.5		39.7		98	
									Result		% R	
											RPD	
											Limit	

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541843 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541843 1363700 Method Blank 09/29/2014 16:24 Water	mg/L RDL	Spike Added	LCS541843 1363701 LCS 09/29/2014 15:33 Water		
						Units Result	Result	Control Limits % R
C-012	Total Organic Carbon		0.30U	0.30	50.0		48.6	80 - 120
	EPA 9060A						97	

Analytical Batch Prep Batch	541843 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	OU8-MW150-240914 21409251003 SAMPLE 09/29/2014 19:43 Water	mg/L RDL	Spike Added	1363363MS 1364600 MS 09/29/2014 21:16 Water		
						Units Result	Result	Control Limits % R
C-012	Total Organic Carbon		17.2	0.30	50.0		64.7	75 - 125
	EPA 9060A						65.3	
							96	
							1	
							25	

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541947 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541947 1364357 Method Blank 09/28/2014 14:00 Water	mg/L RDL	2.00	Spike Added	25.0	Result	26.5	% R	106	Control Limits % R	80 - 120
SM 4500-S2 F-2011													
18496-25-8	Sulfide												

Analytical Batch Prep Batch	541947 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	GPMW-20 21409231302 SAMPLE 09/28/2014 14:00 Water	mg/L RDL	2.00	Spike Added	25.0	Result	27.1	% R	108	Control Limits % R	75 - 125
SM 4500-S2 F-2011													
18496-25-8	Sulfide												

Analytical Batch Prep Batch	541947 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	GPMW-18 21409231301 SAMPLE 09/28/2014 14:00 Water	mg/L RDL	2.00	Result	0.000	RPD Limit	0	25
SM 4500-S2 F-2011										
18496-25-8	Sulfide									

General Chemistry Quality Control Summary

Analytical Batch	541628	Client ID GCAL ID Sample Type Analytical Date Matrix	GPMW-20	mg/L RDL	1.62	Spike Added	2.50	1362309MS	1362309MSD	% R	Control Limits % R	Result	% R	RPD	Limit
Prep Batch	N/A		21409231302					1362693	1362694						
			SAMPLE					MS	MSD						
			09/23/2014 14:37					09/23/2014 18:42	09/23/2014 18:59						
			Water					Water	Water						
EPA 9056A															
14797-55-8	Nitrate														

Analytical Batch Prep Batch	541732 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541732 1363261 Method Blank 09/25/2014 09:44 Water	mg/L RDL	0.050U 0.050U	Spike Added	2.50 2.50	Result	2.32 2.39	% R	93 95	Control Limits % R	80 - 120 80 - 120
EPA 9056A													
16887-00-6	Chloride												
14808-79-8	Sulfate												

Analytical Batch	541732	Client ID	ME-32B	Units	mg/L	Spike		Result		% R	Control		Result	% R	RPD	RPD	
Prep Batch	N/A	GCAL ID	21409236403	Result	RDL	Added					Limits	% R				Limit	
		Sample Type	SAMPLE														
		Analytical Date	09/25/2014 10:19														
		Matrix	Water														
EPA 9056A																	
14808-79-8	Sulfate			237	2.50	125		357		96	80 - 120		356	95	0	15	

Analytical Batch Prep Batch	541732 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	DPMW-21 21409241701 SAMPLE 09/25/2014 17:34 Water	mg/L RDL	47.9 2.50	Spike Added	125	Result	171	% R	98	Control Limits % R	80 - 120	Result	171	% R	99	RPD	0	RPD Limit	15
	EPA 9056A																				
16887-00-6	Chloride																				

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	542159 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542159 1365202 Method Blank 10/01/2014 16:32 Water	mg/L RDL	Spike Added	LCS542159 1365203 LCS 10/01/2014 16:14 Water		
						Result	% R	Control Limits % R
16887-00-6	Chloride	EPA 9056A	Units Result	0.050U	0.050	2.31	93	80 - 120



7979 GSRI Ave., Baton Rouge, LA 70820-7402
Phone: 225.769.4900 • Fax: 225.767.5717 • www.gcal.com

CHAIN OF CUSTODY RECORD

Client ID: 4829 - AMEC Environment & Infrastructure, Inc.
SDG: 214092313
Due Date: 10/02/14



Report to:				Bill to:				Analytical Requests & Method				GCAL use only:					
Client: AMEC E+I				Client: AMEC E+I				Custody Seal used ☒ yes ☐ no				249065					
Address: 1075 Big Shanty Rd. Kenner, LA 70134				Address: 1075 Big Shanty Rd. Kenner, LA 70134				Intact ☐ yes ☐ no				249065					
Contact: Daniel Morris				Contact: Daniel Morris				Temperature °C 3.4				E24					
Phone: (770) 547-4409				Phone: (770) 547-4409													
E-mail: daniel.morris@amec.com				E-mail: daniel.morris@amec.com													
P.O. Number				Project Name/Number													
Sampled By: Daniel Morris				Sampled By: Daniel Morris													
Tela Moreira				Tela Moreira													
Matrix	Date	Time (2400)	Comp	Grab	Sample Description	No. Containers	HA	VOCs (8200)	HA	TDC	HA	Mathane, Ethane, Propane	Chloride / Sulfate	HA	Sulfide	HA	Altrate
W	9/23/14	1102		—	GPMW-18	10	X	X	X	X	X	X	X	X	X	X	X
W	9/23/14	1055		—	GPMW-20	10	X	X	X	X	X	X	X	X	X	X	X
W	9/23/14	1340		—	JPMW-23	10	X	X	X	X	X	X	X	X	X	X	X
W	9/23/14	1455		—	RPBW-14	10	X	X	X	X	X	X	X	X	X	X	X
Signature: [Signature] 9/18/14																	
Air Bill No: 112 7712 3783 1933																	
Turn Around Time (Business Days): ☐ 24h ☐ 48h ☐ 3 days ☐ 1 week ☒ Standard (Per Contract/Quote)																	
Requested by (Signature)				Received by (Signature)				Date				Time					
9/23/14 1512				9/23/14 1512				9/23/14 1512				9/23/14 1512					
Requested by (Signature)				Received by (Signature)				Date				Time					
9/23/14 1545				9/23/14 1545				9/23/14 1545				9/23/14 1545					
Requested by (Signature)				Received by (Signature)				Date				Time					
9/23/14 1545				9/23/14 1545				9/23/14 1545				9/23/14 1545					
Matrix: W = water, S = solid, L = liquid, T = tissue																	

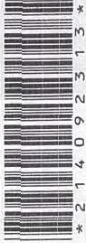
By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.

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

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT



SAMPLE RECEIVING CHECKLIST



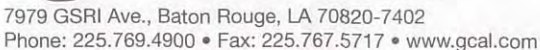
SAMPLE DELIVERY GROUP 214092313	
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX
Profile Number 249065	Received By Saucier, Charlotte M.
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/23/14

COOLERS	Thermometer ID: E24	Temp(°C)
7712 3783 1933		3.4

DISCREPANCIES	LAB PRESERVATIONS
Sample Discrepancy: 21409231301 - GPMW-18 21409231302 - GPMW-20 21409231303 - JPMW-23 21409231304 - RPMW-14	None

CHECKLIST	YES	NO	NA
Were all samples received using proper thermal preservation?	☒	☐	☐
When used, were all custody seals intact?	☒	☐	☐
Were all samples received in proper containers?	☒	☐	☐
Were all samples received using proper chemical preservation?	☒	☐	☐
Was preservative added to any container at the lab?	☐	☒	☐
Were all containers received in good condition?	☒	☐	☐
Were all VOA vials received with no head space?	☒	☐	☐
Do all sample labels match the Chain of Custody?	☐	☒	☐
Did the Chain of Custody list the sampling technician?	☒	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐	☒	☐

NOTES	
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Client ID: 4829 - AMEC Environment & Infrastructure, Inc

SDG: 214092313



Due Date: 10/02/14

Report to: Client: <u>Amec E+I</u> Address: <u>1075 Big Shanty Rd.</u> <u>Kennesaw, GA 30144</u> Contact: <u>Daniel Morris</u> Phone: <u>(770) 547-4409</u> E-mail: <u>daniel.morris@amec.com</u>		Bill to: Client: _____ Address: _____ Contact: _____ Phone: _____ E-mail: _____		Analytical Requests & Method <table><tr><td>VOCs (8260)</td><td>TOC</td><td>methane, Ethane, Ethene</td><td>Chloride / Sulfate</td><td>Sulfide</td><td>Nitrate</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										VOCs (8260)	TOC	methane, Ethane, Ethene	Chloride / Sulfate	Sulfide	Nitrate															GCAL use only: Custody Seal <u>249065</u> used ☒ yes ☐ no intact ☐ yes ☐ no Temperature °C <u>3.4</u> <u>E24</u>	
VOCs (8260)	TOC	methane, Ethane, Ethene	Chloride / Sulfate	Sulfide	Nitrate																														
P.O. Number _____		Project Name/Number <u>Woodall Creek MNA #1</u>																		☐ Dissolved Analysis Requested ☐ Field filtered ☐ Lab filtered															
Sampled By: <u>Daniel Morris</u> <u>Tela Noreikas</u>																				Preservative _____															
Matrix¹	Date	Time (2400)	Comp	Grab	Sample Description	No Con-tainers ↓	HF	HF	HF	non	SA	non																							
W	9/22/14	1102		—	GPMW-18	10	X	X	X	X	X	X																							
W	9/22/14	1055		—	GPMW-20	10	X	X	X	X	X	X																							
W	9/22/14	1340		—	JPMW-23	10	X	X	X	X	X	X																							
W	9/22/14	1455		—	RPMW-14	10	X	X	X	X	X	X																							
Signature 9/18/14																																			
Air Bill No: <u>n/a</u> <u>7712 3783 1433</u> *collection date changed per client 9/24/14																																			
Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote)																																			
Requisitioned by: (Signature) <u>[Signature]</u>		Date: <u>9/22/14</u>		Time: <u>1512</u>		Received by: (Signature) <u>[Signature]</u>		Date: <u>9/22/14</u>		Time: <u>1512</u>		Note: <u>NITRATE</u>																							
Requisitioned by: (Signature) <u>[Signature]</u>		Date: <u>9/22/14</u>		Time: <u>1545</u>		Received by: (Signature) <u>[Signature]</u>		Date: _____		Time: _____																									
Requisitioned by: (Signature) <u>[Signature]</u>		Date: <u>9-23-14</u>		Time: <u>9:15</u>		Received by: (Signature) <u>[Signature]</u>		Date: <u>9-23-15</u>		Time: <u>9:15</u>																									
By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.																																			

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

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



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214092313			CHECKLIST			YES	NO	NA
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX		Were all samples received using proper thermal preservation?			☒	☐	☐
			When used, were all custody seals intact?			☒	☐	☐
			Were all samples received in proper containers?			☒	☐	☐
			Were all samples received using proper chemical preservation?			☒	☐	☐
			Was preservative added to any container at the lab?			☐	☒	☐
			Were all containers received in good condition?			☒	☐	☐
			Were all VOA vials received with no head space?			☒	☐	☐
			Do all sample labels match the Chain of Custody?			☐	☒	☐
			Did the Chain of Custody list the sampling technician?			☒	☐	☐
			Was the COC maintained i.e. all signatures, dates and time of receipt included?			☐	☒	☐
COOLERS			DISCREPANCIES			LAB PRESERVATIONS		
Airbill	Thermometer ID: E24	Temp(°C)	<u>Sample Discrepancy:</u> 21409231301 - GPMW-18 21409231302 - GPMW-20 21409231303 - JPMW-23 21409231304 - RPMW-14			None		
7712 3783 1933		3.4						
NOTES								

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

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

Report Date 10/03/2014

GCAL Report 214092417



Deliver To AMEC E&I
396 Plasters Ave NE
Atlanta, GA 30324
770-547-4409

Attn Daniel Morris

Project Woodall Creek MNA#1

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.

Report: 214092417

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

VOLATILES MASS SPECTROMETRY

In the EPA 8260 analysis for analytical batch 541678, the %D/%Drift is outside $\pm 20\%$ for Vinyl Acetate in the CCV. The response is high and this analyte was not detected in the associated samples.

In the EPA 8260 analysis for analytical batch 541755, the %D/%Drift is outside $\pm 20\%$ for Vinyl acetate in the CCV. The response is high and this analyte was not detected in the associated samples.

In the EPA 8260B analysis, sample (s) 21409241703 (DPMW-27), 21409241704 (RPMW-24) and 21409241705 (DUP-1) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilution is reflected in elevated detection limits.

In the EPA 8260B analysis for analytical batch 541678 and 541755, the LCS and/or LCSD recoveries are above the upper control limit for Vinyl acetate. This compound was not detected in the associated samples.

CONVENTIONALS

In the EPA 9056A analysis, sample (s) 21409241701 (DPMW-2I), 21409241703 (DPMW-27), 21409241705 (DUP-1), 21409241704 (RPMW-24) and 21409241702 (DPMW-2S) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

Laboratory Endorsement

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

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

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

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

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

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

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


Curtis Ekker/Mgr of Data Del

Authorized Signature
GCAL REPORT 214092417 37
THIS REPORT CONTAINS  PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241701	DPMW-2I	Water	09/23/2014 11:00	09/24/2014 09:20
21409241702	DPMW-2S	Water	09/23/2014 10:55	09/24/2014 09:20
21409241703	DPMW-27	Water	09/23/2014 11:00	09/24/2014 09:20
21409241704	RPMW-24	Water	09/23/2014 14:05	09/24/2014 09:20
21409241705	DUP-1	Water	09/23/2014 12:00	09/24/2014 09:20
21409241706	TRIP BLANK	Water	09/23/2014 00:00	09/24/2014 09:20

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241701	DPMW-2I	Water	09/23/2014 11:00	09/24/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	8.36	1.00	0.250	mg/L
14808-79-8	Sulfate	27.5	1.00	0.250	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	2.14J	5.00	0.208	ug/L
67-66-3	Chloroform	0.694J	5.00	0.155	ug/L
127-18-4	Tetrachloroethene	49.9	5.00	0.193	ug/L
79-01-6	Trichloroethene	8.14	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	5.15	5.00	0.103	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.0	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	47.9	10.0	2.50	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241702	DPMW-2S	Water	09/23/2014 10:55	09/24/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	3.50	0.200	0.050	mg/L
14797-55-8	Nitrate	0.134J	0.200	0.050	mg/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	0.37J	1.0	0.30	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	32.1	5.00	0.193	ug/L
79-01-6	Trichloroethene	9.10	5.00	0.161	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241702	DPMW-2S	Water	09/23/2014 10:55	09/24/2014 09:20

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
156-59-2	cis-1,2-Dichloroethene	0.365J	5.00	0.103	ug/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	Sulfate	13.1	0.400	0.100	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241703	DPMW-27	Water	09/23/2014 11:00	09/24/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	13.1	1.00	0.250	mg/L
14797-55-8	Nitrate	4.97	1.00	0.250	mg/L
14808-79-8	Sulfate	19.6	1.00	0.250	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-66-3	Chloroform	2.10J	10.0	0.310	ug/L
127-18-4	Tetrachloroethene	258	10.0	0.385	ug/L
79-01-6	Trichloroethene	46.2	10.0	0.323	ug/L
156-59-2	cis-1,2-Dichloroethene	40.4	10.0	0.207	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241704	RPMW-24	Water	09/23/2014 14:05	09/24/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	5.43	0.400	0.100	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	791	50.0	1.93	ug/L
79-01-6	Trichloroethene	248	50.0	1.61	ug/L
156-59-2	cis-1,2-Dichloroethene	33.4J	50.0	1.03	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.2	1.0	0.30	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241704	RPMW-24	Water	09/23/2014 14:05	09/24/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	30.0	2.00	0.500	mg/L
14808-79-8	Sulfate	43.6	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241705	DUP-1	Water	09/23/2014 12:00	09/24/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	5.11	0.400	0.100	mg/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.3	1.0	0.30	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-64-1	Acetone	13.1J	50.0	1.93	ug/L
127-18-4	Tetrachloroethene	730	50.0	1.93	ug/L
79-01-6	Trichloroethene	230	50.0	1.61	ug/L
156-59-2	cis-1,2-Dichloroethene	23.5J	50.0	1.03	ug/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	30.9	2.00	0.500	mg/L
14808-79-8	Sulfate	41.5	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241706	TRIP BLANK	Water	09/23/2014 00:00	09/24/2014 09:20

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-64-1	Acetone	6.18	5.00	0.193	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241701	DPMW-2I	Water	09/23/2014 11:00	09/24/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 11:13	ALC	541755

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	2.14J	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.694J	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	49.9	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	8.14	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	5.15	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241701	DPMW-2I	Water	09/23/2014 11:00	09/24/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 11:13	ALC	541755

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.1	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	50	50.8	ug/L	102	77 - 127
2037-26-5	Toluene d8	50	54.9	ug/L	110	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50	ug/L	100	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 16:35	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	46.5	ug/L	115	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 15:14	KGL2	541733

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.0	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 14:00	DMT	541947

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241701	DPMW-2I	Water	09/23/2014 11:00	09/24/2014 09:20

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	09/24/2014 17:47	CLA	541700

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	8.36	1.00	0.250	mg/L
14808-79-8	Sulfate	27.5	1.00	0.250	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	09/25/2014 17:34	CLA	541732

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	47.9	10.0	2.50	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241702	DPMW-2S	Water	09/23/2014 10:55	09/24/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 11:34	ALC	541755

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	32.1	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	9.10	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.365J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241702	DPMW-2S	Water	09/23/2014 10:55	09/24/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 11:34	ALC	541755

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	46.8	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	50	51.9	ug/L	104	77 - 127
2037-26-5	Toluene d8	50	53.8	ug/L	108	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.6	ug/L	101	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 16:44	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	51.4	ug/L	127	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 17:59	KGL2	541733

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	0.37J	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 14:00	DMT	541947

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241702	DPMW-2S	Water	09/23/2014 10:55	09/24/2014 09:20

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/24/2014 16:02	CLA	541700

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	3.50	0.200	0.050	mg/L
14797-55-8	Nitrate	0.134J	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	09/25/2014 18:27	CLA	541732

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	Sulfate	13.1	0.400	0.100	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241703	DPMW-27	Water	09/23/2014 11:00	09/24/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	09/25/2014 11:58	ALC	541755

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.246U	10.0	0.246	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.218U	10.0	0.218	ug/L
79-00-5	1,1,2-Trichloroethane	0.318U	10.0	0.318	ug/L
75-34-3	1,1-Dichloroethane	0.342U	10.0	0.342	ug/L
75-35-4	1,1-Dichloroethene	0.416U	10.0	0.416	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.210U	10.0	0.210	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.388U	10.0	0.388	ug/L
106-93-4	1,2-Dibromoethane	0.205U	10.0	0.205	ug/L
95-50-1	1,2-Dichlorobenzene	0.270U	10.0	0.270	ug/L
107-06-2	1,2-Dichloroethane	0.232U	10.0	0.232	ug/L
78-87-5	1,2-Dichloropropane	0.301U	10.0	0.301	ug/L
541-73-1	1,3-Dichlorobenzene	0.275U	10.0	0.275	ug/L
106-46-7	1,4-Dichlorobenzene	0.166U	10.0	0.166	ug/L
78-93-3	2-Butanone	0.284U	10.0	0.284	ug/L
110-75-8	2-Chloroethylvinyl ether	0.291U	10.0	0.291	ug/L
591-78-6	2-Hexanone	0.245U	10.0	0.245	ug/L
108-10-1	4-Methyl-2-pentanone	0.240U	10.0	0.240	ug/L
67-64-1	Acetone	0.387U	10.0	0.387	ug/L
71-43-2	Benzene	0.222U	10.0	0.222	ug/L
75-27-4	Bromodichloromethane	0.167U	10.0	0.167	ug/L
75-25-2	Bromoform	0.430U	10.0	0.430	ug/L
74-83-9	Bromomethane	0.854U	10.0	0.854	ug/L
75-15-0	Carbon disulfide	0.380U	10.0	0.380	ug/L
56-23-5	Carbon tetrachloride	0.496U	10.0	0.496	ug/L
108-90-7	Chlorobenzene	0.166U	10.0	0.166	ug/L
75-00-3	Chloroethane	0.470U	10.0	0.470	ug/L
67-66-3	Chloroform	2.10J	10.0	0.310	ug/L
74-87-3	Chloromethane	0.287U	10.0	0.287	ug/L
110-82-7	Cyclohexane	0.674U	10.0	0.674	ug/L
124-48-1	Dibromochloromethane	0.108U	10.0	0.108	ug/L
75-71-8	Dichlorodifluoromethane	0.290U	10.0	0.290	ug/L
100-41-4	Ethylbenzene	0.218U	10.0	0.218	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.260U	10.0	0.260	ug/L
79-20-9	Methyl Acetate	0.319U	10.0	0.319	ug/L
108-87-2	Methylcyclohexane	0.287U	10.0	0.287	ug/L
75-09-2	Methylene chloride	0.298U	10.0	0.298	ug/L
100-42-5	Styrene	0.179U	10.0	0.179	ug/L
127-18-4	Tetrachloroethene	258	10.0	0.385	ug/L
108-88-3	Toluene	0.244U	10.0	0.244	ug/L
79-01-6	Trichloroethene	46.2	10.0	0.323	ug/L
75-69-4	Trichlorofluoromethane	0.314U	10.0	0.314	ug/L
76-13-1	Trichlorotrifluoroethane	0.316U	10.0	0.316	ug/L
108-05-4	Vinyl acetate	0.302U	10.0	0.302	ug/L
75-01-4	Vinyl chloride	0.254U	10.0	0.254	ug/L
1330-20-7	Xylene (total)	0.358U	30.0	0.358	ug/L
156-59-2	cis-1,2-Dichloroethene	40.4	10.0	0.207	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.248U	10.0	0.248	ug/L
136777-61-2	m,p-Xylene	0.247U	20.0	0.247	ug/L
95-47-6	o-Xylene	0.111U	10.0	0.111	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.155U	10.0	0.155	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241703	DPMW-27	Water	09/23/2014 11:00	09/24/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	09/25/2014 11:58	ALC	541755

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.154U	10.0	0.154	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.255U	10.0	0.255	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	90.3	ug/L	90	78 - 130
1868-53-7	Dibromofluoromethane	100	104	ug/L	104	77 - 127
2037-26-5	Toluene d8	100	106	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	105	ug/L	105	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 16:49	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	43	ug/L	106	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 18:26	KGL2	541733

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	0.30U	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 14:00	DMT	541947

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	09/24/2014 18:11	CLA	541700

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	13.1	1.00	0.250	mg/L
14797-55-8	Nitrate	4.97	1.00	0.250	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241703	DPMW-27	Water	09/23/2014 11:00	09/24/2014 09:20

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	09/24/2014 18:11	CLA	541700

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	Sulfate	19.6	1.00	0.250	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241704	RPMW-24	Water	09/23/2014 14:05	09/24/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/25/2014 12:19	ALC	541755

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	1.23U	50.0	1.23	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.09U	50.0	1.09	ug/L
79-00-5	1,1,2-Trichloroethane	1.59U	50.0	1.59	ug/L
75-34-3	1,1-Dichloroethane	1.71U	50.0	1.71	ug/L
75-35-4	1,1-Dichloroethene	2.08U	50.0	2.08	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.05U	50.0	1.05	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1.94U	50.0	1.94	ug/L
106-93-4	1,2-Dibromoethane	1.02U	50.0	1.02	ug/L
95-50-1	1,2-Dichlorobenzene	1.35U	50.0	1.35	ug/L
107-06-2	1,2-Dichloroethane	1.16U	50.0	1.16	ug/L
78-87-5	1,2-Dichloropropane	1.50U	50.0	1.50	ug/L
541-73-1	1,3-Dichlorobenzene	1.38U	50.0	1.38	ug/L
106-46-7	1,4-Dichlorobenzene	0.831U	50.0	0.831	ug/L
78-93-3	2-Butanone	1.42U	50.0	1.42	ug/L
110-75-8	2-Chloroethylvinyl ether	1.46U	50.0	1.46	ug/L
591-78-6	2-Hexanone	1.22U	50.0	1.22	ug/L
108-10-1	4-Methyl-2-pentanone	1.20U	50.0	1.20	ug/L
67-64-1	Acetone	1.93U	50.0	1.93	ug/L
71-43-2	Benzene	1.11U	50.0	1.11	ug/L
75-27-4	Bromodichloromethane	0.834U	50.0	0.834	ug/L
75-25-2	Bromoform	2.15U	50.0	2.15	ug/L
74-83-9	Bromomethane	4.27U	50.0	4.27	ug/L
75-15-0	Carbon disulfide	1.90U	50.0	1.90	ug/L
56-23-5	Carbon tetrachloride	2.48U	50.0	2.48	ug/L
108-90-7	Chlorobenzene	0.828U	50.0	0.828	ug/L
75-00-3	Chloroethane	2.35U	50.0	2.35	ug/L
67-66-3	Chloroform	1.55U	50.0	1.55	ug/L
74-87-3	Chloromethane	1.44U	50.0	1.44	ug/L
110-82-7	Cyclohexane	3.37U	50.0	3.37	ug/L
124-48-1	Dibromochloromethane	0.539U	50.0	0.539	ug/L
75-71-8	Dichlorodifluoromethane	1.45U	50.0	1.45	ug/L
100-41-4	Ethylbenzene	1.09U	50.0	1.09	ug/L
98-82-8	Isopropylbenzene (Cumene)	1.30U	50.0	1.30	ug/L
79-20-9	Methyl Acetate	1.59U	50.0	1.59	ug/L
108-87-2	Methylcyclohexane	1.43U	50.0	1.43	ug/L
75-09-2	Methylene chloride	1.49U	50.0	1.49	ug/L
100-42-5	Styrene	0.894U	50.0	0.894	ug/L
127-18-4	Tetrachloroethene	791	50.0	1.93	ug/L
108-88-3	Toluene	1.22U	50.0	1.22	ug/L
79-01-6	Trichloroethene	248	50.0	1.61	ug/L
75-69-4	Trichlorofluoromethane	1.57U	50.0	1.57	ug/L
76-13-1	Trichlorotrifluoroethane	1.58U	50.0	1.58	ug/L
108-05-4	Vinyl acetate	1.51U	50.0	1.51	ug/L
75-01-4	Vinyl chloride	1.27U	50.0	1.27	ug/L
1330-20-7	Xylene (total)	1.79U	150	1.79	ug/L
156-59-2	cis-1,2-Dichloroethene	33.4J	50.0	1.03	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.24U	50.0	1.24	ug/L
136777-61-2	m,p-Xylene	1.23U	100	1.23	ug/L
95-47-6	o-Xylene	0.554U	50.0	0.554	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.777U	50.0	0.777	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241704	RPMW-24	Water	09/23/2014 14:05	09/24/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/25/2014 12:19	ALC	541755

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.769U	50.0	0.769	ug/L
10061-02-6	trans-1,3-Dichloropropene	1.28U	50.0	1.28	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	452	ug/L	90	78 - 130
1868-53-7	Dibromofluoromethane	500	514	ug/L	103	77 - 127
2037-26-5	Toluene d8	500	535	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	501	ug/L	100	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 16:55	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	43.4	ug/L	107	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 18:52	KGL2	541733

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.2	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 14:00	DMT	541947

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241704	RPMW-24	Water	09/23/2014 14:05	09/24/2014 09:20

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	09/24/2014 19:38	CLA	541700

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	5.43	0.400	0.100	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/25/2014 18:44	CLA	541732

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	30.0	2.00	0.500	mg/L
14808-79-8	Sulfate	43.6	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241705	DUP-1	Water	09/23/2014 12:00	09/24/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/25/2014 12:40	ALC	541755

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	1.23U	50.0	1.23	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.09U	50.0	1.09	ug/L
79-00-5	1,1,2-Trichloroethane	1.59U	50.0	1.59	ug/L
75-34-3	1,1-Dichloroethane	1.71U	50.0	1.71	ug/L
75-35-4	1,1-Dichloroethene	2.08U	50.0	2.08	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.05U	50.0	1.05	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1.94U	50.0	1.94	ug/L
106-93-4	1,2-Dibromoethane	1.02U	50.0	1.02	ug/L
95-50-1	1,2-Dichlorobenzene	1.35U	50.0	1.35	ug/L
107-06-2	1,2-Dichloroethane	1.16U	50.0	1.16	ug/L
78-87-5	1,2-Dichloropropane	1.50U	50.0	1.50	ug/L
541-73-1	1,3-Dichlorobenzene	1.38U	50.0	1.38	ug/L
106-46-7	1,4-Dichlorobenzene	0.831U	50.0	0.831	ug/L
78-93-3	2-Butanone	1.42U	50.0	1.42	ug/L
110-75-8	2-Chloroethylvinyl ether	1.46U	50.0	1.46	ug/L
591-78-6	2-Hexanone	1.22U	50.0	1.22	ug/L
108-10-1	4-Methyl-2-pentanone	1.20U	50.0	1.20	ug/L
67-64-1	Acetone	13.1J	50.0	1.93	ug/L
71-43-2	Benzene	1.11U	50.0	1.11	ug/L
75-27-4	Bromodichloromethane	0.834U	50.0	0.834	ug/L
75-25-2	Bromoform	2.15U	50.0	2.15	ug/L
74-83-9	Bromomethane	4.27U	50.0	4.27	ug/L
75-15-0	Carbon disulfide	1.90U	50.0	1.90	ug/L
56-23-5	Carbon tetrachloride	2.48U	50.0	2.48	ug/L
108-90-7	Chlorobenzene	0.828U	50.0	0.828	ug/L
75-00-3	Chloroethane	2.35U	50.0	2.35	ug/L
67-66-3	Chloroform	1.55U	50.0	1.55	ug/L
74-87-3	Chloromethane	1.44U	50.0	1.44	ug/L
110-82-7	Cyclohexane	3.37U	50.0	3.37	ug/L
124-48-1	Dibromochloromethane	0.539U	50.0	0.539	ug/L
75-71-8	Dichlorodifluoromethane	1.45U	50.0	1.45	ug/L
100-41-4	Ethylbenzene	1.09U	50.0	1.09	ug/L
98-82-8	Isopropylbenzene (Cumene)	1.30U	50.0	1.30	ug/L
79-20-9	Methyl Acetate	1.59U	50.0	1.59	ug/L
108-87-2	Methylcyclohexane	1.43U	50.0	1.43	ug/L
75-09-2	Methylene chloride	1.49U	50.0	1.49	ug/L
100-42-5	Styrene	0.894U	50.0	0.894	ug/L
127-18-4	Tetrachloroethene	730	50.0	1.93	ug/L
108-88-3	Toluene	1.22U	50.0	1.22	ug/L
79-01-6	Trichloroethene	230	50.0	1.61	ug/L
75-69-4	Trichlorofluoromethane	1.57U	50.0	1.57	ug/L
76-13-1	Trichlorotrifluoroethane	1.58U	50.0	1.58	ug/L
108-05-4	Vinyl acetate	1.51U	50.0	1.51	ug/L
75-01-4	Vinyl chloride	1.27U	50.0	1.27	ug/L
1330-20-7	Xylene (total)	1.79U	150	1.79	ug/L
156-59-2	cis-1,2-Dichloroethene	23.5J	50.0	1.03	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.24U	50.0	1.24	ug/L
136777-61-2	m,p-Xylene	1.23U	100	1.23	ug/L
95-47-6	o-Xylene	0.554U	50.0	0.554	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.777U	50.0	0.777	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241705	DUP-1	Water	09/23/2014 12:00	09/24/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/25/2014 12:40	ALC	541755

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.769U	50.0	0.769	ug/L
10061-02-6	trans-1,3-Dichloropropene	1.28U	50.0	1.28	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	452	ug/L	90	78 - 130
1868-53-7	Dibromofluoromethane	500	506	ug/L	101	77 - 127
2037-26-5	Toluene d8	500	539	ug/L	108	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	502	ug/L	100	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 17:01	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	47.3	ug/L	117	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 19:20	KGL2	541733

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.3	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 14:00	DMT	541947

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241705	DUP-1	Water	09/23/2014 12:00	09/24/2014 09:20

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	09/24/2014 19:56	CLA	541700

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	5.11	0.400	0.100	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/25/2014 19:01	CLA	541732

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	30.9	2.00	0.500	mg/L
14808-79-8	Sulfate	41.5	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241706	TRIP BLANK	Water	09/23/2014 00:00	09/24/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/24/2014 20:13	ALC	541678

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	6.18	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409241706	TRIP BLANK	Water	09/23/2014 00:00	09/24/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/24/2014 20:13	ALC	541678

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	45.7	ug/L	91	78 - 130
1868-53-7	Dibromofluoromethane	50	50.8	ug/L	102	77 - 127
2037-26-5	Toluene d8	50	54.7	ug/L	109	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.6	ug/L	101	71 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch		541678	Client ID		MB541678		LCS541678		LCS541678		LCS541678	
Prep Batch		N/A	GCAL ID		1362938		1362939		1362940		1362940	
			Sample Type		Method Blank		LCS		LCS		LCS	
			Analytical Date		09/24/2014 12:08		09/24/2014 10:32		09/24/2014 10:53		09/24/2014 10:53	
			Matrix		Water		Water		Water		Water	
EPA 8260B			Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
			Result	RDL	Added			Limits % R			Limit	Limit
67-64-1	Acetone		0.193U	0.193	50.0	44.4	89	44 - 156	38.7	77	14	30
75-27-4	Bromodichloromethane		0.083U	0.083	50.0	52.6	105	74 - 125	50.1	100	5	30
75-25-2	Bromoform		0.215U	0.215	50.0	51.2	102	64 - 122	54.0	108	5	30
74-83-9	Bromomethane		0.427U	0.427	50.0	46.5	93	47 - 138	48.6	97	4	30
75-15-0	Carbon disulfide		0.190U	0.190	50.0	48.6	97	69 - 136	46.9	94	4	30
56-23-5	Carbon tetrachloride		0.248U	0.248	50.0	55.0	110	76 - 128	56.6	113	3	30
75-00-3	Chloroethane		0.235U	0.235	50.0	45.4	91	62 - 141	43.8	88	4	30
136777-61-2	m,p-Xylene		0.123U	0.123	100	98.3	98	74 - 126	99.8	100	2	30
67-66-3	Chloroform		0.155U	0.155	50.0	54.0	108	75 - 122	58.1	116	7	30
74-87-3	Chloromethane		0.144U	0.144	50.0	45.8	92	59 - 132	45.7	91	0	30
124-48-1	Dibromochloromethane		0.054U	0.054	50.0	52.7	105	71 - 123	53.5	107	2	30
75-71-8	Dichlorodifluoromethane		0.145U	0.145	50.0	52.7	105	58 - 140	52.2	104	1	30
75-34-3	1,1-Dichloroethane		0.171U	0.171	50.0	52.4	105	74 - 127	51.3	103	2	30
107-06-2	1,2-Dichloroethane		0.116U	0.116	50.0	50.3	101	71 - 129	50.0	100	1	30
156-59-2	cis-1,2-Dichloroethene		0.103U	0.103	50.0	54.1	108	73 - 130	54.5	109	1	30
156-60-5	trans-1,2-Dichloroethene		0.077U	0.077	50.0	50.8	102	69 - 132	40.9	82	22	30
75-09-2	Methylene chloride		0.149U	0.149	50.0	48.9	98	68 - 132	42.0	84	15	30
78-87-5	1,2-Dichloropropane		0.150U	0.150	50.0	50.7	101	72 - 128	49.5	99	2	30
10061-01-5	cis-1,3-Dichloropropene		0.124U	0.124	50.0	48.0	96	71 - 132	47.1	94	2	30
10061-02-6	trans-1,3-Dichloropropene		0.128U	0.128	50.0	47.0	94	71 - 131	46.5	93	1	30
100-41-4	Ethylbenzene		0.109U	0.109	50.0	54.0	108	74 - 126	54.3	109	1	30
591-78-6	2-Hexanone		0.122U	0.122	50.0	41.4	83	50 - 135	46.2	92	11	30
98-82-8	Isopropylbenzene (Cumene)		0.130U	0.130	50.0	48.2	96	71 - 125	48.9	98	1	30
78-93-3	2-Butanone		0.142U	0.142	50.0	41.2	82	58 - 137	47.8	96	15	30
108-10-1	4-Methyl-2-pentanone		0.120U	0.120	50.0	43.2	86	57 - 132	48.0	96	11	30
100-42-5	Styrene		0.089U	0.089	50.0	49.4	99	71 - 127	49.4	99	0	30
127-18-4	Tetrachloroethene		0.193U	0.193	50.0	53.4	107	68 - 128	53.0	106	1	30
79-34-5	1,1,2,2-Tetrachloroethane		0.109U	0.109	50.0	45.8	92	70 - 122	47.8	96	4	30
120-82-1	1,2,4-Trichlorobenzene		0.105U	0.105	50.0	51.6	103	61 - 135	51.7	103	0	30
71-55-6	1,1,1-Trichloroethane		0.123U	0.123	50.0	51.4	103	76 - 126	53.7	107	4	30
79-00-5	1,1,2-Trichloroethane		0.159U	0.159	50.0	51.0	102	72 - 121	51.7	103	1	30
75-69-4	Trichlorofluoromethane		0.157U	0.157	50.0	50.9	102	72 - 136	49.1	98	4	30
75-01-4	Vinyl chloride		0.127U	0.127	50.0	47.8	96	68 - 132	47.5	95	1	30

GC/MS Volatiles Quality Control Summary

Analytical Batch		541678	Client ID		MB541678		LCS541678		LCSD541678		RPD		RPD	Limit
Prep Batch		N/A	GCAL ID		1362938		1362939		1362940		R		RPD	
			Sample Type		Method Blank		LCS		LCSD					
			Analytical Date		09/24/2014 12:08		09/24/2014 10:32		09/24/2014 10:53					
			Matrix		Water		Water		Water					
EPA 8260B														
95-47-6	o-Xylene				Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R		
96-12-8	1,2-Dibromo-3-chloropropane				0.055U	0.055	50.0	47.6	95	73 - 130	48.5	97	2	30
106-93-4	1,2-Dibromoethane				0.194U	0.194	50.0	44.8	90	57 - 121	49.7	99	10	30
108-05-4	Vinyl acetate				0.102U	0.102	50.0	49.7	99	70 - 124	51.6	103	4	30
1634-04-4	tert-Butyl methyl ether (MTBE)				0.151U	0.151	50.0	120	240*	54 - 147	120	240*	0	30
1330-20-7	Xylene (total)				0.078U	0.078	50.0	52.2	104	71 - 125	42.9	86	20	30
108-87-2	Methylcyclohexane				0.179U	0.179	150	146	97	74 - 127	148	99	1	30
110-82-7	Cyclohexane				0.143U	0.143	50.0	55.5	111	67 - 138	52.9	106	5	30
79-20-9	Methyl Acetate				0.337U	0.337	50.0	50.6	101	69 - 132	51.9	104	3	30
76-13-1	Trichlorotrifluoroethane				0.159U	0.159	50.0	41.3	83	57 - 139	33.3	67	21	30
110-75-8	2-Chloroethylvinyl ether				0.158U	0.158	50.0	53.1	106	72 - 136	49.8	100	6	30
541-73-1	1,3-Dichlorobenzene				0.146U	0.146	50.0	46.6	93	56 - 124	48.5	97	4	30
106-46-7	1,4-Dichlorobenzene				0.138U	0.138	50.0	52.5	105	74 - 126	51.7	103	2	30
95-50-1	1,2-Dichlorobenzene				0.083U	0.083	50.0	49.2	98	72 - 122	49.2	98	0	30
75-35-4	1,1-Dichloroethene				0.135U	0.135	50.0	50.9	102	71 - 126	51.1	102	0	30
71-43-2	Benzene				0.208U	0.208	50.0	49.1	98	69 - 129	47.5	95	3	20
79-01-6	Trichloroethene				0.111U	0.111	50.0	51.2	102	70 - 129	52.0	104	2	20
108-88-3	Toluene				0.161U	0.161	50.0	55.7	111	76 - 129	53.0	106	5	20
108-90-7	Chlorobenzene				0.122U	0.122	50.0	49.7	99	72 - 120	49.9	100	0	20
Surrogate					0.083U	0.083	50.0	52.1	104	74 - 123	52.7	105	1	20
460-00-4	4-Bromofluorobenzene				45.8	92	50	50.2	100	78 - 130	50.4	101		
1868-53-7	Dibromofluoromethane				52	104	50	51.7	103	77 - 127	54.2	108		
2037-26-5	Toluene d8				55.1	110	50	49	98	76 - 134	50.5	101		
17060-07-0	1,2-Dichloroethane-d4				50	100	50	48.5	97	71 - 127	50.2	100		

GC/MS Volatiles Quality Control Summary

Analytical Batch		541678	Client ID		14-173 JET PAD SUMP SLUDGE		1361937MS		1361937MSD			
Prep Batch		N/A	GCAL ID	21409220701	SAMPLE		1362941		1362942			
			Sample Type				MS		MSD			
			Analytical Date	09/24/2014 13:23	09/24/2014 14:04		09/24/2014 14:04		09/24/2014 14:25			
			Matrix	Solid	Solid		Solid		Solid			
EPA 8260B			Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	Limit
			Result	RDL	Added			Limits % R				
56-23-5	Carbon tetrachloride		0.00	9.92	2000	2230	112	71 - 133	2290	115	3	30
67-66-3	Chloroform		0.00	6.20	2000	2070	104	74 - 124	2240	112	8	30
107-06-2	1,2-Dichloroethane		0.00	4.64	2000	2090	105	68 - 126	1980	99	5	30
78-93-3	2-Butanone		44.0	5.68	2000	1940	95	47 - 142	2080	102	7	30
127-18-4	Tetrachloroethene		0.00	7.70	2000	2110	106	70 - 127	2130	107	1	30
75-01-4	Vinyl chloride		45.0	5.09	2000	2090	102	67 - 131	2040	100	2	30
75-35-4	1,1-Dichloroethene		0.00	8.32	2000	2130	107	68 - 129	2060	103	3	20
71-43-2	Benzene		0.00	4.44	2000	2100	105	73 - 128	2020	101	4	20
79-01-6	Trichloroethene		0.00	6.46	2000	2290	115	78 - 127	2180	109	5	20
108-90-7	Chlorobenzene		0.00	3.31	2000	2120	106	75 - 121	2100	105	1	20
Surrogate												
460-00-4	4-Bromofluorobenzene				2000	2010	101	62 - 127	2000	100		
1868-53-7	Dibromofluoromethane				2000	2060	103	65 - 130	2190	110		
2037-26-5	Toluene d8				2000	1930	97	71 - 132	1930	97		
17060-07-0	1,2-Dichloroethane-d4				2000	1950	98	62 - 125	1980	99		

Analytical Batch 541678 Prep Batch N/A		Client ID GCAL ID Sample Type Analytical Date Matrix		CALMEDIA ACT ALUMINA (TCLP) 21409231401 SAMPLE 09/24/2014 13:44 Solid		1362313MS 1362943 MS 09/24/2014 14:46 Solid			
EPA 8260B				Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R
56-23-5	Carbon tetrachloride			0.00	9.92	2000	2210	111	71 - 133
67-66-3	Chloroform			0.00	6.20	2000	2120	106	74 - 124
107-06-2	1,2-Dichloroethane			0.00	4.64	2000	2100	105	68 - 126
78-93-3	2-Butanone			0.00	5.68	2000	1970	99	47 - 142
127-18-4	Tetrachloroethene			0.00	7.70	2000	2210	111	70 - 127
75-01-4	Vinyl chloride			0.00	5.09	2000	1930	97	67 - 131
75-35-4	1,1-Dichloroethene			0.00	8.32	2000	2050	103	68 - 129
71-43-2	Benzene			212	4.44	2000	2390	109	73 - 128
79-01-6	Trichloroethene			0.00	6.46	2000	2150	108	78 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch		541678	Client ID GCAL ID Sample Type Analytical Date Matrix	CALMEDIA ACT ALUMINA (TCLP) 21409231401 SAMPLE 09/24/2014 13:44 Solid	1362313MS 1362943 MS 09/24/2014 14:46 Solid				
Prep Batch	N/A								
EPA 8260B									
108-90-7	Chlorobenzene			Units Result 0.00	ug/L RDL 3.31	Spike Added 2000	Result 2190	% R 110	Control Limits % R 75 - 121
Surrogate									
460-00-4	4-Bromofluorobenzene					2000	2030	102	62 - 127
1868-53-7	Dibromofluoromethane					2000	2050	103	65 - 130
2037-26-5	Toluene d8					2000	1960	98	71 - 132
17060-07-0	1,2-Dichloroethane-d4					2000	1980	99	62 - 125

Analytical Batch		541755	Client ID		MB541755	LCS541755		LCS541755		LCS541755	
Prep Batch		N/A	GCAL ID	1363349	1363349	1363350	1363350	1363351	1363351	LCS	
			Sample Type	Method Blank	Method Blank	LCS	LCS	LCS	LCS	09/25/2014 08:17	
			Analytical Date	09/25/2014 10:31	09/25/2014 10:31	09/25/2014 08:17	09/25/2014 08:17	09/25/2014 09:29	09/25/2014 09:29	Water	
			Matrix	Water	Water	Water	Water	Water	Water		
EPA 8260B											
				Units	ug/L	Spike	Result	% R	Control	Result	RPD
				Result	RDL	Added			Limits % R		Limit
67-64-1	Acetone			0.193U	0.193	50.0	44.2	88	44 - 156	45.3	2
75-27-4	Bromodichloromethane			0.083U	0.083	50.0	53.7	107	74 - 125	52.2	3
75-25-2	Bromoform			0.215U	0.215	50.0	53.3	107	64 - 122	53.3	0
74-83-9	Bromomethane			0.427U	0.427	50.0	50.8	102	47 - 138	53.3	5
75-15-0	Carbon disulfide			0.190U	0.190	50.0	52.7	105	69 - 136	52.7	0
56-23-5	Carbon tetrachloride			0.248U	0.248	50.0	55.1	110	76 - 128	56.3	2
75-00-3	Chloroethane			0.235U	0.235	50.0	48.8	98	62 - 141	49.1	1
136777-61-2	m,p-Xylene			0.123U	0.123	100	99.5	100	74 - 126	102	2
67-66-3	Chloroform			0.155U	0.155	50.0	50.6	101	75 - 122	53.7	6
74-87-3	Chloromethane			0.144U	0.144	50.0	48.0	96	59 - 132	50.2	4
124-48-1	Dibromochloromethane			0.054U	0.054	50.0	54.3	109	71 - 123	54.8	1
75-71-8	Dichlorodifluoromethane			0.145U	0.145	50.0	56.9	114	58 - 140	56.9	0
75-34-3	1,1-Dichloroethane			0.171U	0.171	50.0	47.9	96	74 - 127	52.5	9
107-06-2	1,2-Dichloroethane			0.116U	0.116	50.0	51.0	102	71 - 129	48.9	4
156-59-2	cis-1,2-Dichloroethene			0.103U	0.103	50.0	44.8	90	73 - 130	52.4	16
156-60-5	trans-1,2-Dichloroethene			0.077U	0.077	50.0	52.5	105	69 - 132	51.9	1
75-09-2	Methylene chloride			0.149U	0.149	50.0	52.5	105	68 - 132	50.6	4
78-87-5	1,2-Dichloropropane			0.150U	0.150	50.0	51.9	104	72 - 128	50.7	2

GC/MS Volatiles Quality Control Summary

Analytical Batch		541755	Client ID		MB541755		LCS541755		LCS541755		LCS541755		RPD	
Prep Batch		N/A	GCAL ID		1363349		1363350		1363351		LCS		Limit	
			Sample Type		Method Blank		LCS		LCS		09/25/2014 08:17		09/25/2014 09:29	
Analytical Date			Matrix		Water		Water		Water		Water			
EPA 8260B			Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD			
			Result	RDL	Added			Limits % R						
10061-01-5	cis-1,3-Dichloropropene		0.124U	0.124	50.0	48.6	97	71 - 132	48.4	97	0	30		
10061-02-6	trans-1,3-Dichloropropene		0.128U	0.128	50.0	48.4	97	71 - 131	48.5	97	0	30		
100-41-4	Ethylbenzene		0.109U	0.109	50.0	53.6	107	74 - 126	55.1	110	3	30		
591-78-6	2-Hexanone		0.122U	0.122	50.0	46.0	92	50 - 135	46.4	93	1	30		
98-82-8	Isopropylbenzene (Cumene)		0.130U	0.130	50.0	48.7	97	71 - 125	50.2	100	3	30		
78-93-3	2-Butanone		0.142U	0.142	50.0	45.0	90	58 - 137	45.7	91	2	30		
108-10-1	4-Methyl-2-pentanone		0.120U	0.120	50.0	46.5	93	57 - 132	47.5	95	2	30		
100-42-5	Styrene		0.089U	0.089	50.0	49.1	98	71 - 127	50.1	100	2	30		
127-18-4	Tetrachloroethene		0.193U	0.193	50.0	53.1	106	68 - 128	55.6	111	5	30		
79-34-5	1,1,2,2-Tetrachloroethane		0.109U	0.109	50.0	48.8	98	70 - 122	50.3	101	3	30		
120-82-1	1,2,4-Trichlorobenzene		0.105U	0.105	50.0	51.5	103	61 - 135	54.7	109	6	30		
71-55-6	1,1,1-Trichloroethane		0.123U	0.123	50.0	52.3	105	76 - 126	52.8	106	1	30		
79-00-5	1,1,2-Trichloroethane		0.159U	0.159	50.0	51.8	104	72 - 121	51.6	103	0	30		
75-69-4	Trichlorofluoromethane		0.157U	0.157	50.0	54.3	109	72 - 136	55.0	110	1	30		
75-01-4	Vinyl chloride		0.127U	0.127	50.0	51.4	103	68 - 132	51.5	103	0	30		
95-47-6	o-Xylene		0.055U	0.055	50.0	47.9	96	73 - 130	49.6	99	3	30		
96-12-8	1,2-Dibromo-3-chloropropane		0.194U	0.194	50.0	48.8	98	57 - 121	50.3	101	3	30		
106-93-4	1,2-Dibromoethane		0.102U	0.102	50.0	50.1	100	70 - 124	52.5	105	5	30		
108-05-4	Vinyl acetate		0.151U	0.151	50.0	106	212*	54 - 147	118	236*	11	30		
1634-04-4	tert-Butyl methyl ether (MTBE)		0.078U	0.078	50.0	54.4	109	71 - 125	52.8	106	3	30		
1330-20-7	Xylene (total)		0.179U	0.179	150	147	98	74 - 127	151	101	3	30		
108-87-2	Methylcyclohexane		0.143U	0.143	50.0	56.2	112	67 - 138	58.0	116	3	30		
110-82-7	Cyclohexane		0.337U	0.337	50.0	46.7	93	69 - 132	51.9	104	11	30		
79-20-9	Methyl Acetate		0.159U	0.159	50.0	39.6	79	57 - 139	41.5	83	5	30		
76-13-1	Trichlorotrifluoroethane		0.158U	0.158	50.0	55.5	111	72 - 136	57.2	114	3	30		
110-75-8	2-Chloroethylvinyl ether		0.146U	0.146	50.0	48.4	97	56 - 124	48.4	97	0	30		
541-73-1	1,3-Dichlorobenzene		0.138U	0.138	50.0	51.7	103	74 - 126	53.6	107	4	30		
106-46-7	1,4-Dichlorobenzene		0.083U	0.083	50.0	50.1	100	72 - 122	51.5	103	3	30		
95-50-1	1,2-Dichlorobenzene		0.135U	0.135	50.0	51.7	103	71 - 126	53.2	106	3	30		
75-35-4	1,1-Dichloroethene		0.208U	0.208	50.0	53.6	107	69 - 129	52.9	106	1	20		
71-43-2	Benzene		0.111U	0.111	50.0	52.7	105	70 - 129	51.5	103	2	20		
79-01-6	Trichloroethene		0.161U	0.161	50.0	57.3	115	76 - 129	55.2	110	4	20		
108-88-3	Toluene		0.122U	0.122	50.0	50.1	100	72 - 120	50.9	102	2	20		

GC/MS Volatiles Quality Control Summary

Analytical Batch Prep Batch	541755 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541755 1363349 Method Blank 09/25/2014 10:31 Water	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
	EPA 8260B											
108-90-7	Chlorobenzene		0.083U	0.083	50.0	52.6	105	74 - 123	53.1	106	1	20
Surrogate												
460-00-4	4-Bromofluorobenzene		44.3	89	50	50.2	100	78 - 130	51.2	102		
1868-53-7	Dibromofluoromethane		52.4	105	50	51.8	104	77 - 127	52.7	105		
2037-26-5	Toluene d8		54.5	109	50	48.4	97	76 - 134	50.2	100		
17060-07-0	1,2-Dichloroethane-d4		49.5	99	50	49	98	71 - 127	48.2	96		

General Chromatography Quality Control Summary

Analytical Batch Prep Batch	542224 N/A	Client ID		ug/L RDL	Spike Added	LCS542224				LCS542224			
		GCAL ID	Sample Type			Units Result	Result	% R	Control Limits % R	Result	% R	Result	RPD Limit
		1365547	Method Blank			0.435U	15.9	91	39 - 120	15.8	90	15.8	27
74-82-8	Methane			0.435	17.5								
74-85-1	Ethene			0.071	3.06	0.071U	3.24	106	45 - 134	3.20	105	3.20	25
74-84-0	Ethane			0.087	3.28	0.087U	3.60	110	45 - 128	3.58	109	3.58	29
Surrogate													
115-07-1	Propene			116	40.5	46.8	39.7	98	40 - 143	39.8	98	39.8	

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541733 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541733 1363267 Method Blank 09/25/2014 11:51 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
EPA 9060A	Total Organic Carbon		0.30U	0.30	50.0	52.2	104	80 - 120
C-012								

Analytical Batch 541733 Prep Batch N/A		Client ID GCAL ID Sample Type Analytical Date Matrix	DPMW-21 21409241701 SAMPLE 09/25/2014 15:14 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD Limit		
EPA 9060A				1.0	0.30	50.0	54.5	107	75 - 125	55.4	109	2	25
C-012	Total Organic Carbon												

Analytical Batch		541733	Client ID		RAW BRINE	1363189MS		1363189MSD		RPD	
Prep Batch	N/A		GCAL ID	21409245702		1363682	MS	1363683			
			Sample Type	SAMPLE				MSD			
			Analytical Date	09/26/2014 09:29		09/26/2014 10:21	09/26/2014 10:48				
			Matrix	Water		Water	Water				
EPA 9060A				Units	mg/L	Spike	Control	Result	% R	% R	RPD Limit
			Result	4.0	RDL	Added	Limits % R				
C-012	Total Organic Carbon				1.5	250	75 - 125	254	100	110	9
											25

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541947 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541947 1364357 Method Blank 09/28/2014 14:00 Water	mg/L RDL	2.00	Spike Added	25.0	Result	26.5	% R	106	Control Limits % R	80 - 120
SM 4500-S2 F-2011													
18496-25-8	Sulfide												

Analytical Batch Prep Batch	541947 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	GPMW-20 21409231302 SAMPLE 09/28/2014 14:00 Water	mg/L RDL	2.00	Spike Added	25.0	Result	27.1	% R	108	Control Limits % R	75 - 125
SM 4500-S2 F-2011													
18496-25-8	Sulfide												

Analytical Batch Prep Batch	541947 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	GPMW-18 21409231301 SAMPLE 09/28/2014 14:00 Water	mg/L RDL	2.00	Result	0.000	RPD Limit	0	25
SM 4500-S2 F-2011										
18496-25-8	Sulfide									

General Chemistry Quality Control Summary

Analytical Batch	541700 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541700 1363040 Method Blank 09/24/2014 15:27 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
EPA 9056A								
16887-00-6	Chloride		0.050U	0.050	2.50	2.32	93	80 - 120
14797-55-8	Nitrate		0.050U	0.050	2.50	2.38	95	80 - 120
14808-79-8	Sulfate		0.050U	0.050	2.50	2.41	96	80 - 120

Analytical Batch	541700 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	DPMW-27 21409241703 SAMPLE 09/24/2014 18:11 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	1362875MSD 1363043 MSD 09/24/2014 19:21 Water
EPA 9056A									
16887-00-6	Chloride		13.1	0.250	12.5	23.7	85	80 - 120	23.8
14797-55-8	Nitrate		4.97	0.250	12.5	16.9	95	80 - 120	16.8
14808-79-8	Sulfate		19.6	0.250	12.5	31.0	92	80 - 120	31.0
									RPD Limit
									0
									0
									0

Analytical Batch	541732 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541732 1363261 Method Blank 09/25/2014 09:44 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
EPA 9056A								
16887-00-6	Chloride		0.050U	0.050	2.5	2.32	93	80 - 120
14808-79-8	Sulfate		0.050U	0.050	2.50	2.39	95	80 - 120

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541732 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	DPMW-2I 21409241701 SAMPLE 09/25/2014 17:34 Water	mg/L RDL	Spike Added	1362872MS				1362872MSD			
						1363265 MS 09/25/2014 17:52 Water	Result	% R	Control Limits % R	Result	% R	RPD	Limit
16887-00-6	EPA 9056A Chloride		Units Result	47.9	2.50	125	171	98	80 - 120	171	99	0	15



Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214092417

7979 GSRI Ave., Baton Rouge, LA 70820-7402
Phone: 225.769.4900 • Fax: 225.767.5717 • www.gcal.com

Report to:

Bill to:

Client: AMEC ExI
Address: 1075 Big Shanty Rd
Kennesaw, Ga
Contact: Daniel Morris
Phone: 770-547-4409
E-mail: daniel.morris@amec.com

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

P.O. Number	Project Name/Number
-------------	---------------------

Project Name/Number
Woods 11 Creek MNA #1

Sampled By:

Daniel Morris & Tela Morickas

Matrix ¹	Date	Time (2400)	Comp	Grab	Sample Description	No Con- tainers	HCL	HCL	HCL	4C	4C	24C NaOH	Preservative
W	9/23	1100		X	DPMW-2I	10	X	X	X	X	X	X	1
W		1055		↓	DPMW-2S	10	↓	↓	↓	↓	↓	↓	2
		1100		↓	DPMW-27	10	↓	↓	↓	↓	↓	↓	3
		1405		↓	RPMW-24	10	↓	↓	↓	↓	↓	↓	4
		1200		↓	DUP-1	10	↓	↓	↓	↓	↓	↓	5
				↓	TRIP BLANK	3	↓	↓	↓	↓	↓	↓	10

Air Bill No:

7712	5315	9554
------	------	------

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

Note:

Time:

Date: / /

7	
---	--

re) A

Received by: (Signature)

Time:

11

Date:

•

ed by: (Signature)

Reinquinah

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

Time:	Time:
-------	-------

Date:	9-24-19
Date:	6-1-19

--	--

(a) 

(b) 

Received by: (Signature)

Time:	11:00	Re:	
Time:	9:20	Re:	

23/11/2024

Date: 01/11/20	Date: 01/11/20
----------------	----------------

272

ed by: (Signature) *[Signature]*

Relinquish

Matrix¹: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

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



SAMPLE RECEIVING CHECKLIST



* 2 1 4 0 9 2 4 1 7 *

SAMPLE DELIVERY GROUP 214092417		CHECKLIST	
Client	Transport Method	YES	NO
4829 - AMEC Environment & Infrastructure, Inc.	FEDEX	☒	☐
Profile Number 249065	Received By Saucier, Charlotte M.	☒	☐
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/24/14	☒	☐
Were all samples received using proper thermal preservation?		☒	☐
When used, were all custody seals intact?		☒	☐
Were all samples received in proper containers?		☒	☐
Were all samples received using proper chemical preservation?		☒	☐
Was preservative added to any container at the lab?		☒	☐
Were all containers received in good condition?		☒	☐
Were all VOA vials received with no head space?		☒	☐
Do all sample labels match the Chain of Custody?		☒	☐
Did the Chain of Custody list the sampling technician?		☒	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?		☒	☐

COOLERS		LAB PRESERVATIONS	
Airbill	Thermometer ID: E22	Temp(°C)	
7712 5315 9554		0.7	None

DISCREPANCIES	
None	

NOTES	



CHAIN OF CUSTODY RECORD

7979 GSRI Ave., Baton Rouge, LA 70820-7402
Phone: 225.769.4900 • Fax: 225.767.5717 • www.gcal.com

Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214092417

Due Date: 10/03/14



Report to:						Bill to:		Analytical Requests & Method										GCAL use only:	
Client: <u>AMEC E+I</u>						Client: _____		NOCS TOC Methane/ethane/ethene Chloride / Sulfate NITRATE Sulfide										Custody Seal	
Address: <u>1075 Big Shanty Rd</u>						Address: <u>AMEC</u>												used ☒ yes ☐ no	
Contact: <u>Daniel Morris</u>						Contact: <u>Default</u>												intact ☐ yes ☐ no	
Phone: <u>770-547-4409</u>						Phone: _____												Temperature °C <u>0.7</u>	
E-mail: <u>daniel.morris@amec.com</u>						E-mail: _____												Temperature °C <u>0.7</u>	
P.O. Number		Project Name/Number														☐ Dissolved Analysis Requested			
		<u>Woodall Creek MNA #1</u>														☐ Field filtered			
Sampled By: <u>Daniel Morris & Tela Norickas</u>																☐ Lab filtered			
Matrix¹	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	HCL	HCL	HCL	4C	4C	3Ac	NaOH	Preservative					
<u>W</u>	<u>9/23</u>	<u>1100</u>		<u>X</u>	<u>DPMW-2I</u>	<u>10</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>1</u>				
<u>W</u>	<u>9/23</u>	<u>1055</u>			<u>DPMW-2S</u>	<u>10</u>									<u>2</u>				
<u>W</u>	<u>9/23</u>	<u>1100</u>			<u>DPMW-27</u>	<u>10</u>									<u>3</u>				
<u>W</u>	<u>9/23</u>	<u>1405</u>			<u>RPMW-24</u>	<u>10</u>									<u>4</u>				
<u>W</u>	<u>9/23</u>	<u>1200</u>			<u>DUP-1</u>	<u>10</u>									<u>5</u>				
<u>W</u>	<u>9/23</u>	<u>1200</u>			<u>TRIP BLANK</u>	<u>3</u>									<u>10</u>				
<u>K. Lang</u>																			
Air Bill No: <u>7712 5315 9554</u>																			
Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote)																			
Relinquished by: (Signature) <u>K. Lang</u>		Date: <u>9/23/14</u>		Time: <u>1447</u>		Received by: (Signature) <u>AMEC</u>		Date: <u>9/23/14</u>		Time: <u>14:49</u>		Note:							
Relinquished by: (Signature) <u>AMEC</u>		Date: <u>9/23/14</u>		Time: <u>16:00</u>		Received by: (Signature) <u>AMEC</u>		Date: <u>9/23/14</u>		Time: <u>16:00</u>									
Relinquished by: (Signature) <u>Fedex</u>		Date: <u>9-24-14</u>		Time: <u>9:20</u>		Received by: (Signature) <u>SJS</u>		Date: <u>9-24-14</u>		Time: <u>9:20</u>		By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.							

Matrix¹: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

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

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214092417			CHECKLIST			YES	NO	NA
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX		Were all samples received using proper thermal preservation?			☒	☐	☐
			When used, were all custody seals intact?			☒	☐	☐
			Were all samples received in proper containers?			☒	☐	☐
Profile Number 249065	Received By Saucier, Charlotte M.		Were all samples received using proper chemical preservation?			☒	☐	☐
			Was preservative added to any container at the lab?			☐	☒	☐
			Were all containers received in good condition?			☒	☐	☐
			Were all VOA vials received with no head space?			☒	☐	☐
			Do all sample labels match the Chain of Custody?			☒	☐	☐
			Did the Chain of Custody list the sampling technician?			☒	☐	☐
			Was the COC maintained i.e. all signatures, dates and time of receipt included?			☐	☒	☐
COOLERS			DISCREPANCIES			LAB PRESERVATIONS		
Airbill	Thermometer ID: E22	Temp(°C)	None			None		
7712 5315 9554		0.7						
NOTES								

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

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

Report Date 10/07/2014

GCAL Report 214092511



Deliver To AMEC E&I
396 Plasters Ave NE
Atlanta, GA 30324
770-547-4409

Attn Daniel Morris

Project Woodall Creek MNA#1

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.

Report: 214092511

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

VOLATILES GAS CHROMATOGRAPHY

In the EPA RSK-175 analysis, sample 21409251103 (MTWMW-12) had to be diluted to bracket the concentration of target analyte(s) within the calibration range of the instrument.

CONVENTIONALS

In the EPA 9056A analysis, samples 21409251101 (RPMW-15), 21409251102 (JPMW-24) and 21409251103 (MTWMW-12) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

Laboratory Endorsement

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

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

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

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

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

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

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

Curtis Ekker/Mgr of Data Del

Authorized Signature

GCAL REPORT 214092511

THIS REPORT CONTAINS 25 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251101	RPMW-15	Water	09/24/2014 10:40	09/25/2014 09:30
21409251102	JPMW-21	Water	09/24/2014 13:05	09/25/2014 09:30
21409251103	MTWMW-12	Water	09/24/2014 11:55	09/25/2014 09:30
21409251104	TRIP BLANK	Water	09/24/2014 00:00	09/25/2014 09:30

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251101	RPMW-15	Water	09/24/2014 10:40	09/25/2014 09:30

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.75	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	67.3	5.00	0.193	ug/L
79-01-6	Trichloroethene	22.5	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	0.517J	5.00	0.103	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	17.9	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	22.8	4.00	1.00	mg/L
14808-79-8	Sulfate	23.6	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251102	JPMW-21	Water	09/24/2014 13:05	09/25/2014 09:30

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	2.72	0.200	0.050	mg/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.1	1.0	0.30	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.326J	5.00	0.208	ug/L
75-27-4	Bromodichloromethane	1.23J	5.00	0.083	ug/L
67-66-3	Chloroform	10.2	5.00	0.155	ug/L
127-18-4	Tetrachloroethene	129	5.00	0.193	ug/L
79-01-6	Trichloroethene	24.8	5.00	0.161	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251102	JPMW-21	Water	09/24/2014 13:05	09/25/2014 09:30

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
156-59-2	cis-1,2-Dichloroethene	29.6	5.00	0.103	ug/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	19.5	4.00	1.00	mg/L
14808-79-8	Sulfate	19.7	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251103	MTWMW-12	Water	09/24/2014 11:55	09/25/2014 09:30

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.208	0.200	0.050	mg/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.9	1.0	0.30	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.701J	5.00	0.193	ug/L

EPA RSK-175

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	636	60.0	13.1	ug/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	28.9	4.00	1.00	mg/L
14808-79-8	Sulfate	23.7	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251101	RPMW-15	Water	09/24/2014 10:40	09/25/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 12:40	LBH	541899

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	67.3	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	22.5	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.517J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251101	RPMW-15	Water	09/24/2014 10:40	09/25/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 12:40	LBH	541899

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.5	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	50	48.9	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	52.9	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.5	ug/L	101	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 17:08	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	45.2	ug/L	112	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/29/2014 22:17	JEM	541843

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	17.9	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 14:00	DMT	541947

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251101	RPMW-15	Water	09/24/2014 10:40	09/25/2014 09:30

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 15:15	CLA	541732
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		1.75	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	10/03/2014 19:17	JEM	542294
CAS#	Parameter		Result	RDL	MDL	Units
16887-00-6	Chloride		22.8	4.00	1.00	mg/L
14808-79-8	Sulfate		23.6	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251102	JPMW-21	Water	09/24/2014 13:05	09/25/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 13:02	LBH	541899

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.326J	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	1.23J	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	10.2	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	129	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	24.8	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	29.6	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251102	JPMW-21	Water	09/24/2014 13:05	09/25/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 13:02	LBH	541899

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.6	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	50	49.5	ug/L	99	77 - 127
2037-26-5	Toluene d8	50	52.1	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.3	ug/L	101	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 17:15	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	40	ug/L	99	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/29/2014 22:47	JEM	541843

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.1	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 14:00	DMT	541947

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251102	JPMW-21	Water	09/24/2014 13:05	09/25/2014 09:30

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 15:33	CLA	541732

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	2.72	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	10/03/2014 19:52	JEM	542294

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	19.5	4.00	1.00	mg/L
14808-79-8	Sulfate	19.7	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251103	MTWMW-12	Water	09/24/2014 11:55	09/25/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 13:25	LBH	541899

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.701J	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251103	MTWMW-12	Water	09/24/2014 11:55	09/25/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 13:25	LBH	541899

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	50	51.1	ug/L	102	77 - 127
2037-26-5	Toluene d8	50	51.8	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	51.2	ug/L	102	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 17:23	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	41.4	ug/L	102	40 - 143

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			30	10/02/2014 17:38	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	636	60.0	13.1	ug/L

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/29/2014 23:08	JEM	541843

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.9	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 14:00	DMT	541947

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251103	MTWMW-12	Water	09/24/2014 11:55	09/25/2014 09:30

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/25/2014 15:50	CLA	541732

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.208	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	10/03/2014 20:27	JEM	542294

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	28.9	4.00	1.00	mg/L
14808-79-8	Sulfate	23.7	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251104	TRIP BLANK	Water	09/24/2014 00:00	09/25/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 13:48	LBH	541899

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409251104	TRIP BLANK	Water	09/24/2014 00:00	09/25/2014 09:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 13:48	LBH	541899

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.4	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	50	48.2	ug/L	96	77 - 127
2037-26-5	Toluene d8	50	52.8	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.9	ug/L	102	71 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch		541899	Client ID		MB541899		LCS541899		LCS541899		LCSD541899	
Prep Batch		N/A	GCAL ID	Sample Type	1364132	Method Blank	1364133	1364134	LCS		LCSD	
			Analytical Date		09/27/2014 11:29		09/27/2014 09:30	09/27/2014 09:57				
			Matrix		Water		Water	Water				
EPA 8260B				Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD
				Result	RDL	Added		Limits % R				Limit
67-64-1	Acetone			0.193U	0.193	50.0	45.8	92	44 - 156	49.1	98	7
75-27-4	Bromodichloromethane			0.083U	0.083	50.0	53.7	107	74 - 125	52.5	105	2
75-25-2	Bromoform			0.215U	0.215	50.0	52.7	105	64 - 122	51.8	104	2
74-83-9	Bromomethane			0.427U	0.427	50.0	43.8	88	47 - 138	43.5	87	1
75-15-0	Carbon disulfide			0.190U	0.190	50.0	51.4	103	69 - 136	48.7	97	5
56-23-5	Carbon tetrachloride			0.248U	0.248	50.0	51.5	103	76 - 128	51.4	103	0
75-00-3	Chloroethane			0.235U	0.235	50.0	49.6	99	62 - 141	48.3	97	3
136777-61-2	m,p-Xylene			0.123U	0.123	100	106	106	74 - 126	99.0	99	7
67-66-3	Chloroform			0.155U	0.155	50.0	49.9	100	75 - 122	49.7	99	0
74-87-3	Chloromethane			0.144U	0.144	50.0	51.1	102	59 - 132	50.8	102	1
124-48-1	Dibromochloromethane			0.054U	0.054	50.0	49.6	99	71 - 123	47.5	95	4
75-71-8	Dichlorodifluoromethane			0.145U	0.145	50.0	50.3	101	58 - 140	48.6	97	3
75-34-3	1,1-Dichloroethane			0.171U	0.171	50.0	51.2	102	74 - 127	50.1	100	2
107-06-2	1,2-Dichloroethane			0.116U	0.116	50.0	49.5	99	71 - 129	50.1	100	1
156-59-2	cis-1,2-Dichloroethene			0.103U	0.103	50.0	50.2	100	73 - 130	49.6	99	1
156-60-5	trans-1,2-Dichloroethene			0.077U	0.077	50.0	49.2	98	69 - 132	48.3	97	2
75-09-2	Methylene chloride			0.149U	0.149	50.0	48.7	97	68 - 132	47.6	95	2
78-87-5	1,2-Dichloropropane			0.150U	0.150	50.0	52.3	105	72 - 128	51.0	102	3
10061-01-5	cis-1,3-Dichloropropene			0.124U	0.124	50.0	49.5	99	71 - 132	47.5	95	4
10061-02-6	trans-1,3-Dichloropropene			0.128U	0.128	50.0	48.4	97	71 - 131	47.0	94	3
100-41-4	Ethylbenzene			0.109U	0.109	50.0	51.8	104	74 - 126	48.7	97	6
591-78-6	2-Hexanone			0.122U	0.122	50.0	51.4	103	50 - 135	53.7	107	4
98-82-8	Isopropylbenzene (Cumene)			0.130U	0.130	50.0	54.9	110	71 - 125	50.8	102	8
78-93-3	2-Butanone			0.142U	0.142	50.0	47.2	94	58 - 137	50.8	102	7
108-10-1	4-Methyl-2-pentanone			0.120U	0.120	50.0	49.9	100	57 - 132	50.9	102	2
100-42-5	Styrene			0.089U	0.089	50.0	54.3	109	71 - 127	51.5	103	5
127-18-4	Tetrachloroethene			0.193U	0.193	50.0	52.9	106	68 - 128	48.8	98	8
79-34-5	1,1,2,2-Tetrachloroethane			0.109U	0.109	50.0	50.2	100	70 - 122	50.1	100	0
120-82-1	1,2,4-Trichlorobenzene			0.105U	0.105	50.0	49.9	100	61 - 135	47.7	95	5
71-55-6	1,1,1-Trichloroethane			0.123U	0.123	50.0	50.2	100	76 - 126	50.8	102	1
79-00-5	1,1,2-Trichloroethane			0.159U	0.159	50.0	51.6	103	72 - 121	49.6	99	4
75-69-4	Trichlorofluoromethane			0.157U	0.157	50.0	49.2	98	72 - 136	47.0	94	5
75-01-4	Vinyl chloride			0.127U	0.127	50.0	52.2	104	68 - 132	49.8	100	5

GC/MS Volatiles Quality Control Summary

Analytical Batch		541899	Client ID		MB541899		LCS541899		LCSD541899		RPD	
Prep Batch		N/A	GCAL ID	1364132	1364133	1364134	LCS		LCS		RPD Limit	
Sample Type		Method Blank	ug/L		Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	
Analytical Date		09/27/2014 11:29	RDL									
Matrix		Water										
EPA 8260B												
95-47-6	o-Xylene		0.055U	0.055	50.0	53.5	107	73 - 130	50.2	100	6	30
96-12-8	1,2-Dibromo-3-chloropropane		0.194U	0.194	50.0	50.2	100	57 - 121	51.6	103	3	30
106-93-4	1,2-Dibromoethane		0.102U	0.102	50.0	52.7	105	70 - 124	51.5	103	2	30
108-05-4	Vinyl acetate		0.151U	0.151	50.0	51.7	103	54 - 147	49.6	99	4	30
1634-04-4	tert-Butyl methyl ether (MTBE)		0.078U	0.078	50.0	47.8	96	71 - 125	48.1	96	1	30
1330-20-7	Xylene (total)		0.179U	0.179	150	159	106	74 - 127	149	99	6	30
108-87-2	Methylcyclohexane		0.143U	0.143	50.0	53.2	106	67 - 138	48.4	97	9	30
110-82-7	Cyclohexane		0.337U	0.337	50.0	50.8	102	69 - 132	48.7	97	4	30
79-20-9	Methyl Acetate		0.159U	0.159	50.0	46.8	94	57 - 139	46.2	92	1	30
76-13-1	Trichlorotrifluoroethane		0.158U	0.158	50.0	50.3	101	72 - 136	46.6	93	8	30
110-75-8	2-Chloroethylvinyl ether		0.146U	0.146	50.0	36.3	73	56 - 124	43.7	87	19	30
541-73-1	1,3-Dichlorobenzene		0.138U	0.138	50.0	52.0	104	74 - 126	49.3	99	5	30
106-46-7	1,4-Dichlorobenzene		0.083U	0.083	50.0	49.6	99	72 - 122	47.5	95	4	30
95-50-1	1,2-Dichlorobenzene		0.135U	0.135	50.0	51.7	103	71 - 126	49.3	99	5	30
75-35-4	1,1-Dichloroethene		0.208U	0.208	50.0	49.9	100	69 - 129	47.1	94	6	20
71-43-2	Benzene		0.111U	0.111	50.0	50.4	101	70 - 129	49.9	100	1	20
79-01-6	Trichloroethene		0.161U	0.161	50.0	50.5	101	76 - 129	47.8	96	5	20
108-88-3	Toluene		0.122U	0.122	50.0	52.4	105	72 - 120	49.0	98	7	20
108-90-7	Chlorobenzene		0.083U	0.083	50.0	50.4	101	74 - 123	47.6	95	6	20
Surrogate												
460-00-4	4-Bromofluorobenzene		48.1	96	50	50.8	102	78 - 130	50.2	100		
1868-53-7	Dibromofluoromethane		49.1	98	50	48.7	97	77 - 127	51.4	103		
2037-26-5	Toluene d8		52.3	105	50	49.9	100	76 - 134	49	98		
17060-07-0	1,2-Dichloroethane-d4		50.2	100	50	50.6	101	71 - 127	52	104		

General Chromatography Quality Control Summary

Analytical Batch Prep Batch	542224 N/A	Client ID		ug/L RDL	Spike Added	LCS542224				LCS542224			
		GCAL ID	Sample Type			Units Result	Result	% R	Control Limits % R	Result	% R	Result	RPD Limit
		1365547	Method Blank			0.435U	15.9	91	39 - 120	15.8	90	15.8	27
74-82-8	Methane			0.435	17.5								
74-85-1	Ethene			0.071	3.06	0.071U	3.24	106	45 - 134	3.20	105	3.20	25
74-84-0	Ethane			0.087	3.28	0.087U	3.60	110	45 - 128	3.58	109	3.58	29
Surrogate													
115-07-1	Propene			116	40.5	46.8	39.7	98	40 - 143	39.8	98	39.8	

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541843 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541843 1363700 Method Blank 09/29/2014 16:24 Water	mg/L RDL	Spike Added	LCS541843 1363701 LCS 09/29/2014 15:33 Water		
						Result	% R	Control Limits % R
C-012	Total Organic Carbon		0.30U	0.30	50.0	48.6	97	80 - 120

Analytical Batch Prep Batch	541843 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	OU8-MW150-240914 21409251003 SAMPLE 09/29/2014 19:43 Water	mg/L RDL	Spike Added	1363363MS 1364600 MS 09/29/2014 21:16 Water			1363363MSD 1364601 MSD 09/29/2014 21:35 Water		
						Result	% R	Control Limits % R	Result	% R	RPD Limit
C-012	Total Organic Carbon		17.2	0.30	50.0	64.7	95	75 - 125	65.3	96	1 25

Analytical Batch Prep Batch	541843 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	U31PS201G 21409252401 SAMPLE 09/30/2014 09:04 Water	mg/L RDL	Spike Added	1363454MS 1364602 MS 09/30/2014 09:21 Water			1363454MSD 1364603 MSD 09/30/2014 09:37 Water		
						Result	% R	Control Limits % R	Result	% R	RPD Limit
C-012	Total Organic Carbon		189	1.5	250	441	101	75 - 125	445	102	1 25

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541947 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541947 1364357 Method Blank 09/28/2014 14:00 Water	mg/L RDL	2.00	Spike Added	25.0	Result	26.5	% R	106	Control Limits % R	80 - 120
SM 4500-S2 F-2011													
18496-25-8	Sulfide												

Analytical Batch Prep Batch	541947 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	GPMW-20 21409231302 SAMPLE 09/28/2014 14:00 Water	mg/L RDL	2.00	Spike Added	25.0	Result	27.1	% R	108	Control Limits % R	75 - 125
SM 4500-S2 F-2011													
18496-25-8	Sulfide												

Analytical Batch Prep Batch	541947 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	GPMW-18 21409231301 SAMPLE 09/28/2014 14:00 Water	mg/L RDL	2.00	Result	0.000	RPD Limit	0	25
SM 4500-S2 F-2011										
18496-25-8	Sulfide									

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541732 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541732 1363261 Method Blank 09/25/2014 09:44 Water	LCS541732 1363262 LCS 09/25/2014 09:27 Water			
EPA 9056A			Units Result	mg/L RDL	Spike Added	Result	Control Limits % R
14797-55-8	Nitrate		0.050U	0.050	2.50	2.36	94 80 - 120

Analytical Batch Prep Batch	542294 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542294 1365964 Method Blank 10/03/2014 14:56 Water	LCS542294 1365965 LCS 10/03/2014 14:39 Water			
EPA 9056A			Units Result	mg/L RDL	Spike Added	Result	Control Limits % R
16887-00-6	Chloride		0.050U	0.050	2.50	2.66	106 80 - 120
14808-79-8	Sulfate		0.050U	0.050	2.50	2.47	99 80 - 120

Analytical Batch Prep Batch	542294 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	OUTFALL 1 21409236304 SAMPLE 10/03/2014 16:23 Water	1362582MS 1365966 MS 10/03/2014 16:40 Water	1362582MSD 1365967 MSD 10/03/2014 16:58 Water			
EPA 9056A			Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
14808-79-8	Sulfate		0.000	5.00	250	250	100	80 - 120
						247	99	
							1	15

CHAIN OF CUSTODY RECORD

Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214092511

Due Date: 10/07/14

Phone: 225.769.4900 • Fax: 225.767.5717 • www.goal.com

Report to:

Client: AMEL EXI
Address: 1075 Big Sandy Rd
Kennesaw, GA 30144
Contact: Daniel Morris
Phone: 770-547-4409
E-mail: daniel.morris@amc.ca

Client: _____
Address: **AMEC** _____
Contact: **AMEC** _____
Phone: _____
E-mail: _____

P.O. Number	Project Name/Number
	Woodall Creek MNA #1

Sampled By: Daniel Morris

Matrix	Date	Time (2400)	Comp	Grab	Sample Description	No. Containers	He1	He1	He1	4C	Zn/C	Na/C	4C	Preservative
W	9/24/04	1040		X	RPWW-15	10	X	X	X	X	X	X	X	1
		1305		X	TPWW-24	10	X	X	X	X	X	X	X	2
		1155		X	MTWW-12	10	X	X	X	X	X	X	X	3
		—		X	TRIP BLANK	3	X							4

Air Bill No: 772 6860 3450

Turn Around Time (Business Days): ☐ 24h ☒ 48h ☐ 1 week ☒ Standard (Per Contract/Quote)

Requisitioned by (Signature) <i>[Signature]</i>	Date: 2/27/11	Received by (Signature) <i>[Signature]</i>	Date: 2/27/11	Time: 11:30	Note: ---
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	Date: 3/23/17	Time: 1:11	Received by: Signature	Date: 3/23/17	Time: 1:11
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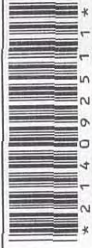
22 Nov 2007	6/162/15	1808	1808
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Date: 2/25/93 Time: 10:30 Received by: (Signature) Time: 10:30 By sub: 4937 Condition:	Date: 2/25/93 Time: 10:30 Received by: (Signature) Time: 10:30 By sub: 4937 Condition:
---	---

Matrix¹: W = water, S = solid, L = liquid, T = tissue



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214092511		CHECKLIST		YES	NO	NA
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX	Were all samples received using proper thermal preservation?	☒	☐	☐	
Profile Number 249065	Received By Sayles, Jerome A.	When used, were all custody seals intact?	☒	☐	☐	
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/25/14	Were all samples received in proper containers?	☒	☐	☐	
		Were all samples received using proper chemical preservation?	☒	☐	☐	
		Was preservative added to any container at the lab?	☐	☒	☐	
		Were all containers received in good condition?	☒	☐	☐	
		Were all VOA vials received with no head space?	☒	☐	☐	
		Do all sample labels match the Chain of Custody?	☒	☐	☐	
		Did the Chain of Custody list the sampling technician?	☒	☐	☐	
		Was the COC maintained i.e. all signatures, dates and time of receipt included?	☒	☒	☐	
		LAB PRESERVATIONS				
		None				
		DISCREPANCIES				
		None				
		COOLERS				
Airbill	Thermometer ID: E22	Temp(°C)	0.6			
		NOTES				



CHAIN OF CUSTODY RECORD

7979 GSRI Ave., Baton Rouge, LA 70820-7402
Phone: 225.769.4900 • Fax: 225.767.5717 • www.gcal.com

Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214092511

Due Date: 10/07/14



Report to:						Bill to:		Analytical Requests & Method										GCAL use only:	
Client: <u>AMEC EXI</u>						Client: _____		4C VOCs 4C TOC 4C Methane/ethane/benzene 4C Chloride + Sulfate 4C Zn/Cd/Ni/As 4C NITRATE										Custody Seal <u>249065</u>	
Address: <u>1075 Big Shanty Rd</u>						Address: _____												used ☒ yes ☐ no <u>line 1</u>	
Contact: <u>Daniel Morris</u>						Contact: _____												intact ☒ yes ☐ no	
Phone: <u>770-547-4409</u>						Phone: _____												Temperature °C <u>0.6 E24</u>	
E-mail: <u>daniel.morris@amec.com</u>						E-mail: _____												☐ Dissolved Analysis Requested	
P.O. Number		Project Name/Number														☐ Field filtered			
		<u>Woodall Creek MNA #1</u>														☐ Lab filtered			
Sampled By: <u>Daniel Morris</u>																			
Matrix¹	Date	Time (2400)	Comp	Grab	Sample Description	No Con-tainers	4C VOCs	4C TOC	4C Methane/ethane/benzene	4C Chloride + Sulfate	4C Zn/Cd/Ni/As	4C NITRATE	Preservative						
W	9/24	1040		X	RPMW-15	10	X	X	X	X	X	X		2					
↓	↓	1305		X	JPMW-24	10	X	X	X	X	X	X		2					
↓	↓	1155		X	MTWMW-12	10	X	X	X	X	X	X		3					
↓	↓	✓		X	TRIP BLANK	3	X							4					
<u>Daniel Morris</u> 9/24/14																			
Air Bill No: <u>7712 08101 3450</u>																			
Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote)																			
Relinquished by: (Signature) <u>Daniel Morris</u>		Date: <u>9/24/14</u>		Received by: (Signature) <u>Kevin Amez</u>		Date: <u>9/24/14</u>		Time: <u>19:52</u>		Note: <u>* NITRATE *</u>									
Relinquished by: (Signature) <u>Kevin Amez</u>		Date: <u>9/24/14</u>		Received by: (Signature) <u>FedEx</u>		Date: <u>9/25/14</u>		Time: <u>0930</u>		By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.									
Relinquished by: (Signature) <u>FedEx</u>		Date: <u>9/25/14</u>		Received by: (Signature) <u>William Nag</u>		Date: <u>9/25/14</u>		Time: <u>0930</u>											

Matrix¹: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

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

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214092511			CHECKLIST	YES	NO	NA
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX		Were all samples received using proper thermal preservation?	☒	☐	☐
			When used, were all custody seals intact?	☒	☐	☐
			Were all samples received in proper containers?	☒	☐	☐
Profile Number 249065	Received By Sayles, Jerome A.		Were all samples received using proper chemical preservation?	☒	☐	☐
			Was preservative added to any container at the lab?	☐	☒	☐
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/25/14		Were all containers received in good condition?	☒	☐	☐
			Were all VOA vials received with no head space?	☒	☐	☐
			Do all sample labels match the Chain of Custody?	☒	☐	☐
			Did the Chain of Custody list the sampling technician?	☒	☐	☐
			Was the COC maintained i.e. all signatures, dates and time of receipt included?	☒	☒	☐
COOLERS			DISCREPANCIES	LAB PRESERVATIONS		
Airbill	Thermometer ID: E22	Temp(°C)	None	None		
		0.6				
NOTES						

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

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

Report Date 10/16/2014

GCAL Report 214092613



Deliver To AMEC E&I
396 Plasters Ave NE
Atlanta, GA 30324
770-547-4409

Attn Daniel Morris

Project Woodall Creek MNA#1

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.

Report: 214092613

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

VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis, sample 21409261303 (JPBRW-1) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilution is reflected in elevated reporting limits.

VOLATILES GAS CHROMATOGRAPHY

In the EPA RSK-175 analysis, sample 21409261303 (JPBRW-1) had to be diluted to bracket the concentration of target analyte(s) within the calibration range of the instrument. The recoveries for the surrogates are not applicable for those analyses at a 10 or higher dilution.

CONVENTIONALS

In the EPA 9056A analysis, all samples had to be diluted in order to bracket the concentration within the calibration range of the instrument.

Laboratory Endorsement

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

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

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

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

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

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

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


Karen Melburn Data Dir

Authorized Signature

GCAL REPORT 214092613


Karen Melburn Data Dir

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261301	MTWMW-10	Water	09/25/2014 10:38	09/26/2014 10:00
21409261302	DUP-2	Water	09/25/2014 00:00	09/26/2014 10:00
21409261303	JPBRW-1	Water	09/25/2014 13:30	09/26/2014 10:00

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261301	MTWMW-10	Water	09/25/2014 10:38	09/26/2014 10:00

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	2.91	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-66-3	Chloroform	1.23J	5.00	0.155	ug/L
127-18-4	Tetrachloroethene	49.7	5.00	0.193	ug/L
79-01-6	Trichloroethene	7.98	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	1.75J	5.00	0.103	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	3.0	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	11.4	4.00	1.00	mg/L
14808-79-8	Sulfate	50.8	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261302	DUP-2	Water	09/25/2014 00:00	09/26/2014 10:00

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	2.93	0.200	0.050	mg/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.8	1.0	0.30	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
108-10-1	4-Methyl-2-pentanone	0.613J	5.00	0.120	ug/L
67-66-3	Chloroform	1.22J	5.00	0.155	ug/L
127-18-4	Tetrachloroethene	51.2	5.00	0.193	ug/L
79-01-6	Trichloroethene	8.06	5.00	0.161	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261302	DUP-2	Water	09/25/2014 00:00	09/26/2014 10:00

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
156-59-2	cis-1,2-Dichloroethene	1.80J	5.00	0.103	ug/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	11.4	4.00	1.00	mg/L
14808-79-8	Sulfate	51.3	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261303	JPBRW-1	Water	09/25/2014 13:30	09/26/2014 10:00

EPA RSK-175

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	3.57	1.00	0.087	ug/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	295	25.0	0.963	ug/L
79-01-6	Trichloroethene	229	25.0	0.807	ug/L
156-59-2	cis-1,2-Dichloroethene	54.6	25.0	0.517	ug/L
156-60-5	trans-1,2-Dichloroethene	5.38J	25.0	0.385	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.0	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	Sulfate	15.3	0.400	0.100	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	24.3	4.00	1.00	mg/L

EPA RSK-175

CAS#	Parameter	Result	RDL	MDL	Units
74-85-1	Ethene	49.4	10.0	0.714	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261301	MTWMW-10	Water	09/25/2014 10:38	09/26/2014 10:00

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 14:10	LBH	541899

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	1.23J	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	49.7	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	7.98	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	1.75J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261301	MTWMW-10	Water	09/25/2014 10:38	09/26/2014 10:00

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 14:10	LBH	541899

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.8	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	49	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	52.1	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.1	ug/L	100	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 17:44	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	45.4	ug/L	112	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 13:27	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	3.0	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 08:20	DMT	542206

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261301	MTWMW-10	Water	09/25/2014 10:38	09/26/2014 10:00

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/26/2014 14:32	DMT	541833
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		2.91	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	10/06/2014 18:25	JEM	542405
CAS#	Parameter		Result	RDL	MDL	Units
16887-00-6	Chloride		11.4	4.00	1.00	mg/L
14808-79-8	Sulfate		50.8	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261302	DUP-2	Water	09/25/2014 00:00	09/26/2014 10:00

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 14:33	LBH	541899

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.613J	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	1.22J	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	51.2	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	8.06	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	1.80J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261302	DUP-2	Water	09/25/2014 00:00	09/26/2014 10:00

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 14:33	LBH	541899

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	49.5	ug/L	99	77 - 127
2037-26-5	Toluene d8	50	51.7	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.6	ug/L	101	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 17:51	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	43	ug/L	106	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 13:48	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.8	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 14:00	DMT	541947

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261302	DUP-2	Water	09/25/2014 00:00	09/26/2014 10:00

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/26/2014 14:49	DMT	541833

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	2.93	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	10/06/2014 19:00	JEM	542405

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	11.4	4.00	1.00	mg/L
14808-79-8	Sulfate	51.3	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261303	JPBRW-1	Water	09/25/2014 13:30	09/26/2014 10:00

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	09/28/2014 18:27	LBH	541943

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.615U	25.0	0.615	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.546U	25.0	0.546	ug/L
79-00-5	1,1,2-Trichloroethane	0.795U	25.0	0.795	ug/L
75-34-3	1,1-Dichloroethane	0.856U	25.0	0.856	ug/L
75-35-4	1,1-Dichloroethene	1.04U	25.0	1.04	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.526U	25.0	0.526	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.971U	25.0	0.971	ug/L
106-93-4	1,2-Dibromoethane	0.512U	25.0	0.512	ug/L
95-50-1	1,2-Dichlorobenzene	0.674U	25.0	0.674	ug/L
107-06-2	1,2-Dichloroethane	0.581U	25.0	0.581	ug/L
78-87-5	1,2-Dichloropropane	0.752U	25.0	0.752	ug/L
541-73-1	1,3-Dichlorobenzene	0.689U	25.0	0.689	ug/L
106-46-7	1,4-Dichlorobenzene	0.416U	25.0	0.416	ug/L
78-93-3	2-Butanone	0.711U	25.0	0.711	ug/L
110-75-8	2-Chloroethylvinyl ether	0.729U	25.0	0.729	ug/L
591-78-6	2-Hexanone	0.612U	25.0	0.612	ug/L
108-10-1	4-Methyl-2-pentanone	0.600U	25.0	0.600	ug/L
67-64-1	Acetone	0.967U	25.0	0.967	ug/L
71-43-2	Benzene	0.555U	25.0	0.555	ug/L
75-27-4	Bromodichloromethane	0.417U	25.0	0.417	ug/L
75-25-2	Bromoform	1.08U	25.0	1.08	ug/L
74-83-9	Bromomethane	2.14U	25.0	2.14	ug/L
75-15-0	Carbon disulfide	0.950U	25.0	0.950	ug/L
56-23-5	Carbon tetrachloride	1.24U	25.0	1.24	ug/L
108-90-7	Chlorobenzene	0.414U	25.0	0.414	ug/L
75-00-3	Chloroethane	1.18U	25.0	1.18	ug/L
67-66-3	Chloroform	0.775U	25.0	0.775	ug/L
74-87-3	Chloromethane	0.718U	25.0	0.718	ug/L
110-82-7	Cyclohexane	1.69U	25.0	1.69	ug/L
124-48-1	Dibromochloromethane	0.270U	25.0	0.270	ug/L
75-71-8	Dichlorodifluoromethane	0.724U	25.0	0.724	ug/L
100-41-4	Ethylbenzene	0.545U	25.0	0.545	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.651U	25.0	0.651	ug/L
79-20-9	Methyl Acetate	0.797U	25.0	0.797	ug/L
108-87-2	Methylcyclohexane	0.717U	25.0	0.717	ug/L
75-09-2	Methylene chloride	0.745U	25.0	0.745	ug/L
100-42-5	Styrene	0.447U	25.0	0.447	ug/L
127-18-4	Tetrachloroethene	295	25.0	0.963	ug/L
108-88-3	Toluene	0.609U	25.0	0.609	ug/L
79-01-6	Trichloroethene	229	25.0	0.807	ug/L
75-69-4	Trichlorofluoromethane	0.785U	25.0	0.785	ug/L
76-13-1	Trichlorotrifluoroethane	0.790U	25.0	0.790	ug/L
108-05-4	Vinyl acetate	0.755U	25.0	0.755	ug/L
75-01-4	Vinyl chloride	0.636U	25.0	0.636	ug/L
1330-20-7	Xylene (total)	0.894U	75.0	0.894	ug/L
156-59-2	cis-1,2-Dichloroethene	54.6	25.0	0.517	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.621U	25.0	0.621	ug/L
136777-61-2	m,p-Xylene	0.617U	50.0	0.617	ug/L
95-47-6	o-Xylene	0.277U	25.0	0.277	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.389U	25.0	0.389	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261303	JPBRW-1	Water	09/25/2014 13:30	09/26/2014 10:00

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	09/28/2014 18:27	LBH	541943

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	5.38J	25.0	0.385	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.639U	25.0	0.639	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	250	234	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	250	249	ug/L	100	77 - 127
2037-26-5	Toluene d8	250	265	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	250	255	ug/L	102	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 18:09	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	3.57	1.00	0.087	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	41.4	ug/L	102	40 - 143

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/02/2014 18:22	JAR	542224

CAS#	Parameter	Result	RDL	MDL	Units
74-85-1	Ethene	49.4	10.0	0.714	ug/L

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 14:08	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.0	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 08:20	DMT	542206

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409261303	JPBRW-1	Water	09/25/2014 13:30	09/26/2014 10:00

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/26/2014 15:07	DMT	541833
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		0.050U	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	10/06/2014 19:53	JEM	542405
CAS#	Parameter		Result	RDL	MDL	Units
14808-79-8	Sulfate		15.3	0.400	0.100	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	10/12/2014 01:21	DMT	542789
CAS#	Parameter		Result	RDL	MDL	Units
16887-00-6	Chloride		24.3	4.00	1.00	mg/L

GC/MS Volatiles Quality Control Summary

Analytical Batch		541899	Client ID		MB541899		LCS541899		LCSD541899		RPD	
Prep Batch		N/A	GCAL ID	Sample Type	1364132	1364133	1364134	1364133	1364134	RPD	Limit	
			Analytical Date	Matrix	Method Blank	LCS	LCSD	Water	Water			
			09/27/2014 11:29		09/27/2014 09:30	09/27/2014 09:30	09/27/2014 09:57	Water	Water			
			Water		Water	Water	Water					

GC/MS Volatiles Quality Control Summary

Analytical Batch		541899	Client ID		MB541899		LCS541899		LCSD541899		RPD	
Prep Batch		N/A	GCAL ID	1364132	1364132	1364133	1364133	1364134	1364134	RPD	Limit	
			Sample Type	Method Blank	LCS	LCS	LCS	LCSD	LCSD			
			Analytical Date	09/27/2014 11:29	09/27/2014 09:30	09/27/2014 09:30	09/27/2014 09:30	09/27/2014 09:57	09/27/2014 09:57			
			Matrix	Water	Water	Water	Water	Water	Water			
EPA 8260B			Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	
95-47-6	o-Xylene		0.055U	0.055	50.0	53.5	107	73 - 130	50.2	100	6	
96-12-8	1,2-Dibromo-3-chloropropane		0.194U	0.194	50.0	50.2	100	57 - 121	51.6	103	3	
106-93-4	1,2-Dibromoethane		0.102U	0.102	50.0	52.7	105	70 - 124	51.5	103	2	
108-05-4	Vinyl acetate		0.151U	0.151	50.0	51.7	103	54 - 147	49.6	99	4	
1634-04-4	tert-Butyl methyl ether (MTBE)		0.078U	0.078	50.0	47.8	96	71 - 125	48.1	96	1	
1330-20-7	Xylene (total)		0.179U	0.179	150	159	106	74 - 127	149	99	6	
108-87-2	Methylcyclohexane		0.143U	0.143	50.0	53.2	106	67 - 138	48.4	97	9	
110-82-7	Cyclohexane		0.337U	0.337	50.0	50.8	102	69 - 132	48.7	97	4	
79-20-9	Methyl Acetate		0.159U	0.159	50.0	46.8	94	57 - 139	46.2	92	1	
76-13-1	Trichlorotrifluoroethane		0.158U	0.158	50.0	50.3	101	72 - 136	46.6	93	8	
110-75-8	2-Chloroethylvinyl ether		0.146U	0.146	50.0	36.3	73	56 - 124	43.7	87	19	
541-73-1	1,3-Dichlorobenzene		0.138U	0.138	50.0	52.0	104	74 - 126	49.3	99	5	
106-46-7	1,4-Dichlorobenzene		0.083U	0.083	50.0	49.6	99	72 - 122	47.5	95	4	
95-50-1	1,2-Dichlorobenzene		0.135U	0.135	50.0	51.7	103	71 - 126	49.3	99	5	
75-35-4	1,1-Dichloroethene		0.208U	0.208	50.0	49.9	100	69 - 129	47.1	94	6	
71-43-2	Benzene		0.111U	0.111	50.0	50.4	101	70 - 129	49.9	100	1	
79-01-6	Trichloroethene		0.161U	0.161	50.0	50.5	101	76 - 129	47.8	96	5	
108-88-3	Toluene		0.122U	0.122	50.0	52.4	105	72 - 120	49.0	98	7	
108-90-7	Chlorobenzene		0.083U	0.083	50.0	50.4	101	74 - 123	47.6	95	6	
Surrogate												
460-00-4	4-Bromofluorobenzene		48.1	96	50	50.8	102	78 - 130	50.2	100		
1868-53-7	Dibromofluoromethane		49.1	98	50	48.7	97	77 - 127	51.4	103		
2037-26-5	Toluene d8		52.3	105	50	49.9	100	76 - 134	49	98		
17060-07-0	1,2-Dichloroethane-d4		50.2	100	50	50.6	101	71 - 127	52	104		

GC/MS Volatiles Quality Control Summary

Analytical Batch		541943	Client ID		MB541943		LCS541943		LCS541943		LCS541943	
Prep Batch		N/A	GCAL ID	Sample Type	1364339	Method Blank	1364339	1364340	1364341	LCS	09/28/2014 10:20	09/28/2014 10:43
			Analytical Date	Matrix	09/28/2014 12:14	Water		Water				Water
EPA 8260B				Units	ug/L	Spike	Control	Result	% R	Limit	% R	RPD
				Result	RDL	Added	Limits % R					Limit
67-64-1	Acetone			0.193U	0.193	50.0	44 - 156	47.8	96	51.8	104	8
75-27-4	Bromodichloromethane			0.083U	0.083	50.0	74 - 125	51.6	103	50.4	101	2
75-25-2	Bromoform			0.215U	0.215	50.0	64 - 122	51.1	102	51.9	104	2
74-83-9	Bromomethane			0.427U	0.427	50.0	47 - 138	43.6	87	44.1	88	1
75-15-0	Carbon disulfide			0.190U	0.190	50.0	69 - 136	49.4	99	51.5	103	4
56-23-5	Carbon tetrachloride			0.248U	0.248	50.0	76 - 128	50.1	100	51.2	102	2
75-00-3	Chloroethane			0.235U	0.235	50.0	62 - 141	43.9	88	45.9	92	4
136777-61-2	m,p-Xylene			0.123U	0.123	100	74 - 126	101	101	97.8	98	3
67-66-3	Chloroform			0.155U	0.155	50.0	75 - 122	47.5	95	50.1	100	5
74-87-3	Chloromethane			0.144U	0.144	50.0	59 - 132	45.4	91	47.0	94	3
124-48-1	Dibromochloromethane			0.054U	0.054	50.0	71 - 123	48.4	97	47.6	95	2
75-71-8	Dichlorodifluoromethane			0.145U	0.145	50.0	58 - 140	47.3	95	47.4	95	0
75-34-3	1,1-Dichloroethane			0.171U	0.171	50.0	74 - 127	48.9	98	50.2	100	3
107-06-2	1,2-Dichloroethane			0.116U	0.116	50.0	71 - 129	47.8	96	49.0	98	2
156-59-2	cis-1,2-Dichloroethene			0.103U	0.103	50.0	73 - 130	47.5	95	49.9	100	5
156-60-5	trans-1,2-Dichloroethene			0.077U	0.077	50.0	69 - 132	46.3	93	48.3	97	4
75-09-2	Methylene chloride			0.149U	0.149	50.0	68 - 132	45.9	92	49.0	98	7
78-87-5	1,2-Dichloropropane			0.150U	0.150	50.0	72 - 128	50.1	100	49.0	98	2
10061-01-5	cis-1,3-Dichloropropene			0.124U	0.124	50.0	71 - 132	47.1	94	45.3	91	4
10061-02-6	trans-1,3-Dichloropropene			0.128U	0.128	50.0	71 - 131	46.5	93	46.3	93	0
100-41-4	Ethylbenzene			0.109U	0.109	50.0	74 - 126	48.3	97	48.1	96	0
591-78-6	2-Hexanone			0.122U	0.122	50.0	50 - 135	52.0	104	53.7	107	3
98-82-8	Isopropylbenzene (Cumene)			0.130U	0.130	50.0	71 - 125	51.7	103	50.8	102	2
78-93-3	2-Butanone			0.142U	0.142	50.0	58 - 137	48.7	97	51.6	103	6
108-10-1	4-Methyl-2-pentanone			0.120U	0.120	50.0	57 - 132	49.7	99	50.4	101	1
100-42-5	Styrene			0.089U	0.089	50.0	71 - 127	52.0	104	51.3	103	1
127-18-4	Tetrachloroethene			0.193U	0.193	50.0	68 - 128	50.3	101	47.4	95	6
79-34-5	1,1,2,2-Tetrachloroethane			0.109U	0.109	50.0	70 - 122	48.6	97	49.8	100	2
120-82-1	1,2,4-Trichlorobenzene			0.105U	0.105	50.0	61 - 135	47.1	94	47.3	95	0
71-55-6	1,1,1-Trichloroethane			0.123U	0.123	50.0	76 - 126	48.7	97	49.7	99	2
79-00-5	1,1,2-Trichloroethane			0.159U	0.159	50.0	72 - 121	49.1	98	48.2	96	2
75-69-4	Trichlorofluoromethane			0.157U	0.157	50.0	72 - 136	46.5	93	48.0	96	3
75-01-4	Vinyl chloride			0.127U	0.127	50.0	68 - 132	47.8	96	49.3	99	3

GC/MS Volatiles Quality Control Summary

Analytical Batch		541943	Client ID		MB541943		LCS541943		LCSD541943		RPD		RPD	Limit
Prep Batch		N/A	GCAL ID		1364339		1364340		1364341		R		RPD	
			Sample Type		Method Blank		LCS		LCSD					
			Analytical Date		09/28/2014 12:14		09/28/2014 10:20		09/28/2014 10:43					
			Matrix		Water		Water		Water					
EPA 8260B														
95-47-6	o-Xylene		0.055U	0.055	50.0	51.5	103	73 - 130	50.4	101	2	30		
96-12-8	1,2-Dibromo-3-chloropropane		0.194U	0.194	50.0	49.2	98	57 - 121	51.0	102	4	30		
106-93-4	1,2-Dibromoethane		0.102U	0.102	50.0	51.1	102	70 - 124	50.5	101	1	30		
108-05-4	Vinyl acetate		0.151U	0.151	50.0	45.4	91	54 - 147	44.7	89	2	30		
1634-04-4	tert-Butyl methyl ether (MTBE)		0.078U	0.078	50.0	45.3	91	71 - 125	48.8	98	7	30		
1330-20-7	Xylene (total)		0.179U	0.179	150	152	101	74 - 127	148	99	3	30		
108-87-2	Methylcyclohexane		0.143U	0.143	50.0	50.8	102	67 - 138	48.1	96	5	30		
110-82-7	Cyclohexane		0.337U	0.337	50.0	48.7	97	69 - 132	49.0	98	1	30		
79-20-9	Methyl Acetate		0.159U	0.159	50.0	45.7	91	57 - 139	47.3	95	3	30		
76-13-1	Trichlorotrifluoroethane		0.158U	0.158	50.0	47.9	96	72 - 136	48.4	97	1	30		
110-75-8	2-Chloroethylvinyl ether		0.146U	0.146	50.0	44.9	90	56 - 124	45.1	90	0	30		
541-73-1	1,3-Dichlorobenzene		0.138U	0.138	50.0	49.3	99	74 - 126	49.0	98	1	30		
106-46-7	1,4-Dichlorobenzene		0.083U	0.083	50.0	46.9	94	72 - 122	47.0	94	0	30		
95-50-1	1,2-Dichlorobenzene		0.135U	0.135	50.0	48.6	97	71 - 126	49.2	98	1	30		
75-35-4	1,1-Dichloroethene		0.208U	0.208	50.0	46.6	93	69 - 129	47.6	95	2	20		
71-43-2	Benzene		0.111U	0.111	50.0	48.6	97	70 - 129	48.6	97	0	20		
79-01-6	Trichloroethene		0.161U	0.161	50.0	49.1	98	76 - 129	46.7	93	5	20		
108-88-3	Toluene		0.122U	0.122	50.0	50.0	100	72 - 120	48.7	97	3	20		
108-90-7	Chlorobenzene		0.083U	0.083	50.0	48.1	96	74 - 123	47.7	95	1	20		
Surrogate														
460-00-4	4-Bromofluorobenzene		47.5	95	50	50.5	101	78 - 130	50.8	102				
1868-53-7	Dibromofluoromethane		49.2	98	50	49.2	98	77 - 127	51.6	103				
2037-26-5	Toluene d8		51.4	103	50	49.9	100	76 - 134	49.3	99				
17060-07-0	1,2-Dichloroethane-d4		50.1	100	50	49.8	100	71 - 127	51.2	102				

General Chromatography Quality Control Summary

Analytical Batch		542224	Client ID		MB542224		LCS542224		LCSD542224		RPD	
Prep Batch		N/A	GCAL ID	1365547	1365548	1365549	Control	Result	% R	RPD	Limit	
			Sample Type	Method Blank			% R					
			Analytical Date	10/02/2014 13:18	10/02/2014 14:09	10/02/2014 14:18						
			Matrix	Water	Water	Water						
EPA RSK-175												
74-82-8	Methane		Units	ug/L	Spike		Result	% R	Control	Result	% R	RPD
74-85-1	Ethene		0.435U	0.435	17.5		15.9	91	39 - 120	15.8	90	1
74-84-0	Ethane		0.071U	0.071	3.06		3.24	106	45 - 134	3.20	105	1
Surrogate			0.087U	0.087	3.28		3.60	110	45 - 128	3.58	109	1
115-07-1	Propene		46.8	116	40.5		39.7	98	40 - 143	39.8	98	

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	542074 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542074 1364771 Method Blank 09/30/2014 12:16 Water	mg/L RDL	Spike Added	LCS542074 1364772 LCS 09/30/2014 11:32 Water		
						Units Result	Result	Control Limits % R
C-012	Total Organic Carbon		0.30U	0.30	50.0		49.0	98
								80 - 120

Analytical Batch Prep Batch	542074 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MTWMW-8 21409300804 SAMPLE 09/30/2014 18:15 Water	mg/L RDL	Spike Added	MTWMW-8 MS 21409300807 MS 09/30/2014 18:43 Water		
						Units Result	Result	Control Limits % R
C-012	Total Organic Carbon		0.89	0.30	50.0		48.9	96
							48.9	96
								75 - 125
								0
								25

Analytical Batch Prep Batch	542074 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	U31PPDC 21409300702 SAMPLE 09/30/2014 12:39 Water	mg/L RDL	Spike Added	1364756MS 1364773 MS 09/30/2014 12:55 Water		
						Units Result	Result	Control Limits % R
C-012	Total Organic Carbon		15.0	0.30	50.0		63.6	97
							64.2	98
								75 - 125
								1
								25

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541947 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541947 1364357 Method Blank 09/28/2014 14:00 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
SM 4500-S2 F-2011			Units Result	2.00U	25.0	26.5	106	80 - 120
18496-25-8	Sulfide							

Analytical Batch Prep Batch	541947 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	GPMW-20 21409231302 SAMPLE 09/28/2014 14:00 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
SM 4500-S2 F-2011			Units Result	0.000	25.0	27.1	108	75 - 125
18496-25-8	Sulfide							

Analytical Batch Prep Batch	541947 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	GPMW-18 21409231301 SAMPLE 09/28/2014 14:00 Water	mg/L RDL	Result	RPD Limit	RPD Limit
SM 4500-S2 F-2011			Units Result	0.000	0.000	0	25
18496-25-8	Sulfide						

Analytical Batch Prep Batch	542206 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542206 1365483 Method Blank 10/02/2014 08:20 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
SM 4500-S2 F-2011			Units Result	2.00U	25.0	26.3	105	80 - 120
18496-25-8	Sulfide							

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	542206 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MTWMW-8		Spike Added	MTWMW-8 MS		MTWMW-8 MSD				
			21409300804 SAMPLE 10/02/2014 08:20 Water	mg/L RDL		21409300807 MS 10/02/2014 08:20 Water	Result	% R	Control Limits % R	Result	% R	RPD
18496-25-8	Sulfide	SM 4500-S2 F-2011	0.000	2.00	25.0	26.1	104	75 - 125	26.5	106	2	25

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541833 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541833 1363674 Method Blank 09/26/2014 09:19 Water		LCS541833 1363675 LCS 09/26/2014 09:01 Water	
EPA 9056A			Units Result	mg/L RDL	Spike Added	Control Limits % R
14797-55-8	Nitrate		0.050U	0.050	2.50	93 80 - 120

Analytical Batch Prep Batch	542405 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542405 1366483 Method Blank 10/06/2014 14:18 Water		LCS542405 1366484 LCS 10/06/2014 14:01 Water	
EPA 9056A			Units Result	mg/L RDL	Spike Added	Control Limits % R
16887-00-6	Chloride		0.050U	0.050	2.50	96 80 - 120
14808-79-8	Sulfate		0.050U	0.050	2.50	108 80 - 120

Analytical Batch Prep Batch	542405 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	003 21409300601 SAMPLE 10/06/2014 23:25 Water		1364747MS 1366485 MS 10/06/2014 23:42 Water	1364747MSD 1366486 MSD 10/07/2014 00:00 Water
EPA 9056A			Units Result	mg/L RDL	Spike Added	Control Limits % R
16887-00-6	Chloride		13.4	2.50	125	137 99 138 100 1 15

Analytical Batch Prep Batch	542789 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542789 1368836 Method Blank 10/11/2014 15:46 Water		LCS542789 1368837 LCS 10/11/2014 15:29 Water	
EPA 9056A			Units Result	mg/L RDL	Spike Added	Control Limits % R
16887-00-6	Chloride		0.050U	0.050	2.50	2.33 93 80 - 120

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	542789 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	JPBRW-1 21409261303 SAMPLE 10/12/2014 01:21 Water	mg/L RDL	Spike Added	1363811MS				1363811MSD			
						1368840 MS 10/12/2014 01:38 Water	Result	% R	Control Limits % R	Result	% R	RPD	Limit
16887-00-6	EPA 9056A Chloride		Units Result	24.3	1.00	50.0	74.7	101	80 - 120	74.8	101	0	15



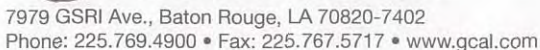
Client ID: 4829 - AMEC Environment & Infrastructure, Inc.
SDG: 214092613
Due Date: 10/08/14

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



* 2 1 4 0 9 2 6 1 3 *

[illegible]



Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214092613



Due Date: 10/08/14

Report to:						Bill to:						Analytical Requests & Method								GCAL use only:											
Client: AMEC E&I Address: 1075 Big Shanty Rd. Kennesaw, GA 30144 Contact: Daniel Morris Phone: 770-547-4409 E-mail: daniel.morris@amec.com						Client: Address: AMEC Contact: Default Phone: E-mail:														Custody Seal used ☒ yes ☐ no intact ☐ yes ☐ no Temperature °C 1.7 / 3.4 E22											
P.O. Number				Project Name/Number Woodall Creek MNA #1																											
Sampled By: Daniel Morris & Tala Norickas																		VOCs	TOC	Methanol/Ethanol/Acetone	Chloride + Sulfate	NITRATE	Sulfide								
Matrix¹	Date	Time (2400)	Comp	Grab	Sample Description	No Con- tainers ↓	HCL	HCL	HCL	YC	YC	BPA/ Naph						Preservative ←													
W	9/25	1038			MTWMW-10	10	X	X	X	X	X	X						1													
		/			DUP-2		X	X	X	X	X	X						2													
W	9/25	1330			JPBRW-1	10	X	X	X	X	X	X						3													
Air Bill No:	7712 83410359																														
Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote)																															
Relinquished by: (Signature) Tala Norickas		Date: 9/25/14		Time: 1445		Received by: (Signature) Alicia Inez		Date: 9/27/14		Time: 19:45		Note: * NITRATE *																			
Relinquished by: (Signature) Paul Williams		Date: 9/25/14		Time: 1530		Received by: (Signature)		Date:		Time:																					
Relinquished by: (Signature) Fedex		Date: 9/25/14		Time: 1600		Received by: (Signature) L. SB		Date: 9/26/14		Time: 1000																					

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

Matrix¹: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

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



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214092613

Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX
Profile Number 249065	Received By Saucier, Charlotte M.
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/26/14

CHECKLIST

	YES	NO	NA
Were all samples received using proper thermal preservation?	☒	☐	☐
When used, were all custody seals intact?	☒	☐	☐
Were all samples received in proper containers?	☒	☐	☐
Were all samples received using proper chemical preservation?	☒	☐	☐
Was preservative added to any container at the lab?	☐	☒	☐
Were all containers received in good condition?	☒	☐	☐
Were all VOA vials received with no head space?	☒	☐	☐
Do all sample labels match the Chain of Custody?	☒	☐	☐
Did the Chain of Custody list the sampling technician?	☒	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐	☒	☐

COOLERS

Airbill	Thermometer ID: E22	Temp(°C)
7712 8341 0359		1.7 3.4

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

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

Report Date 10/10/2014

GCAL Report 214092715



Deliver To AMEC E&I
396 Plasters Ave NE
Atlanta, GA 30324
770-547-4409

Attn Daniel Morris

Project Woodall Creek MNA#1

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.

Report: 214092715

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

VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis, samples 21409271501 (MTWMW-7I), 21409271502 (MTWMW-7) and 21409271504 (JPMW-16) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilution is reflected in elevated detection limits.

VOLATILES GAS CHROMATOGRAPHY

In the EPA RSK-175 analysis, samples 21409271501 (MTWMW-7I) and 21409271502 (MTWMW-7) had to be diluted to bracket the concentration of target analyte(s) within the calibration range of the instrument.

CONVENTIONALS

In the EPA 9056A analysis, samples 21409271504 (JPMW-16), 21409271502 (MTWMW-7), 21409271503 (JPMW-17) and 21409271501 (MTWMW-7I) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

Laboratory Endorsement

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

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

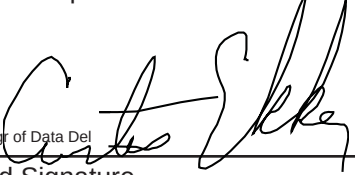
J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

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

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

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

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


Curtis Ekker/Mgr of Data Del
Authorized Signature
GCAL REPORT 214092715
THIS REPORT CONTAINS 30 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271501	MTWMW-7I	Water	09/26/2014 11:02	09/27/2014 09:45
21409271502	MTWMW-7	Water	09/26/2014 11:28	09/27/2014 09:45
21409271503	JPMW-17	Water	09/26/2014 11:30	09/27/2014 09:45
21409271504	JPMW-16	Water	09/26/2014 14:15	09/27/2014 09:45
21409271505	TRIP BLANK	Water	09/26/2014 00:00	09/27/2014 09:45

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271501	MTWMW-71	Water	09/26/2014 11:02	09/27/2014 09:45

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.288	0.200	0.050	mg/L

EPA RSK-175

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.354J	1.00	0.087	ug/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	3.93J	10.0	0.246	ug/L
75-34-3	1,1-Dichloroethane	2.40J	10.0	0.342	ug/L
75-35-4	1,1-Dichloroethene	19.0	10.0	0.416	ug/L
108-90-7	Chlorobenzene	0.830J	10.0	0.166	ug/L
67-66-3	Chloroform	1.11J	10.0	0.310	ug/L
127-18-4	Tetrachloroethene	304	10.0	0.385	ug/L
79-01-6	Trichloroethene	176	10.0	0.323	ug/L
75-01-4	Vinyl chloride	1.95J	10.0	0.254	ug/L
156-59-2	cis-1,2-Dichloroethene	18.7	10.0	0.207	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	3.0	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	8.65	1.00	0.250	mg/L
14808-79-8	Sulfate	29.8	1.00	0.250	mg/L

EPA RSK-175

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	191	20.0	4.35	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271502	MTWMW-7	Water	09/26/2014 11:28	09/27/2014 09:45

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	2.93J	10.0	0.246	ug/L
75-34-3	1,1-Dichloroethane	3.20J	10.0	0.342	ug/L
75-35-4	1,1-Dichloroethene	19.8	10.0	0.416	ug/L
67-66-3	Chloroform	0.806J	10.0	0.310	ug/L
127-18-4	Tetrachloroethene	265	10.0	0.385	ug/L
79-01-6	Trichloroethene	151	10.0	0.323	ug/L
75-01-4	Vinyl chloride	6.58J	10.0	0.254	ug/L
156-59-2	cis-1,2-Dichloroethene	24.6	10.0	0.207	ug/L
156-60-5	trans-1,2-Dichloroethene	0.469J	10.0	0.154	ug/L

EPA RSK-175

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	1.12	1.00	0.087	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	3.3	1.0	0.30	mg/L

EPA RSK-175

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	342	40.0	8.70	ug/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	9.22	1.00	0.250	mg/L
14808-79-8	Sulfate	30.0	1.00	0.250	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271503	JPMW-17	Water	09/26/2014 11:30	09/27/2014 09:45

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	3.79	0.200	0.050	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271503	JPMW-17	Water	09/26/2014 11:30	09/27/2014 09:45

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.5	1.0	0.30	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-66-3	Chloroform	1.24J	5.00	0.155	ug/L
127-18-4	Tetrachloroethene	48.1	5.00	0.193	ug/L
79-01-6	Trichloroethene	7.09	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	1.99J	5.00	0.103	ug/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	9.12	1.00	0.250	mg/L
14808-79-8	Sulfate	43.3	1.00	0.250	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271504	JPMW-16	Water	09/26/2014 14:15	09/27/2014 09:45

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	3.81	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-66-3	Chloroform	7.10J	25.0	0.775	ug/L
127-18-4	Tetrachloroethene	341	25.0	0.963	ug/L
79-01-6	Trichloroethene	117	25.0	0.807	ug/L
156-59-2	cis-1,2-Dichloroethene	43.7	25.0	0.517	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.7	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	12.5	4.00	1.00	mg/L
14808-79-8	Sulfate	29.3	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271501	MTWMW-71	Water	09/26/2014 11:02	09/27/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	09/28/2014 15:40	JCK	541943

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	3.93J	10.0	0.246	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.218U	10.0	0.218	ug/L
79-00-5	1,1,2-Trichloroethane	0.318U	10.0	0.318	ug/L
75-34-3	1,1-Dichloroethane	2.40J	10.0	0.342	ug/L
75-35-4	1,1-Dichloroethene	19.0	10.0	0.416	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.210U	10.0	0.210	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.388U	10.0	0.388	ug/L
106-93-4	1,2-Dibromoethane	0.205U	10.0	0.205	ug/L
95-50-1	1,2-Dichlorobenzene	0.270U	10.0	0.270	ug/L
107-06-2	1,2-Dichloroethane	0.232U	10.0	0.232	ug/L
78-87-5	1,2-Dichloropropane	0.301U	10.0	0.301	ug/L
541-73-1	1,3-Dichlorobenzene	0.275U	10.0	0.275	ug/L
106-46-7	1,4-Dichlorobenzene	0.166U	10.0	0.166	ug/L
78-93-3	2-Butanone	0.284U	10.0	0.284	ug/L
110-75-8	2-Chloroethylvinyl ether	0.291U	10.0	0.291	ug/L
591-78-6	2-Hexanone	0.245U	10.0	0.245	ug/L
108-10-1	4-Methyl-2-pentanone	0.240U	10.0	0.240	ug/L
67-64-1	Acetone	0.387U	10.0	0.387	ug/L
71-43-2	Benzene	0.222U	10.0	0.222	ug/L
75-27-4	Bromodichloromethane	0.167U	10.0	0.167	ug/L
75-25-2	Bromoform	0.430U	10.0	0.430	ug/L
74-83-9	Bromomethane	0.854U	10.0	0.854	ug/L
75-15-0	Carbon disulfide	0.380U	10.0	0.380	ug/L
56-23-5	Carbon tetrachloride	0.496U	10.0	0.496	ug/L
108-90-7	Chlorobenzene	0.830J	10.0	0.166	ug/L
75-00-3	Chloroethane	0.470U	10.0	0.470	ug/L
67-66-3	Chloroform	1.11J	10.0	0.310	ug/L
74-87-3	Chloromethane	0.287U	10.0	0.287	ug/L
110-82-7	Cyclohexane	0.674U	10.0	0.674	ug/L
124-48-1	Dibromochloromethane	0.108U	10.0	0.108	ug/L
75-71-8	Dichlorodifluoromethane	0.290U	10.0	0.290	ug/L
100-41-4	Ethylbenzene	0.218U	10.0	0.218	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.260U	10.0	0.260	ug/L
79-20-9	Methyl Acetate	0.319U	10.0	0.319	ug/L
108-87-2	Methylcyclohexane	0.287U	10.0	0.287	ug/L
75-09-2	Methylene chloride	0.298U	10.0	0.298	ug/L
100-42-5	Styrene	0.179U	10.0	0.179	ug/L
127-18-4	Tetrachloroethene	304	10.0	0.385	ug/L
108-88-3	Toluene	0.244U	10.0	0.244	ug/L
79-01-6	Trichloroethene	176	10.0	0.323	ug/L
75-69-4	Trichlorofluoromethane	0.314U	10.0	0.314	ug/L
76-13-1	Trichlorotrifluoroethane	0.316U	10.0	0.316	ug/L
108-05-4	Vinyl acetate	0.302U	10.0	0.302	ug/L
75-01-4	Vinyl chloride	1.95J	10.0	0.254	ug/L
1330-20-7	Xylene (total)	0.358U	30.0	0.358	ug/L
156-59-2	cis-1,2-Dichloroethene	18.7	10.0	0.207	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.248U	10.0	0.248	ug/L
136777-61-2	m,p-Xylene	0.247U	20.0	0.247	ug/L
95-47-6	o-Xylene	0.111U	10.0	0.111	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.155U	10.0	0.155	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271501	MTWMW-71	Water	09/26/2014 11:02	09/27/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	09/28/2014 15:40	JCK	541943

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.154U	10.0	0.154	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.255U	10.0	0.255	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	95.1	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	100	98.5	ug/L	99	77 - 127
2037-26-5	Toluene d8	100	106	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	102	ug/L	102	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 15:20	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.354J	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	33.5	ug/L	83	40 - 143

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/08/2014 15:26	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	191	20.0	4.35	ug/L

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 14:31	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	3.0	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 08:20	DMT	542206

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271501	MTWMW-71	Water	09/26/2014 11:02	09/27/2014 09:45

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 15:28	DMT	541871
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		0.288	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	10/08/2014 19:55	JEM	542580
CAS#	Parameter		Result	RDL	MDL	Units
16887-00-6	Chloride		8.65	1.00	0.250	mg/L
14808-79-8	Sulfate		29.8	1.00	0.250	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271502	MTWMW-7	Water	09/26/2014 11:28	09/27/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	09/28/2014 16:06	JCK	541943

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	2.93J	10.0	0.246	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.218U	10.0	0.218	ug/L
79-00-5	1,1,2-Trichloroethane	0.318U	10.0	0.318	ug/L
75-34-3	1,1-Dichloroethane	3.20J	10.0	0.342	ug/L
75-35-4	1,1-Dichloroethene	19.8	10.0	0.416	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.210U	10.0	0.210	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.388U	10.0	0.388	ug/L
106-93-4	1,2-Dibromoethane	0.205U	10.0	0.205	ug/L
95-50-1	1,2-Dichlorobenzene	0.270U	10.0	0.270	ug/L
107-06-2	1,2-Dichloroethane	0.232U	10.0	0.232	ug/L
78-87-5	1,2-Dichloropropane	0.301U	10.0	0.301	ug/L
541-73-1	1,3-Dichlorobenzene	0.275U	10.0	0.275	ug/L
106-46-7	1,4-Dichlorobenzene	0.166U	10.0	0.166	ug/L
78-93-3	2-Butanone	0.284U	10.0	0.284	ug/L
110-75-8	2-Chloroethylvinyl ether	0.291U	10.0	0.291	ug/L
591-78-6	2-Hexanone	0.245U	10.0	0.245	ug/L
108-10-1	4-Methyl-2-pentanone	0.240U	10.0	0.240	ug/L
67-64-1	Acetone	0.387U	10.0	0.387	ug/L
71-43-2	Benzene	0.222U	10.0	0.222	ug/L
75-27-4	Bromodichloromethane	0.167U	10.0	0.167	ug/L
75-25-2	Bromoform	0.430U	10.0	0.430	ug/L
74-83-9	Bromomethane	0.854U	10.0	0.854	ug/L
75-15-0	Carbon disulfide	0.380U	10.0	0.380	ug/L
56-23-5	Carbon tetrachloride	0.496U	10.0	0.496	ug/L
108-90-7	Chlorobenzene	0.166U	10.0	0.166	ug/L
75-00-3	Chloroethane	0.470U	10.0	0.470	ug/L
67-66-3	Chloroform	0.806J	10.0	0.310	ug/L
74-87-3	Chloromethane	0.287U	10.0	0.287	ug/L
110-82-7	Cyclohexane	0.674U	10.0	0.674	ug/L
124-48-1	Dibromochloromethane	0.108U	10.0	0.108	ug/L
75-71-8	Dichlorodifluoromethane	0.290U	10.0	0.290	ug/L
100-41-4	Ethylbenzene	0.218U	10.0	0.218	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.260U	10.0	0.260	ug/L
79-20-9	Methyl Acetate	0.319U	10.0	0.319	ug/L
108-87-2	Methylcyclohexane	0.287U	10.0	0.287	ug/L
75-09-2	Methylene chloride	0.298U	10.0	0.298	ug/L
100-42-5	Styrene	0.179U	10.0	0.179	ug/L
127-18-4	Tetrachloroethene	265	10.0	0.385	ug/L
108-88-3	Toluene	0.244U	10.0	0.244	ug/L
79-01-6	Trichloroethene	151	10.0	0.323	ug/L
75-69-4	Trichlorofluoromethane	0.314U	10.0	0.314	ug/L
76-13-1	Trichlorotrifluoroethane	0.316U	10.0	0.316	ug/L
108-05-4	Vinyl acetate	0.302U	10.0	0.302	ug/L
75-01-4	Vinyl chloride	6.58J	10.0	0.254	ug/L
1330-20-7	Xylene (total)	0.358U	30.0	0.358	ug/L
156-59-2	cis-1,2-Dichloroethene	24.6	10.0	0.207	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.248U	10.0	0.248	ug/L
136777-61-2	m,p-Xylene	0.247U	20.0	0.247	ug/L
95-47-6	o-Xylene	0.111U	10.0	0.111	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.155U	10.0	0.155	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271502	MTWMW-7	Water	09/26/2014 11:28	09/27/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	09/28/2014 16:06	JCK	541943

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.469J	10.0	0.154	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.255U	10.0	0.255	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	95.9	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	100	98.1	ug/L	98	77 - 127
2037-26-5	Toluene d8	100	107	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	99.1	ug/L	99	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 15:32	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	1.12	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	26.7	ug/L	66	40 - 143

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	10/08/2014 15:38	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	342	40.0	8.70	ug/L

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 14:52	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	3.3	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 08:20	DMT	542206

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271502	MTWMW-7	Water	09/26/2014 11:28	09/27/2014 09:45

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 15:45	DMT	541871
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		0.050U	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	10/08/2014 18:45	JEM	542580
CAS#	Parameter		Result	RDL	MDL	Units
16887-00-6	Chloride		9.22	1.00	0.250	mg/L
14808-79-8	Sulfate		30.0	1.00	0.250	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271503	JPMW-17	Water	09/26/2014 11:30	09/27/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 16:29	LBH	541943

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	1.24J	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	48.1	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	7.09	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	1.99J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271503	JPMW-17	Water	09/26/2014 11:30	09/27/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 16:29	LBH	541943

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.4	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	50	49.3	ug/L	99	77 - 127
2037-26-5	Toluene d8	50	53	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.4	ug/L	101	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 15:45	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	26.9	ug/L	66	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 16:28	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.5	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 08:20	DMT	542206

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271503	JPMW-17	Water	09/26/2014 11:30	09/27/2014 09:45

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 16:03	DMT	541871

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	3.79	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	10/08/2014 19:38	JEM	542580

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	9.12	1.00	0.250	mg/L
14808-79-8	Sulfate	43.3	1.00	0.250	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271504	JPMW-16	Water	09/26/2014 14:15	09/27/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	09/28/2014 16:54	LBH	541943

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.615U	25.0	0.615	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.546U	25.0	0.546	ug/L
79-00-5	1,1,2-Trichloroethane	0.795U	25.0	0.795	ug/L
75-34-3	1,1-Dichloroethane	0.856U	25.0	0.856	ug/L
75-35-4	1,1-Dichloroethene	1.04U	25.0	1.04	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.526U	25.0	0.526	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.971U	25.0	0.971	ug/L
106-93-4	1,2-Dibromoethane	0.512U	25.0	0.512	ug/L
95-50-1	1,2-Dichlorobenzene	0.674U	25.0	0.674	ug/L
107-06-2	1,2-Dichloroethane	0.581U	25.0	0.581	ug/L
78-87-5	1,2-Dichloropropane	0.752U	25.0	0.752	ug/L
541-73-1	1,3-Dichlorobenzene	0.689U	25.0	0.689	ug/L
106-46-7	1,4-Dichlorobenzene	0.416U	25.0	0.416	ug/L
78-93-3	2-Butanone	0.711U	25.0	0.711	ug/L
110-75-8	2-Chloroethylvinyl ether	0.729U	25.0	0.729	ug/L
591-78-6	2-Hexanone	0.612U	25.0	0.612	ug/L
108-10-1	4-Methyl-2-pentanone	0.600U	25.0	0.600	ug/L
67-64-1	Acetone	0.967U	25.0	0.967	ug/L
71-43-2	Benzene	0.555U	25.0	0.555	ug/L
75-27-4	Bromodichloromethane	0.417U	25.0	0.417	ug/L
75-25-2	Bromoform	1.08U	25.0	1.08	ug/L
74-83-9	Bromomethane	2.14U	25.0	2.14	ug/L
75-15-0	Carbon disulfide	0.950U	25.0	0.950	ug/L
56-23-5	Carbon tetrachloride	1.24U	25.0	1.24	ug/L
108-90-7	Chlorobenzene	0.414U	25.0	0.414	ug/L
75-00-3	Chloroethane	1.18U	25.0	1.18	ug/L
67-66-3	Chloroform	7.10J	25.0	0.775	ug/L
74-87-3	Chloromethane	0.718U	25.0	0.718	ug/L
110-82-7	Cyclohexane	1.69U	25.0	1.69	ug/L
124-48-1	Dibromochloromethane	0.270U	25.0	0.270	ug/L
75-71-8	Dichlorodifluoromethane	0.724U	25.0	0.724	ug/L
100-41-4	Ethylbenzene	0.545U	25.0	0.545	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.651U	25.0	0.651	ug/L
79-20-9	Methyl Acetate	0.797U	25.0	0.797	ug/L
108-87-2	Methylcyclohexane	0.717U	25.0	0.717	ug/L
75-09-2	Methylene chloride	0.745U	25.0	0.745	ug/L
100-42-5	Styrene	0.447U	25.0	0.447	ug/L
127-18-4	Tetrachloroethene	341	25.0	0.963	ug/L
108-88-3	Toluene	0.609U	25.0	0.609	ug/L
79-01-6	Trichloroethene	117	25.0	0.807	ug/L
75-69-4	Trichlorofluoromethane	0.785U	25.0	0.785	ug/L
76-13-1	Trichlorotrifluoroethane	0.790U	25.0	0.790	ug/L
108-05-4	Vinyl acetate	0.755U	25.0	0.755	ug/L
75-01-4	Vinyl chloride	0.636U	25.0	0.636	ug/L
1330-20-7	Xylene (total)	0.894U	75.0	0.894	ug/L
156-59-2	cis-1,2-Dichloroethene	43.7	25.0	0.517	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.621U	25.0	0.621	ug/L
136777-61-2	m,p-Xylene	0.617U	50.0	0.617	ug/L
95-47-6	o-Xylene	0.277U	25.0	0.277	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.389U	25.0	0.389	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271504	JPMW-16	Water	09/26/2014 14:15	09/27/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	09/28/2014 16:54	LBH	541943

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.385U	25.0	0.385	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.639U	25.0	0.639	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	250	240	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	250	247	ug/L	99	77 - 127
2037-26-5	Toluene d8	250	267	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	250	253	ug/L	101	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 15:58	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	33.5	ug/L	83	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 16:49	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.7	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 08:20	DMT	542206

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271504	JPMW-16	Water	09/26/2014 14:15	09/27/2014 09:45

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/27/2014 16:20	DMT	541871

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	3.81	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	10/06/2014 22:49	JEM	542405

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	12.5	4.00	1.00	mg/L
14808-79-8	Sulfate	29.3	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271505	TRIP BLANK	Water	09/26/2014 00:00	09/27/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 17:39	LBH	541943

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409271505	TRIP BLANK	Water	09/26/2014 00:00	09/27/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/28/2014 17:39	LBH	541943

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.5	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	50	49.3	ug/L	99	77 - 127
2037-26-5	Toluene d8	50	52.8	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.1	ug/L	100	71 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch		541943	Client ID		MB541943		LCS541943		LCS541943		LCS541943	
Prep Batch		N/A	GCAL ID	Sample Type	Method Blank	09/28/2014 12:14	09/28/2014 10:20	09/28/2014 10:20	09/28/2014 10:20	1364340	1364341	
			Analytical Date	Matrix	Water	Water	Water	Water	Water	LCS	LCS	
EPA 8260B												
67-64-1	Acetone	0.193U	0.193	50.0	47.8	96	44 - 156	51.8	104	8	30	
75-27-4	Bromodichloromethane	0.083U	0.083	50.0	51.6	103	74 - 125	50.4	101	2	30	
75-25-2	Bromoform	0.215U	0.215	50.0	51.1	102	64 - 122	51.9	104	2	30	
74-83-9	Bromomethane	0.427U	0.427	50.0	43.6	87	47 - 138	44.1	88	1	30	
75-15-0	Carbon disulfide	0.190U	0.190	50.0	49.4	99	69 - 136	51.5	103	4	30	
56-23-5	Carbon tetrachloride	0.248U	0.248	50.0	50.1	100	76 - 128	51.2	102	2	30	
75-00-3	Chloroethane	0.235U	0.235	50.0	43.9	88	62 - 141	45.9	92	4	30	
136777-61-2	m,p-Xylene	0.123U	0.123	100	101	101	74 - 126	97.8	98	3	30	
67-66-3	Chloroform	0.155U	0.155	50.0	47.5	95	75 - 122	50.1	100	5	30	
74-87-3	Chloromethane	0.144U	0.144	50.0	45.4	91	59 - 132	47.0	94	3	30	
124-48-1	Dibromochloromethane	0.054U	0.054	50.0	48.4	97	71 - 123	47.6	95	2	30	
75-71-8	Dichlorodifluoromethane	0.145U	0.145	50.0	47.3	95	58 - 140	47.4	95	0	30	
75-34-3	1,1-Dichloroethane	0.171U	0.171	50.0	48.9	98	74 - 127	50.2	100	3	30	
107-06-2	1,2-Dichloroethane	0.116U	0.116	50.0	47.8	96	71 - 129	49.0	98	2	30	
156-59-2	cis-1,2-Dichloroethene	0.103U	0.103	50.0	47.5	95	73 - 130	49.9	100	5	30	
156-60-5	trans-1,2-Dichloroethene	0.077U	0.077	50.0	46.3	93	69 - 132	48.3	97	4	30	
75-09-2	Methylene chloride	0.149U	0.149	50.0	45.9	92	68 - 132	49.0	98	7	30	
78-87-5	1,2-Dichloropropane	0.150U	0.150	50.0	50.1	100	72 - 128	49.0	98	2	30	
10061-01-5	cis-1,3-Dichloropropene	0.124U	0.124	50.0	47.1	94	71 - 132	45.3	91	4	30	
10061-02-6	trans-1,3-Dichloropropene	0.128U	0.128	50.0	46.5	93	71 - 131	46.3	93	0	30	
100-41-4	Ethylbenzene	0.109U	0.109	50.0	48.3	97	74 - 126	48.1	96	0	30	
591-78-6	2-Hexanone	0.122U	0.122	50.0	52.0	104	50 - 135	53.7	107	3	30	
98-82-8	Isopropylbenzene (Cumene)	0.130U	0.130	50.0	51.7	103	71 - 125	50.8	102	2	30	
78-93-3	2-Butanone	0.142U	0.142	50.0	48.7	97	58 - 137	51.6	103	6	30	
108-10-1	4-Methyl-2-pentanone	0.120U	0.120	50.0	49.7	99	57 - 132	50.4	101	1	30	
100-42-5	Styrene	0.089U	0.089	50.0	52.0	104	71 - 127	51.3	103	1	30	
127-18-4	Tetrachloroethene	0.193U	0.193	50.0	50.3	101	68 - 128	47.4	95	6	30	
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	0.109	50.0	48.6	97	70 - 122	49.8	100	2	30	
120-82-1	1,2,4-Trichlorobenzene	0.105U	0.105	50.0	47.1	94	61 - 135	47.3	95	0	30	
71-55-6	1,1,1-Trichloroethane	0.123U	0.123	50.0	48.7	97	76 - 126	49.7	99	2	30	
79-00-5	1,1,2-Trichloroethane	0.159U	0.159	50.0	49.1	98	72 - 121	48.2	96	2	30	
75-69-4	Trichlorofluoromethane	0.157U	0.157	50.0	46.5	93	72 - 136	48.0	96	3	30	
75-01-4	Vinyl chloride	0.127U	0.127	50.0	47.8	96	68 - 132	49.3	99	3	30	

GC/MS Volatiles Quality Control Summary

Analytical Batch		541943	Client ID		MB541943		LCS541943		LCSD541943			
Prep Batch		N/A	GCAL ID		1364339		1364340		1364341			
			Sample Type		Method Blank		LCS		LCSD			
			Analytical Date		09/28/2014 12:14		09/28/2014 10:20		09/28/2014 10:43			
			Matrix		Water		Water		Water			
EPA 8260B			Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
			Result	RDL	Added			Limits % R			Limit	
95-47-6	o-Xylene		0.055U	0.055	50.0	51.5	103	73 - 130	50.4	101	2	30
96-12-8	1,2-Dibromo-3-chloropropane		0.194U	0.194	50.0	49.2	98	57 - 121	51.0	102	4	30
106-93-4	1,2-Dibromoethane		0.102U	0.102	50.0	51.1	102	70 - 124	50.5	101	1	30
108-05-4	Vinyl acetate		0.151U	0.151	50.0	45.4	91	54 - 147	44.7	89	2	30
1634-04-4	tert-Butyl methyl ether (MTBE)		0.078U	0.078	50.0	45.3	91	71 - 125	48.8	98	7	30
1330-20-7	Xylene (total)		0.179U	0.179	150	152	101	74 - 127	148	99	3	30
108-87-2	Methylcyclohexane		0.143U	0.143	50.0	50.8	102	67 - 138	48.1	96	5	30
110-82-7	Cyclohexane		0.337U	0.337	50.0	48.7	97	69 - 132	49.0	98	1	30
79-20-9	Methyl Acetate		0.159U	0.159	50.0	45.7	91	57 - 139	47.3	95	3	30
76-13-1	Trichlorotrifluoroethane		0.158U	0.158	50.0	47.9	96	72 - 136	48.4	97	1	30
110-75-8	2-Chloroethylvinyl ether		0.146U	0.146	50.0	44.9	90	56 - 124	45.1	90	0	30
541-73-1	1,3-Dichlorobenzene		0.138U	0.138	50.0	49.3	99	74 - 126	49.0	98	1	30
106-46-7	1,4-Dichlorobenzene		0.083U	0.083	50.0	46.9	94	72 - 122	47.0	94	0	30
95-50-1	1,2-Dichlorobenzene		0.135U	0.135	50.0	48.6	97	71 - 126	49.2	98	1	30
75-35-4	1,1-Dichloroethene		0.208U	0.208	50.0	46.6	93	69 - 129	47.6	95	2	20
71-43-2	Benzene		0.111U	0.111	50.0	48.6	97	70 - 129	48.6	97	0	20
79-01-6	Trichloroethene		0.161U	0.161	50.0	49.1	98	76 - 129	46.7	93	5	20
108-88-3	Toluene		0.122U	0.122	50.0	50.0	100	72 - 120	48.7	97	3	20
108-90-7	Chlorobenzene		0.083U	0.083	50.0	48.1	96	74 - 123	47.7	95	1	20
Surrogate												
460-00-4	4-Bromofluorobenzene		47.5	95	50	50.5	101	78 - 130	50.8	102		
1868-53-7	Dibromofluoromethane		49.2	98	50	49.2	98	77 - 127	51.6	103		
2037-26-5	Toluene d8		51.4	103	50	49.9	100	76 - 134	49.3	99		
17060-07-0	1,2-Dichloroethane-d4		50.1	100	50	49.8	100	71 - 127	51.2	102		

General Chromatography Quality Control Summary

Analytical Batch Prep Batch	542552 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542552 1367429 Method Blank 10/08/2014 15:09 Water	ug/L RDL	Spike Added	Result	% R	Control Limits % R
EPA RSK-175								
74-82-8	Methane		0.435U	0.435	17.5	15.1	86	39 - 120
74-85-1	Ethene		0.071U	0.071	3.06	2.78	91	45 - 134
74-84-0	Ethane		0.087U	0.087	3.28	3.09	94	45 - 128
Surrogate								
115-07-1	Propene		28.2	70	40.5	25.3	62	40 - 143

Analytical Batch Prep Batch	542552 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MTWMW-8 21409300804 SAMPLE 10/08/2014 16:24 Water	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	Limit
EPA RSK-175												
74-82-8	Methane		0.00	0.435	17.5	15.1	86	39 - 120	14.5	83	4	27
74-85-1	Ethene		0.00	0.071	3.06	3.06	100	45 - 134	2.89	94	6	25
74-84-0	Ethane		0.00	0.087	3.28	3.25	99	45 - 128	2.96	90	9	29
Surrogate												
115-07-1	Propene				40.5	32.1	79	40 - 143	30.7	76		

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	542074 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542074 1364771 Method Blank 09/30/2014 12:16 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
EPA 9060A			Units Result	0.30U	0.30	49.0	98	80 - 120
C-012	Total Organic Carbon				50.0			

Analytical Batch Prep Batch	542074 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MTWMW-8 21409300804 SAMPLE 09/30/2014 18:15 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD Limit
EPA 9060A			Units Result	0.89	0.30	48.9	96	75 - 125	48.9	96	0
C-012	Total Organic Carbon				50.0						25

Analytical Batch Prep Batch	542074 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	U31PPDC 21409300702 SAMPLE 09/30/2014 12:39 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD Limit
EPA 9060A			Units Result	15.0	0.30	63.6	97	75 - 125	64.2	98	1
C-012	Total Organic Carbon				50.0						25

General Chemistry Quality Control Summary

Analytical Batch 542206 Prep Batch N/A		Client ID GCAL ID Sample Type Analytical Date Matrix	MB542206 1365483 Method Blank 10/02/2014 08:20 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
SM 4500-S2 F-2011				2.00U	2.00	26.3	105	80 - 120
18496-25-8	Sulfide				25.0			

Analytical Batch 542206 Prep Batch N/A		Client ID GCAL ID Sample Type Analytical Date Matrix		MTWMW-8 21409300804 SAMPLE 10/02/2014 08:20 Water		mg/L RDL		Spike Added		Result		% R		Control Limits % R		Result		% R		RPD Limit	
										26.1		104		75 - 125		26.5		106		2	
										25.0										25	
SM 4500-S2 F-2011																					
18496-25-8 Sulfide						0.000		2.00													

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	541871 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB541871 1363856 Method Blank 09/27/2014 15:10 Water		LCS541871 1363857 LCS 09/27/2014 14:53 Water	
EPA 9056A			Units Result	mg/L RDL	Spike Added	Control Limits % R
14797-55-8	Nitrate		0.050U	0.050	2.50	% R 106 80 - 120

Analytical Batch Prep Batch	542405 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542405 1366483 Method Blank 10/06/2014 14:18 Water		LCS542405 1366484 LCS 10/06/2014 14:01 Water	
EPA 9056A			Units Result	mg/L RDL	Spike Added	Control Limits % R
16887-00-6	Chloride		0.050U	0.050	2.50	% R 96 80 - 120
14808-79-8	Sulfate		0.050U	0.050	2.50	% R 108 80 - 120

Analytical Batch Prep Batch	542405 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	003 21409300601 SAMPLE 10/06/2014 23:25 Water		1364747MS 1366485 MS 10/06/2014 23:42 Water	1364747MSD 1366486 MSD 10/07/2014 00:00 Water
EPA 9056A			Units Result	mg/L RDL	Spike Added	Control Limits % R
16887-00-6	Chloride		13.4	2.50	125	% R 99 80 - 120
					137	Result 138
						% R 100
						RPD Limit 1 15

Analytical Batch Prep Batch	542580 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542580 1367600 Method Blank 10/08/2014 18:10 Water		LCS542580 1367601 LCS 10/08/2014 17:52 Water	
EPA 9056A			Units Result	mg/L RDL	Spike Added	Control Limits % R
16887-00-6	Chloride		0.050U	0.050	2.50	% R 91 80 - 120
					2.28	Result

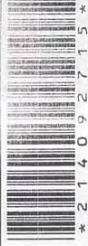


Client ID: 4829 - AMEC Environment & Infrastructure, Inc.
SDG: 214092715
Due Date: 10/08/14

Report to: Client: <u>AMEC E+I</u> Address: <u>1075 Big Shanty Rd.</u> <u>Kennesaw, GA 30144</u> Contact: <u>Daniel Morris</u> Phone: <u>770-547-4409</u> E-mail: <u>daniel.morris@amec.com</u>				Bill to: Client: <u>AMEC</u> Address: <u>1075 Big Shanty Rd.</u> <u>Kennesaw, GA 30144</u> Contact: <u>Daniel Morris</u> Phone: <u>770-547-4409</u> E-mail: <u>daniel.morris@amec.com</u>				Analytical Requests & Method <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">GCAL use only:</td> <td style="width:15%;">Custody Seal</td> <td style="width:15%;">used ☐ yes ☐ no</td> <td style="width:15%;">intact ☐ yes ☐ no</td> <td style="width:15%;">Temperature °C <u>2.2</u></td> <td style="width:15%;">Dissolved Analysis Requested</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>☐ Field filtered</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>☐ Lab filtered</td> </tr> </table>										GCAL use only:	Custody Seal	used ☐ yes ☐ no	intact ☐ yes ☐ no	Temperature °C <u>2.2</u>	Dissolved Analysis Requested						☐ Field filtered						☐ Lab filtered																														
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Sampled By: <u>Daniel Morris x Tara Marckas</u>		Project Name/Number <u>Woodall Creek MUA #1</u>		Standard (Per Contract/Quote) <u>7712 9733 6525</u>																																																													
Matrix <u>W</u> <u>↓</u> <u>↓</u> <u>↓</u>		Date <u>9/26</u> <u>↓</u> <u>↓</u> <u>↓</u>		Time (2400) <u>1102</u> <u>1128</u> <u>1130</u> <u>1415</u> <u>—</u>		Comp <u>X</u> <u>↓</u> <u>↓</u> <u>↓</u>		Grab <u>MTWMMW-7I</u> <u>MTWMMW-7</u> <u>SPMW-17</u> <u>SPMW-16</u> <u>TRAP BLANK</u>		Sample Description 		No Con-tainers <u>10</u> <u>↓</u> <u>↓</u> <u>3</u>		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">H4C VOCs</td> <td style="width:15%;">H4C TOC</td> <td style="width:15%;">H4C Methane/triethane/diene</td> <td style="width:15%;">H4C NITRATE</td> <td style="width:15%;">H4C Alkalide + sulfate</td> <td style="width:15%;">H4C Sulfide</td> <td style="width:15%;">Preservative</td> </tr> <tr> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>1</u></td> </tr> <tr> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>2</u></td> </tr> <tr> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>3</u></td> </tr> <tr> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>4</u></td> </tr> <tr> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>↓</u></td> <td><u>5</u></td> </tr> </table>										H4C VOCs	H4C TOC	H4C Methane/triethane/diene	H4C NITRATE	H4C Alkalide + sulfate	H4C Sulfide	Preservative	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>1</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>2</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>3</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>4</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>5</u>
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Air Bill No: <u>7712 9733 6525</u>																																																																	
Turn Around Time (Business Days): ☐ 24h ☐ 48h ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote)																																																																	
Relinquished by (Signature) <u>[Signature]</u>		Date <u>9/26/14</u>		Time <u>1423</u>		Relinquished by (Signature) <u>[Signature]</u>		Date <u>9/26/14</u>		Time <u>1423</u>		Note: <u>*NITRATE*</u>																																																					
Relinquished by (Signature) <u>[Signature]</u>		Date <u>9/26/14</u>		Time <u>1530</u>		Relinquished by (Signature) <u>[Signature]</u>		Date <u>9/27/14</u>		Time <u>1445</u>		Note: <u>*NITRATE*</u>																																																					
Matrix: W = water, S = solid, L = liquid, T = tissue																																																																	



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214092715	
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX
Profile Number 249065	Received By Saucier, Charlotte M.
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/27/14

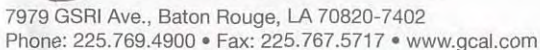
CHECKLIST		YES	NO	NA
Were all samples received using proper thermal preservation?		☒	☐	☐
When used, were all custody seals intact?		☒	☐	☐
Were all samples received in proper containers?		☒	☐	☐
Were all samples received using proper chemical preservation?		☒	☐	☐
Was preservative added to any container at the lab?		☐	☒	☐
Were all containers received in good condition?		☒	☐	☐
Were all VOA vials received with no head space?		☒	☐	☐
Do all sample labels match the Chain of Custody?		☒	☐	☐
Did the Chain of Custody list the sampling technician?		☒	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?		☐	☒	☐

COOLERS	
Airbill 7712 9733 6525	Thermometer ID: E22 Temp(°C) 2.2

DISCREPANCIES	
None	

LAB PRESERVATIONS	
None	

NOTES



Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214092715



Due Date: 10/08/14

[illegible]

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

Matrix¹: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

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



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 214092715			CHECKLIST	YES	NO	NA
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX		Were all samples received using proper thermal preservation?	☒	☐	☐
			When used, were all custody seals intact?	☒	☐	☐
			Were all samples received in proper containers?	☒	☐	☐
Profile Number 249065	Received By Saucier, Charlotte M.		Were all samples received using proper chemical preservation?	☒	☐	☐
			Was preservative added to any container at the lab?	☐	☒	☐
			Were all containers received in good condition?	☒	☐	☐
			Were all VOA vials received with no head space?	☒	☐	☐
			Do all sample labels match the Chain of Custody?	☒	☐	☐
			Did the Chain of Custody list the sampling technician?	☒	☐	☐
			Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐	☒	☐
Line Item(s) 1 - Water TCL VOCs			Receive Date(s) 09/27/14			
COOLERS			DISCREPANCIES	LAB PRESERVATIONS		
Airbill	Thermometer ID: E22	Temp(°C)	None	None		
7712 9733 6525		2.2				
NOTES						

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

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

Report Date 10/10/2014

GCAL Report 214093008



Deliver To AMEC E&I
396 Plasters Ave NE
Atlanta, GA 30324
770-547-4409

Attn Daniel Morris

Project Woodall Creek MNA#1

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.

Report: 214093008

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

VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis, samples 21409300801 (HOAMW-3), 21409300802 (HOAMW-5), 21409300803 (HOAMW-5I), 21409300804 (MTWMW-8), 21409300807 (MTWMW-8 MS) and 21409300808 (MTWMW-8 MSD) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilution is reflected in elevated detection limits.

In the EPA 8260B analysis for analytical batch 542302, the MS/MSD exhibited recovery failures. The LCS/LCSD recoveries are above the upper control limit for Vinyl acetate. This compound was not detected in the associated samples. The %D/%Drift is outside $\pm 40\%$ for Vinyl Acetate in the CCV. The response is high and this analyte was not detected in the associated samples.

In the EPA 8260B analysis for analytical batch 542462, Methylene chloride was detected at an estimated concentration in the method blank. This is probable laboratory contamination. The MS/MSD recoveries for 2-Chloroethylvinyl ether are not applicable because this compound is not recovered in acidified samples.

CONVENTIONALS

In the EPA 9056A analysis, all samples had to be diluted in order to bracket the concentration within the calibration range of the instrument and/or to eliminate a chemical or physical interference. This is reflected in the elevated reporting limits.

In the EPA 9056A analysis for analytical batch 542075, the MS recovery is slightly below the control limit for Chloride. The LCS is acceptable.

Laboratory Endorsement

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

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

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

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

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

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

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



Authorized Signature

GCAL REPORT 214093008

THIS REPORT CONTAINS 50 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300801	HOAMW-3	Water	09/29/2014 10:35	09/30/2014 09:20
21409300802	HOAMW-5	Water	09/29/2014 13:10	09/30/2014 09:20
21409300803	HOAMW-5I	Water	09/29/2014 14:20	09/30/2014 09:20
21409300804	MTWMW-8	Water	09/29/2014 11:05	09/30/2014 09:20
21409300805	JPMW-22	Water	09/29/2014 14:50	09/30/2014 09:20
21409300806	TRIP BLANK	Water	09/29/2014 00:00	09/30/2014 09:20
21409300807	MTWMW-8 MS	Water	09/29/2014 11:05	09/30/2014 09:20
21409300808	MTWMW-8 MSD	Water	09/29/2014 11:05	09/30/2014 09:20

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300801	HOAMW-3	Water	09/29/2014 10:35	09/30/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	2.67	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-66-3	Chloroform	13.1	10.0	0.310	ug/L
127-18-4	Tetrachloroethene	267	10.0	0.385	ug/L
79-01-6	Trichloroethene	79.6	10.0	0.323	ug/L
156-59-2	cis-1,2-Dichloroethene	73.1	10.0	0.207	ug/L
156-60-5	trans-1,2-Dichloroethene	0.783J	10.0	0.154	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.3	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	18.2	2.00	0.500	mg/L
14808-79-8	Sulfate	31.6	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300802	HOAMW-5	Water	09/29/2014 13:10	09/30/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.74	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-66-3	Chloroform	4.21J	10.0	0.310	ug/L
127-18-4	Tetrachloroethene	287	10.0	0.385	ug/L
79-01-6	Trichloroethene	92.6	10.0	0.323	ug/L
156-59-2	cis-1,2-Dichloroethene	107	10.0	0.207	ug/L
156-60-5	trans-1,2-Dichloroethene	1.26J	10.0	0.154	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300802	HOAMW-5	Water	09/29/2014 13:10	09/30/2014 09:20

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.0	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	24.7	2.00	0.500	mg/L
14808-79-8	Sulfate	17.8	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300803	HOAMW-5I	Water	09/29/2014 14:20	09/30/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.53	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-66-3	Chloroform	4.30J	10.0	0.310	ug/L
127-18-4	Tetrachloroethene	232	10.0	0.385	ug/L
79-01-6	Trichloroethene	76.4	10.0	0.323	ug/L
156-59-2	cis-1,2-Dichloroethene	111	10.0	0.207	ug/L
156-60-5	trans-1,2-Dichloroethene	1.01J	10.0	0.154	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.6	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	24.3	2.00	0.500	mg/L
14808-79-8	Sulfate	19.1	2.00	0.500	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300804	MTWMW-8	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	2.95	0.400	0.100	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-09-2	Methylene chloride	10.7J	50.0	1.49	ug/L
127-18-4	Tetrachloroethene	914	50.0	1.93	ug/L
79-01-6	Trichloroethene	405	50.0	1.61	ug/L
156-59-2	cis-1,2-Dichloroethene	96.8	50.0	1.03	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	0.89J	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	17.3	2.00	0.500	mg/L
14808-79-8	Sulfate	25.3	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300805	JPMW-22	Water	09/29/2014 14:50	09/30/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	2.05	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	1.33J	5.00	0.208	ug/L
71-43-2	Benzene	4.63J	5.00	0.111	ug/L
67-66-3	Chloroform	1.92J	5.00	0.155	ug/L
127-18-4	Tetrachloroethene	106	5.00	0.193	ug/L
79-01-6	Trichloroethene	14.3	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	19.2	5.00	0.103	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300805	JPMW-22	Water	09/29/2014 14:50	09/30/2014 09:20

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.5	1.0	0.30	mg/L

EPA RSK-175

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	1.11	1.00	0.087	ug/L
74-82-8	Methane	2.23	2.00	0.435	ug/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	14.0	2.00	0.500	mg/L
14808-79-8	Sulfate	34.1	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300806	TRIP BLANK	Water	09/29/2014 00:00	09/30/2014 09:20

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-64-1	Acetone	10.0	5.00	0.193	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300807	MTWMW-8 MS	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	7.71	0.400	0.100	mg/L

EPA RSK-175

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	3.25	1.00	0.087	ug/L
74-85-1	Ethene	3.06	1.00	0.071	ug/L
74-82-8	Methane	15.1	2.00	0.435	ug/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	493	50.0	1.23	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	536	50.0	1.09	ug/L
79-00-5	1,1,2-Trichloroethane	490	50.0	1.59	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300807	MTWMW-8 MS	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-34-3	1,1-Dichloroethane	682	50.0	1.71	ug/L
75-35-4	1,1-Dichloroethene	513	50.0	2.08	ug/L
120-82-1	1,2,4-Trichlorobenzene	468	50.0	1.05	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	501	50.0	1.94	ug/L
106-93-4	1,2-Dibromoethane	479	50.0	1.02	ug/L
95-50-1	1,2-Dichlorobenzene	506	50.0	1.35	ug/L
107-06-2	1,2-Dichloroethane	516	50.0	1.16	ug/L
78-87-5	1,2-Dichloropropane	520	50.0	1.50	ug/L
541-73-1	1,3-Dichlorobenzene	501	50.0	1.38	ug/L
106-46-7	1,4-Dichlorobenzene	483	50.0	0.831	ug/L
78-93-3	2-Butanone	478	50.0	1.42	ug/L
110-75-8	2-Chloroethylvinyl ether	500	50.0	1.46	ug/L
591-78-6	2-Hexanone	496	50.0	1.22	ug/L
108-10-1	4-Methyl-2-pentanone	525	50.0	1.20	ug/L
67-64-1	Acetone	549	50.0	1.93	ug/L
71-43-2	Benzene	512	50.0	1.11	ug/L
75-27-4	Bromodichloromethane	523	50.0	0.834	ug/L
75-25-2	Bromoform	448	50.0	2.15	ug/L
74-83-9	Bromomethane	502	50.0	4.27	ug/L
75-15-0	Carbon disulfide	519	50.0	1.90	ug/L
56-23-5	Carbon tetrachloride	503	50.0	2.48	ug/L
108-90-7	Chlorobenzene	485	50.0	0.828	ug/L
75-00-3	Chloroethane	520	50.0	2.35	ug/L
67-66-3	Chloroform	536	50.0	1.55	ug/L
74-87-3	Chloromethane	481	50.0	1.44	ug/L
110-82-7	Cyclohexane	548	50.0	3.37	ug/L
124-48-1	Dibromochloromethane	486	50.0	0.539	ug/L
75-71-8	Dichlorodifluoromethane	494	50.0	1.45	ug/L
100-41-4	Ethylbenzene	509	50.0	1.09	ug/L
98-82-8	Isopropylbenzene (Cumene)	453	50.0	1.30	ug/L
79-20-9	Methyl Acetate	513	50.0	1.59	ug/L
108-87-2	Methylcyclohexane	554	50.0	1.43	ug/L
75-09-2	Methylene chloride	611	50.0	1.49	ug/L
100-42-5	Styrene	455	50.0	0.894	ug/L
127-18-4	Tetrachloroethene	1220	50.0	1.93	ug/L
108-88-3	Toluene	476	50.0	1.22	ug/L
79-01-6	Trichloroethene	894	50.0	1.61	ug/L
75-69-4	Trichlorofluoromethane	519	50.0	1.57	ug/L
76-13-1	Trichlorotrifluoroethane	535	50.0	1.58	ug/L
108-05-4	Vinyl acetate	1290	50.0	1.51	ug/L
75-01-4	Vinyl chloride	509	50.0	1.27	ug/L
1330-20-7	Xylene (total)	1370	150	1.79	ug/L
156-59-2	cis-1,2-Dichloroethene	697	50.0	1.03	ug/L
10061-01-5	cis-1,3-Dichloropropene	476	50.0	1.24	ug/L
136777-61-2	m,p-Xylene	923	100	1.23	ug/L
95-47-6	o-Xylene	444	50.0	0.554	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	617	50.0	0.777	ug/L
156-60-5	trans-1,2-Dichloroethene	599	50.0	0.769	ug/L
10061-02-6	trans-1,3-Dichloropropene	484	50.0	1.28	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300807	MTWMW-8 MS	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	48.9	1.0	0.30	mg/L

SM 4500-S2 F-2011

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	26.1	2.00	2.00	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	37.2	2.00	0.500	mg/L
14808-79-8	Sulfate	50.9	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300808	MTWMW-8 MSD	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	7.69	0.400	0.100	mg/L

EPA RSK-175

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	2.96	1.00	0.087	ug/L
74-85-1	Ethene	2.89	1.00	0.071	ug/L
74-82-8	Methane	14.5	2.00	0.435	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	48.9	1.0	0.30	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	497	50.0	1.23	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	542	50.0	1.09	ug/L
79-00-5	1,1,2-Trichloroethane	484	50.0	1.59	ug/L
75-34-3	1,1-Dichloroethane	791	50.0	1.71	ug/L
75-35-4	1,1-Dichloroethene	501	50.0	2.08	ug/L
120-82-1	1,2,4-Trichlorobenzene	459	50.0	1.05	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	494	50.0	1.94	ug/L
106-93-4	1,2-Dibromoethane	476	50.0	1.02	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300808	MTWMW-8 MSD	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
95-50-1	1,2-Dichlorobenzene	500	50.0	1.35	ug/L
107-06-2	1,2-Dichloroethane	505	50.0	1.16	ug/L
78-87-5	1,2-Dichloropropane	501	50.0	1.50	ug/L
541-73-1	1,3-Dichlorobenzene	506	50.0	1.38	ug/L
106-46-7	1,4-Dichlorobenzene	480	50.0	0.831	ug/L
78-93-3	2-Butanone	476	50.0	1.42	ug/L
110-75-8	2-Chloroethylvinyl ether	495	50.0	1.46	ug/L
591-78-6	2-Hexanone	480	50.0	1.22	ug/L
108-10-1	4-Methyl-2-pentanone	509	50.0	1.20	ug/L
67-64-1	Acetone	531	50.0	1.93	ug/L
71-43-2	Benzene	491	50.0	1.11	ug/L
75-27-4	Bromodichloromethane	512	50.0	0.834	ug/L
75-25-2	Bromoform	445	50.0	2.15	ug/L
74-83-9	Bromomethane	523	50.0	4.27	ug/L
75-15-0	Carbon disulfide	514	50.0	1.90	ug/L
56-23-5	Carbon tetrachloride	508	50.0	2.48	ug/L
108-90-7	Chlorobenzene	477	50.0	0.828	ug/L
75-00-3	Chloroethane	523	50.0	2.35	ug/L
67-66-3	Chloroform	509	50.0	1.55	ug/L
74-87-3	Chloromethane	499	50.0	1.44	ug/L
110-82-7	Cyclohexane	500	50.0	3.37	ug/L
124-48-1	Dibromochloromethane	469	50.0	0.539	ug/L
75-71-8	Dichlorodifluoromethane	490	50.0	1.45	ug/L
100-41-4	Ethylbenzene	480	50.0	1.09	ug/L
98-82-8	Isopropylbenzene (Cumene)	441	50.0	1.30	ug/L
79-20-9	Methyl Acetate	503	50.0	1.59	ug/L
108-87-2	Methylcyclohexane	523	50.0	1.43	ug/L
75-09-2	Methylene chloride	602	50.0	1.49	ug/L
100-42-5	Styrene	447	50.0	0.894	ug/L
127-18-4	Tetrachloroethene	1220	50.0	1.93	ug/L
108-88-3	Toluene	465	50.0	1.22	ug/L
79-01-6	Trichloroethene	878	50.0	1.61	ug/L
75-69-4	Trichlorofluoromethane	513	50.0	1.57	ug/L
76-13-1	Trichlorotrifluoroethane	523	50.0	1.58	ug/L
108-05-4	Vinyl acetate	1160	50.0	1.51	ug/L
75-01-4	Vinyl chloride	511	50.0	1.27	ug/L
1330-20-7	Xylene (total)	1330	150	1.79	ug/L
156-59-2	cis-1,2-Dichloroethene	606	50.0	1.03	ug/L
10061-01-5	cis-1,3-Dichloropropene	468	50.0	1.24	ug/L
136777-61-2	m,p-Xylene	898	100	1.23	ug/L
95-47-6	o-Xylene	429	50.0	0.554	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	601	50.0	0.777	ug/L
156-60-5	trans-1,2-Dichloroethene	578	50.0	0.769	ug/L
10061-02-6	trans-1,3-Dichloropropene	479	50.0	1.28	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300808	MTWMW-8 MSD	Water	09/29/2014 11:05	09/30/2014 09:20

SM 4500-S2 F-2011

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	26.5	2.00	2.00	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	37.5	2.00	0.500	mg/L
14808-79-8	Sulfate	51.1	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300801	HOAMW-3	Water	09/29/2014 10:35	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	10/03/2014 14:27	CJR	542302

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.246U	10.0	0.246	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.218U	10.0	0.218	ug/L
79-00-5	1,1,2-Trichloroethane	0.318U	10.0	0.318	ug/L
75-34-3	1,1-Dichloroethane	0.342U	10.0	0.342	ug/L
75-35-4	1,1-Dichloroethene	0.416U	10.0	0.416	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.210U	10.0	0.210	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.388U	10.0	0.388	ug/L
106-93-4	1,2-Dibromoethane	0.205U	10.0	0.205	ug/L
95-50-1	1,2-Dichlorobenzene	0.270U	10.0	0.270	ug/L
107-06-2	1,2-Dichloroethane	0.232U	10.0	0.232	ug/L
78-87-5	1,2-Dichloropropane	0.301U	10.0	0.301	ug/L
541-73-1	1,3-Dichlorobenzene	0.275U	10.0	0.275	ug/L
106-46-7	1,4-Dichlorobenzene	0.166U	10.0	0.166	ug/L
78-93-3	2-Butanone	0.284U	10.0	0.284	ug/L
110-75-8	2-Chloroethylvinyl ether	0.291U	10.0	0.291	ug/L
591-78-6	2-Hexanone	0.245U	10.0	0.245	ug/L
108-10-1	4-Methyl-2-pentanone	0.240U	10.0	0.240	ug/L
67-64-1	Acetone	0.387U	10.0	0.387	ug/L
71-43-2	Benzene	0.222U	10.0	0.222	ug/L
75-27-4	Bromodichloromethane	0.167U	10.0	0.167	ug/L
75-25-2	Bromoform	0.430U	10.0	0.430	ug/L
74-83-9	Bromomethane	0.854U	10.0	0.854	ug/L
75-15-0	Carbon disulfide	0.380U	10.0	0.380	ug/L
56-23-5	Carbon tetrachloride	0.496U	10.0	0.496	ug/L
108-90-7	Chlorobenzene	0.166U	10.0	0.166	ug/L
75-00-3	Chloroethane	0.470U	10.0	0.470	ug/L
67-66-3	Chloroform	13.1	10.0	0.310	ug/L
74-87-3	Chloromethane	0.287U	10.0	0.287	ug/L
110-82-7	Cyclohexane	0.674U	10.0	0.674	ug/L
124-48-1	Dibromochloromethane	0.108U	10.0	0.108	ug/L
75-71-8	Dichlorodifluoromethane	0.290U	10.0	0.290	ug/L
100-41-4	Ethylbenzene	0.218U	10.0	0.218	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.260U	10.0	0.260	ug/L
79-20-9	Methyl Acetate	0.319U	10.0	0.319	ug/L
108-87-2	Methylcyclohexane	0.287U	10.0	0.287	ug/L
75-09-2	Methylene chloride	0.298U	10.0	0.298	ug/L
100-42-5	Styrene	0.179U	10.0	0.179	ug/L
127-18-4	Tetrachloroethene	267	10.0	0.385	ug/L
108-88-3	Toluene	0.244U	10.0	0.244	ug/L
79-01-6	Trichloroethene	79.6	10.0	0.323	ug/L
75-69-4	Trichlorofluoromethane	0.314U	10.0	0.314	ug/L
76-13-1	Trichlorotrifluoroethane	0.316U	10.0	0.316	ug/L
108-05-4	Vinyl acetate	0.302U	10.0	0.302	ug/L
75-01-4	Vinyl chloride	0.254U	10.0	0.254	ug/L
1330-20-7	Xylene (total)	0.358U	30.0	0.358	ug/L
156-59-2	cis-1,2-Dichloroethene	73.1	10.0	0.207	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.248U	10.0	0.248	ug/L
136777-61-2	m,p-Xylene	0.247U	20.0	0.247	ug/L
95-47-6	o-Xylene	0.111U	10.0	0.111	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.155U	10.0	0.155	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300801	HOAMW-3	Water	09/29/2014 10:35	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	10/03/2014 14:27	CJR	542302

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.783J	10.0	0.154	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.255U	10.0	0.255	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	78.5	ug/L	79	78 - 130
1868-53-7	Dibromofluoromethane	100	112	ug/L	112	77 - 127
2037-26-5	Toluene d8	100	109	ug/L	109	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	111	ug/L	111	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 16:03	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	30.1	ug/L	74	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 17:12	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.3	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 08:20	DMT	542206

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300801	HOAMW-3	Water	09/29/2014 10:35	09/30/2014 09:20

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 16:02	JEM	542075
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		2.67	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/30/2014 21:16	JEM	542075
CAS#	Parameter		Result	RDL	MDL	Units
16887-00-6	Chloride		18.2	2.00	0.500	mg/L
14808-79-8	Sulfate		31.6	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300802	HOAMW-5	Water	09/29/2014 13:10	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	10/03/2014 14:51	CJR	542302

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.246U	10.0	0.246	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.218U	10.0	0.218	ug/L
79-00-5	1,1,2-Trichloroethane	0.318U	10.0	0.318	ug/L
75-34-3	1,1-Dichloroethane	0.342U	10.0	0.342	ug/L
75-35-4	1,1-Dichloroethene	0.416U	10.0	0.416	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.210U	10.0	0.210	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.388U	10.0	0.388	ug/L
106-93-4	1,2-Dibromoethane	0.205U	10.0	0.205	ug/L
95-50-1	1,2-Dichlorobenzene	0.270U	10.0	0.270	ug/L
107-06-2	1,2-Dichloroethane	0.232U	10.0	0.232	ug/L
78-87-5	1,2-Dichloropropane	0.301U	10.0	0.301	ug/L
541-73-1	1,3-Dichlorobenzene	0.275U	10.0	0.275	ug/L
106-46-7	1,4-Dichlorobenzene	0.166U	10.0	0.166	ug/L
78-93-3	2-Butanone	0.284U	10.0	0.284	ug/L
110-75-8	2-Chloroethylvinyl ether	0.291U	10.0	0.291	ug/L
591-78-6	2-Hexanone	0.245U	10.0	0.245	ug/L
108-10-1	4-Methyl-2-pentanone	0.240U	10.0	0.240	ug/L
67-64-1	Acetone	0.387U	10.0	0.387	ug/L
71-43-2	Benzene	0.222U	10.0	0.222	ug/L
75-27-4	Bromodichloromethane	0.167U	10.0	0.167	ug/L
75-25-2	Bromoform	0.430U	10.0	0.430	ug/L
74-83-9	Bromomethane	0.854U	10.0	0.854	ug/L
75-15-0	Carbon disulfide	0.380U	10.0	0.380	ug/L
56-23-5	Carbon tetrachloride	0.496U	10.0	0.496	ug/L
108-90-7	Chlorobenzene	0.166U	10.0	0.166	ug/L
75-00-3	Chloroethane	0.470U	10.0	0.470	ug/L
67-66-3	Chloroform	4.21J	10.0	0.310	ug/L
74-87-3	Chloromethane	0.287U	10.0	0.287	ug/L
110-82-7	Cyclohexane	0.674U	10.0	0.674	ug/L
124-48-1	Dibromochloromethane	0.108U	10.0	0.108	ug/L
75-71-8	Dichlorodifluoromethane	0.290U	10.0	0.290	ug/L
100-41-4	Ethylbenzene	0.218U	10.0	0.218	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.260U	10.0	0.260	ug/L
79-20-9	Methyl Acetate	0.319U	10.0	0.319	ug/L
108-87-2	Methylcyclohexane	0.287U	10.0	0.287	ug/L
75-09-2	Methylene chloride	0.298U	10.0	0.298	ug/L
100-42-5	Styrene	0.179U	10.0	0.179	ug/L
127-18-4	Tetrachloroethene	287	10.0	0.385	ug/L
108-88-3	Toluene	0.244U	10.0	0.244	ug/L
79-01-6	Trichloroethene	92.6	10.0	0.323	ug/L
75-69-4	Trichlorofluoromethane	0.314U	10.0	0.314	ug/L
76-13-1	Trichlorotrifluoroethane	0.316U	10.0	0.316	ug/L
108-05-4	Vinyl acetate	0.302U	10.0	0.302	ug/L
75-01-4	Vinyl chloride	0.254U	10.0	0.254	ug/L
1330-20-7	Xylene (total)	0.358U	30.0	0.358	ug/L
156-59-2	cis-1,2-Dichloroethene	107	10.0	0.207	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.248U	10.0	0.248	ug/L
136777-61-2	m,p-Xylene	0.247U	20.0	0.247	ug/L
95-47-6	o-Xylene	0.111U	10.0	0.111	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.155U	10.0	0.155	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300802	HOAMW-5	Water	09/29/2014 13:10	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	10/03/2014 14:51	CJR	542302

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	1.26J	10.0	0.154	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.255U	10.0	0.255	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	79.4	ug/L	79	78 - 130
1868-53-7	Dibromofluoromethane	100	109	ug/L	109	77 - 127
2037-26-5	Toluene d8	100	110	ug/L	110	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	107	ug/L	107	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 16:11	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	30.3	ug/L	75	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 17:33	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.0	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 08:20	DMT	542206

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300802	HOAMW-5	Water	09/29/2014 13:10	09/30/2014 09:20

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 17:12	JEM	542075

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.74	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/30/2014 23:00	JEM	542075

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	24.7	2.00	0.500	mg/L
14808-79-8	Sulfate	17.8	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300803	HOAMW-5I	Water	09/29/2014 14:20	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	10/03/2014 15:14	CJR	542302

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.246U	10.0	0.246	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.218U	10.0	0.218	ug/L
79-00-5	1,1,2-Trichloroethane	0.318U	10.0	0.318	ug/L
75-34-3	1,1-Dichloroethane	0.342U	10.0	0.342	ug/L
75-35-4	1,1-Dichloroethene	0.416U	10.0	0.416	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.210U	10.0	0.210	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.388U	10.0	0.388	ug/L
106-93-4	1,2-Dibromoethane	0.205U	10.0	0.205	ug/L
95-50-1	1,2-Dichlorobenzene	0.270U	10.0	0.270	ug/L
107-06-2	1,2-Dichloroethane	0.232U	10.0	0.232	ug/L
78-87-5	1,2-Dichloropropane	0.301U	10.0	0.301	ug/L
541-73-1	1,3-Dichlorobenzene	0.275U	10.0	0.275	ug/L
106-46-7	1,4-Dichlorobenzene	0.166U	10.0	0.166	ug/L
78-93-3	2-Butanone	0.284U	10.0	0.284	ug/L
110-75-8	2-Chloroethylvinyl ether	0.291U	10.0	0.291	ug/L
591-78-6	2-Hexanone	0.245U	10.0	0.245	ug/L
108-10-1	4-Methyl-2-pentanone	0.240U	10.0	0.240	ug/L
67-64-1	Acetone	0.387U	10.0	0.387	ug/L
71-43-2	Benzene	0.222U	10.0	0.222	ug/L
75-27-4	Bromodichloromethane	0.167U	10.0	0.167	ug/L
75-25-2	Bromoform	0.430U	10.0	0.430	ug/L
74-83-9	Bromomethane	0.854U	10.0	0.854	ug/L
75-15-0	Carbon disulfide	0.380U	10.0	0.380	ug/L
56-23-5	Carbon tetrachloride	0.496U	10.0	0.496	ug/L
108-90-7	Chlorobenzene	0.166U	10.0	0.166	ug/L
75-00-3	Chloroethane	0.470U	10.0	0.470	ug/L
67-66-3	Chloroform	4.30J	10.0	0.310	ug/L
74-87-3	Chloromethane	0.287U	10.0	0.287	ug/L
110-82-7	Cyclohexane	0.674U	10.0	0.674	ug/L
124-48-1	Dibromochloromethane	0.108U	10.0	0.108	ug/L
75-71-8	Dichlorodifluoromethane	0.290U	10.0	0.290	ug/L
100-41-4	Ethylbenzene	0.218U	10.0	0.218	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.260U	10.0	0.260	ug/L
79-20-9	Methyl Acetate	0.319U	10.0	0.319	ug/L
108-87-2	Methylcyclohexane	0.287U	10.0	0.287	ug/L
75-09-2	Methylene chloride	0.298U	10.0	0.298	ug/L
100-42-5	Styrene	0.179U	10.0	0.179	ug/L
127-18-4	Tetrachloroethene	232	10.0	0.385	ug/L
108-88-3	Toluene	0.244U	10.0	0.244	ug/L
79-01-6	Trichloroethene	76.4	10.0	0.323	ug/L
75-69-4	Trichlorofluoromethane	0.314U	10.0	0.314	ug/L
76-13-1	Trichlorotrifluoroethane	0.316U	10.0	0.316	ug/L
108-05-4	Vinyl acetate	0.302U	10.0	0.302	ug/L
75-01-4	Vinyl chloride	0.254U	10.0	0.254	ug/L
1330-20-7	Xylene (total)	0.358U	30.0	0.358	ug/L
156-59-2	cis-1,2-Dichloroethene	111	10.0	0.207	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.248U	10.0	0.248	ug/L
136777-61-2	m,p-Xylene	0.247U	20.0	0.247	ug/L
95-47-6	o-Xylene	0.111U	10.0	0.111	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.155U	10.0	0.155	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300803	HOAMW-5I	Water	09/29/2014 14:20	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	10/03/2014 15:14	CJR	542302

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	1.01J	10.0	0.154	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.255U	10.0	0.255	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	81.4	ug/L	81	78 - 130
1868-53-7	Dibromofluoromethane	100	117	ug/L	117	77 - 127
2037-26-5	Toluene d8	100	109	ug/L	109	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	110	ug/L	110	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 16:18	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	30	ug/L	74	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 17:54	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.6	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 08:20	DMT	542206

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300803	HOAMW-5I	Water	09/29/2014 14:20	09/30/2014 09:20

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 17:30	JEM	542075

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.53	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/30/2014 23:18	JEM	542075

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	24.3	2.00	0.500	mg/L
14808-79-8	Sulfate	19.1	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300804	MTWMW-8	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/03/2014 20:10	JCK	542302

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	1.23U	50.0	1.23	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.09U	50.0	1.09	ug/L
79-00-5	1,1,2-Trichloroethane	1.59U	50.0	1.59	ug/L
75-34-3	1,1-Dichloroethane	1.71U	50.0	1.71	ug/L
75-35-4	1,1-Dichloroethene	2.08U	50.0	2.08	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.05U	50.0	1.05	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1.94U	50.0	1.94	ug/L
106-93-4	1,2-Dibromoethane	1.02U	50.0	1.02	ug/L
95-50-1	1,2-Dichlorobenzene	1.35U	50.0	1.35	ug/L
107-06-2	1,2-Dichloroethane	1.16U	50.0	1.16	ug/L
78-87-5	1,2-Dichloropropane	1.50U	50.0	1.50	ug/L
541-73-1	1,3-Dichlorobenzene	1.38U	50.0	1.38	ug/L
106-46-7	1,4-Dichlorobenzene	0.831U	50.0	0.831	ug/L
78-93-3	2-Butanone	1.42U	50.0	1.42	ug/L
110-75-8	2-Chloroethylvinyl ether	1.46U	50.0	1.46	ug/L
591-78-6	2-Hexanone	1.22U	50.0	1.22	ug/L
108-10-1	4-Methyl-2-pentanone	1.20U	50.0	1.20	ug/L
67-64-1	Acetone	1.93U	50.0	1.93	ug/L
71-43-2	Benzene	1.11U	50.0	1.11	ug/L
75-27-4	Bromodichloromethane	0.834U	50.0	0.834	ug/L
75-25-2	Bromoform	2.15U	50.0	2.15	ug/L
74-83-9	Bromomethane	4.27U	50.0	4.27	ug/L
75-15-0	Carbon disulfide	1.90U	50.0	1.90	ug/L
56-23-5	Carbon tetrachloride	2.48U	50.0	2.48	ug/L
108-90-7	Chlorobenzene	0.828U	50.0	0.828	ug/L
75-00-3	Chloroethane	2.35U	50.0	2.35	ug/L
67-66-3	Chloroform	1.55U	50.0	1.55	ug/L
74-87-3	Chloromethane	1.44U	50.0	1.44	ug/L
110-82-7	Cyclohexane	3.37U	50.0	3.37	ug/L
124-48-1	Dibromochloromethane	0.539U	50.0	0.539	ug/L
75-71-8	Dichlorodifluoromethane	1.45U	50.0	1.45	ug/L
100-41-4	Ethylbenzene	1.09U	50.0	1.09	ug/L
98-82-8	Isopropylbenzene (Cumene)	1.30U	50.0	1.30	ug/L
79-20-9	Methyl Acetate	1.59U	50.0	1.59	ug/L
108-87-2	Methylcyclohexane	1.43U	50.0	1.43	ug/L
75-09-2	Methylene chloride	10.7J	50.0	1.49	ug/L
100-42-5	Styrene	0.894U	50.0	0.894	ug/L
127-18-4	Tetrachloroethene	914	50.0	1.93	ug/L
108-88-3	Toluene	1.22U	50.0	1.22	ug/L
79-01-6	Trichloroethene	405	50.0	1.61	ug/L
75-69-4	Trichlorofluoromethane	1.57U	50.0	1.57	ug/L
76-13-1	Trichlorotrifluoroethane	1.58U	50.0	1.58	ug/L
108-05-4	Vinyl acetate	1.51U	50.0	1.51	ug/L
75-01-4	Vinyl chloride	1.27U	50.0	1.27	ug/L
1330-20-7	Xylene (total)	1.79U	150	1.79	ug/L
156-59-2	cis-1,2-Dichloroethene	96.8	50.0	1.03	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.24U	50.0	1.24	ug/L
136777-61-2	m,p-Xylene	1.23U	100	1.23	ug/L
95-47-6	o-Xylene	0.554U	50.0	0.554	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.777U	50.0	0.777	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300804	MTWMW-8	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/03/2014 20:10	JCK	542302

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.769U	50.0	0.769	ug/L
10061-02-6	trans-1,3-Dichloropropene	1.28U	50.0	1.28	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	395	ug/L	79	78 - 130
1868-53-7	Dibromofluoromethane	500	495	ug/L	99	77 - 127
2037-26-5	Toluene d8	500	521	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	522	ug/L	104	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 16:24	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	31.4	ug/L	78	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 18:15	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	0.89J	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 08:20	DMT	542206

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300804	MTWMW-8	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/30/2014 21:33	JEM	542075

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	17.3	2.00	0.500	mg/L
14808-79-8	Sulfate	25.3	2.00	0.500	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	10/01/2014 08:10	JEM	542075

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	2.95	0.400	0.100	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300805	JPMW-22	Water	09/29/2014 14:50	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/07/2014 16:57	LBH	542462

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	1.33J	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	4.63J	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	1.92J	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	106	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	14.3	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	19.2	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300805	JPMW-22	Water	09/29/2014 14:50	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/07/2014 16:57	LBH	542462

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	45.6	ug/L	91	78 - 130
1868-53-7	Dibromofluoromethane	50	49	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	51.4	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	51.3	ug/L	103	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 16:36	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	1.11	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	2.23	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	27.7	ug/L	68	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 19:23	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	2.5	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 08:20	DMT	542206

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300805	JPMW-22	Water	09/29/2014 14:50	09/30/2014 09:20

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 17:47	JEM	542075

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	2.05	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/30/2014 23:35	JEM	542075

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	14.0	2.00	0.500	mg/L
14808-79-8	Sulfate	34.1	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300806	TRIP BLANK	Water	09/29/2014 00:00	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/03/2014 15:58	CJR	542302

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	10.0	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300806	TRIP BLANK	Water	09/29/2014 00:00	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/03/2014 15:58	CJR	542302

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	40	ug/L	80	78 - 130
1868-53-7	Dibromofluoromethane	50	50	ug/L	100	77 - 127
2037-26-5	Toluene d8	50	53.4	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	52.4	ug/L	105	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300807	MTWMW-8 MS	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/03/2014 20:31	JCK	542302

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	493	50.0	1.23	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	536	50.0	1.09	ug/L
79-00-5	1,1,2-Trichloroethane	490	50.0	1.59	ug/L
75-34-3	1,1-Dichloroethane	682	50.0	1.71	ug/L
75-35-4	1,1-Dichloroethene	513	50.0	2.08	ug/L
120-82-1	1,2,4-Trichlorobenzene	468	50.0	1.05	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	501	50.0	1.94	ug/L
106-93-4	1,2-Dibromoethane	479	50.0	1.02	ug/L
95-50-1	1,2-Dichlorobenzene	506	50.0	1.35	ug/L
107-06-2	1,2-Dichloroethane	516	50.0	1.16	ug/L
78-87-5	1,2-Dichloropropane	520	50.0	1.50	ug/L
541-73-1	1,3-Dichlorobenzene	501	50.0	1.38	ug/L
106-46-7	1,4-Dichlorobenzene	483	50.0	0.831	ug/L
78-93-3	2-Butanone	478	50.0	1.42	ug/L
110-75-8	2-Chloroethylvinyl ether	500	50.0	1.46	ug/L
591-78-6	2-Hexanone	496	50.0	1.22	ug/L
108-10-1	4-Methyl-2-pentanone	525	50.0	1.20	ug/L
67-64-1	Acetone	549	50.0	1.93	ug/L
71-43-2	Benzene	512	50.0	1.11	ug/L
75-27-4	Bromodichloromethane	523	50.0	0.834	ug/L
75-25-2	Bromoform	448	50.0	2.15	ug/L
74-83-9	Bromomethane	502	50.0	4.27	ug/L
75-15-0	Carbon disulfide	519	50.0	1.90	ug/L
56-23-5	Carbon tetrachloride	503	50.0	2.48	ug/L
108-90-7	Chlorobenzene	485	50.0	0.828	ug/L
75-00-3	Chloroethane	520	50.0	2.35	ug/L
67-66-3	Chloroform	536	50.0	1.55	ug/L
74-87-3	Chloromethane	481	50.0	1.44	ug/L
110-82-7	Cyclohexane	548	50.0	3.37	ug/L
124-48-1	Dibromochloromethane	486	50.0	0.539	ug/L
75-71-8	Dichlorodifluoromethane	494	50.0	1.45	ug/L
100-41-4	Ethylbenzene	509	50.0	1.09	ug/L
98-82-8	Isopropylbenzene (Cumene)	453	50.0	1.30	ug/L
79-20-9	Methyl Acetate	513	50.0	1.59	ug/L
108-87-2	Methylcyclohexane	554	50.0	1.43	ug/L
75-09-2	Methylene chloride	611	50.0	1.49	ug/L
100-42-5	Styrene	455	50.0	0.894	ug/L
127-18-4	Tetrachloroethene	1220	50.0	1.93	ug/L
108-88-3	Toluene	476	50.0	1.22	ug/L
79-01-6	Trichloroethene	894	50.0	1.61	ug/L
75-69-4	Trichlorofluoromethane	519	50.0	1.57	ug/L
76-13-1	Trichlorotrifluoroethane	535	50.0	1.58	ug/L
108-05-4	Vinyl acetate	1290	50.0	1.51	ug/L
75-01-4	Vinyl chloride	509	50.0	1.27	ug/L
1330-20-7	Xylene (total)	1370	150	1.79	ug/L
156-59-2	cis-1,2-Dichloroethene	697	50.0	1.03	ug/L
10061-01-5	cis-1,3-Dichloropropene	476	50.0	1.24	ug/L
136777-61-2	m,p-Xylene	923	100	1.23	ug/L
95-47-6	o-Xylene	444	50.0	0.554	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	617	50.0	0.777	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300807	MTWMW-8 MS	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/03/2014 20:31	JCK	542302

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	599	50.0	0.769	ug/L
10061-02-6	trans-1,3-Dichloropropene	484	50.0	1.28	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	427	ug/L	85	78 - 130
1868-53-7	Dibromofluoromethane	500	508	ug/L	102	77 - 127
2037-26-5	Toluene d8	500	475	ug/L	95	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	502	ug/L	100	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 16:43	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	3.25	1.00	0.087	ug/L
74-85-1	Ethene	3.06	1.00	0.071	ug/L
74-82-8	Methane	15.1	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	32.1	ug/L	79	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 18:43	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	48.9	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 08:20	DMT	542206

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	26.1	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300807	MTWMW-8 MS	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/30/2014 21:51	JEM	542075

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	37.2	2.00	0.500	mg/L
14808-79-8	Sulfate	50.9	2.00	0.500	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	10/01/2014 08:28	JEM	542075

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	7.71	0.400	0.100	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300808	MTWMW-8 MSD	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/03/2014 20:52	CJR	542302

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	497	50.0	1.23	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	542	50.0	1.09	ug/L
79-00-5	1,1,2-Trichloroethane	484	50.0	1.59	ug/L
75-34-3	1,1-Dichloroethane	791	50.0	1.71	ug/L
75-35-4	1,1-Dichloroethene	501	50.0	2.08	ug/L
120-82-1	1,2,4-Trichlorobenzene	459	50.0	1.05	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	494	50.0	1.94	ug/L
106-93-4	1,2-Dibromoethane	476	50.0	1.02	ug/L
95-50-1	1,2-Dichlorobenzene	500	50.0	1.35	ug/L
107-06-2	1,2-Dichloroethane	505	50.0	1.16	ug/L
78-87-5	1,2-Dichloropropane	501	50.0	1.50	ug/L
541-73-1	1,3-Dichlorobenzene	506	50.0	1.38	ug/L
106-46-7	1,4-Dichlorobenzene	480	50.0	0.831	ug/L
78-93-3	2-Butanone	476	50.0	1.42	ug/L
110-75-8	2-Chloroethylvinyl ether	495	50.0	1.46	ug/L
591-78-6	2-Hexanone	480	50.0	1.22	ug/L
108-10-1	4-Methyl-2-pentanone	509	50.0	1.20	ug/L
67-64-1	Acetone	531	50.0	1.93	ug/L
71-43-2	Benzene	491	50.0	1.11	ug/L
75-27-4	Bromodichloromethane	512	50.0	0.834	ug/L
75-25-2	Bromoform	445	50.0	2.15	ug/L
74-83-9	Bromomethane	523	50.0	4.27	ug/L
75-15-0	Carbon disulfide	514	50.0	1.90	ug/L
56-23-5	Carbon tetrachloride	508	50.0	2.48	ug/L
108-90-7	Chlorobenzene	477	50.0	0.828	ug/L
75-00-3	Chloroethane	523	50.0	2.35	ug/L
67-66-3	Chloroform	509	50.0	1.55	ug/L
74-87-3	Chloromethane	499	50.0	1.44	ug/L
110-82-7	Cyclohexane	500	50.0	3.37	ug/L
124-48-1	Dibromochloromethane	469	50.0	0.539	ug/L
75-71-8	Dichlorodifluoromethane	490	50.0	1.45	ug/L
100-41-4	Ethylbenzene	480	50.0	1.09	ug/L
98-82-8	Isopropylbenzene (Cumene)	441	50.0	1.30	ug/L
79-20-9	Methyl Acetate	503	50.0	1.59	ug/L
108-87-2	Methylcyclohexane	523	50.0	1.43	ug/L
75-09-2	Methylene chloride	602	50.0	1.49	ug/L
100-42-5	Styrene	447	50.0	0.894	ug/L
127-18-4	Tetrachloroethene	1220	50.0	1.93	ug/L
108-88-3	Toluene	465	50.0	1.22	ug/L
79-01-6	Trichloroethene	878	50.0	1.61	ug/L
75-69-4	Trichlorofluoromethane	513	50.0	1.57	ug/L
76-13-1	Trichlorotrifluoroethane	523	50.0	1.58	ug/L
108-05-4	Vinyl acetate	1160	50.0	1.51	ug/L
75-01-4	Vinyl chloride	511	50.0	1.27	ug/L
1330-20-7	Xylene (total)	1330	150	1.79	ug/L
156-59-2	cis-1,2-Dichloroethene	606	50.0	1.03	ug/L
10061-01-5	cis-1,3-Dichloropropene	468	50.0	1.24	ug/L
136777-61-2	m,p-Xylene	898	100	1.23	ug/L
95-47-6	o-Xylene	429	50.0	0.554	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	601	50.0	0.777	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300808	MTWMW-8 MSD	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/03/2014 20:52	CJR	542302

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	578	50.0	0.769	ug/L
10061-02-6	trans-1,3-Dichloropropene	479	50.0	1.28	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	435	ug/L	87	78 - 130
1868-53-7	Dibromofluoromethane	500	512	ug/L	102	77 - 127
2037-26-5	Toluene d8	500	482	ug/L	96	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	516	ug/L	103	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 16:48	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	2.96	1.00	0.087	ug/L
74-85-1	Ethene	2.89	1.00	0.071	ug/L
74-82-8	Methane	14.5	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	30.7	ug/L	76	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/30/2014 19:01	JEM	542074

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	48.9	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/02/2014 08:20	DMT	542206

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	26.5	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21409300808	MTWMW-8 MSD	Water	09/29/2014 11:05	09/30/2014 09:20

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	09/30/2014 22:08	JEM	542075

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	37.5	2.00	0.500	mg/L
14808-79-8	Sulfate	51.1	2.00	0.500	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	10/01/2014 08:45	JEM	542075

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	7.69	0.400	0.100	mg/L

GC/MS Volatiles Quality Control Summary

Analytical Batch	542302	Client ID	MB542302		LCS542302		LCS542302		LCS542302
Prep Batch	N/A	GCAL ID	1366013		1366014		1366015		1366015
		Sample Type	Method Blank		LCS		LCS		LCS
		Analytical Date	10/03/2014 13:42		10/03/2014 11:14		10/03/2014 12:27		10/03/2014 12:27
		Matrix	Water		Water		Water		Water
EPA 8260B			Units	ug/L	Spike	% R	Control	% R	RPD
			Result	RDL	Added	Limit	Limit	Limit	Limit
67-64-1	Acetone		0.193U	0.193	50.0	52.4	44 - 156	105	4
75-27-4	Bromodichloromethane		0.083U	0.083	50.0	51.9	74 - 125	104	2
75-25-2	Bromoform		0.215U	0.215	50.0	47.3	64 - 122	95	2
74-83-9	Bromomethane		0.427U	0.427	50.0	51.0	47 - 138	102	7
75-15-0	Carbon disulfide		0.190U	0.190	50.0	50.5	69 - 136	101	4
56-23-5	Carbon tetrachloride		0.248U	0.248	50.0	50.6	76 - 128	101	11
75-00-3	Chloroethane		0.235U	0.235	50.0	49.4	62 - 141	99	4
136777-61-2	m,p-Xylene		0.123U	0.123	100	91.3	74 - 126	91	3
67-66-3	Chloroform		0.155U	0.155	50.0	54.4	75 - 122	109	8
74-87-3	Chloromethane		0.144U	0.144	50.0	50.2	59 - 132	100	3
124-48-1	Dibromochloromethane		0.054U	0.054	50.0	49.1	71 - 123	98	4
75-71-8	Dichlorodifluoromethane		0.145U	0.145	50.0	50.0	58 - 140	100	5
75-34-3	1,1-Dichloroethane		0.171U	0.171	50.0	54.3	74 - 127	109	13
107-06-2	1,2-Dichloroethane		0.116U	0.116	50.0	50.5	71 - 129	101	6
156-59-2	cis-1,2-Dichloroethene		0.103U	0.103	50.0	56.9	73 - 130	114	8
156-60-5	trans-1,2-Dichloroethene		0.077U	0.077	50.0	58.6	69 - 132	117	3
75-09-2	Methylene chloride		0.149U	0.149	50.0	61.6	72 - 128	123	2
78-87-5	1,2-Dichloropropane		0.150U	0.150	50.0	52.5	71 - 132	105	2
10061-01-5	cis-1,3-Dichloropropene		0.124U	0.124	50.0	48.3	71 - 131	97	5
10061-02-6	trans-1,3-Dichloropropene		0.128U	0.128	50.0	48.7	71 - 131	97	1
100-41-4	Ethylbenzene		0.109U	0.109	50.0	49.5	74 - 126	99	4
591-78-6	2-Hexanone		0.122U	0.122	50.0	49.4	50 - 135	99	1
98-82-8	Isopropylbenzene (Cumene)		0.130U	0.130	50.0	44.7	71 - 125	89	3
78-93-3	2-Butanone		0.142U	0.142	50.0	49.2	58 - 137	98	4
108-10-1	4-Methyl-2-pentanone		0.120U	0.120	50.0	49.6	57 - 132	99	2
100-42-5	Styrene		0.089U	0.089	50.0	46.7	71 - 127	93	0
127-18-4	Tetrachloroethene		0.193U	0.193	50.0	43.4	68 - 128	87	4
79-34-5	1,1,2,2-Tetrachloroethane		0.109U	0.109	50.0	52.9	70 - 122	106	1
120-82-1	1,2,4-Trichlorobenzene		0.105U	0.105	50.0	48.7	61 - 135	97	1
71-55-6	1,1,1-Trichloroethane		0.123U	0.123	50.0	48.5	76 - 126	97	11
79-00-5	1,1,2-Trichloroethane		0.159U	0.159	50.0	49.6	72 - 121	99	1
75-69-4	Trichlorofluoromethane		0.157U	0.157	50.0	49.0	72 - 136	98	6
75-01-4	Vinyl chloride		0.127U	0.127	50.0	49.5	68 - 132	99	6

GC/MS Volatiles Quality Control Summary

Analytical Batch		542302	Client ID		MB542302		LCS542302		LCSD542302			
Prep Batch		N/A	GCAL ID		1366013		1366014		1366015			
			Sample Type		Method Blank		LCS		LCSD			
			Analytical Date		10/03/2014 13:42		10/03/2014 11:14		10/03/2014 12:27			
			Matrix		Water		Water		Water			
EPA 8260B			Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
			Result	RDL	Added			Limits			Limit	
95-47-6		o-Xylene	0.055U	0.055	50.0	43.2	86	73 - 130	45.1	90	4	30
96-12-8		1,2-Dibromo-3-chloropropane	0.194U	0.194	50.0	48.3	97	57 - 121	46.9	94	3	30
106-93-4		1,2-Dibromoethane	0.102U	0.102	50.0	47.6	95	70 - 124	49.2	98	3	30
108-05-4		Vinyl acetate	0.151U	0.151	50.0	132	264*	54 - 147	135	270*	2	30
1634-04-4		tert-Butyl methyl ether (MTBE)	0.078U	0.078	50.0	61.3	123	71 - 125	62.1	124	1	30
1330-20-7		Xylene (total)	0.179U	0.179	150	134	89	74 - 127	139	93	4	30
108-87-2		Methylcyclohexane	0.143U	0.143	50.0	50.1	100	67 - 138	54.5	109	8	30
110-82-7		Cyclohexane	0.337U	0.337	50.0	51.7	103	69 - 132	58.9	118	13	30
79-20-9		Methyl Acetate	0.159U	0.159	50.0	47.2	94	57 - 139	43.0	86	9	30
76-13-1		Trichlorotrifluoroethane	0.158U	0.158	50.0	50.9	102	72 - 136	54.2	108	6	30
110-75-8		2-Chloroethylvinyl ether	0.146U	0.146	50.0	51.6	103	56 - 124	50.8	102	2	30
541-73-1		1,3-Dichlorobenzene	0.138U	0.138	50.0	51.0	102	74 - 126	51.1	102	0	30
106-46-7		1,4-Dichlorobenzene	0.083U	0.083	50.0	48.6	97	72 - 122	48.6	97	0	30
95-50-1		1,2-Dichlorobenzene	0.135U	0.135	50.0	50.3	101	71 - 126	51.1	102	2	30
75-35-4		1,1-Dichloroethene	0.208U	0.208	50.0	49.0	98	69 - 129	52.1	104	6	20
71-43-2		Benzene	0.111U	0.111	50.0	49.3	99	70 - 129	51.8	104	5	20
79-01-6		Trichloroethene	0.161U	0.161	50.0	49.6	99	76 - 129	51.0	102	3	20
108-88-3		Toluene	0.122U	0.122	50.0	46.4	93	72 - 120	47.9	96	3	20
108-90-7		Chlorobenzene	0.083U	0.083	50.0	48.6	97	74 - 123	49.4	99	2	20
Surrogate												
460-00-4		4-Bromofluorobenzene	39.8	80	50	42.8	86	78 - 130	44.3	89		
1868-53-7		Dibromofluoromethane	52.1	104	50	49.6	99	77 - 127	54.2	108		
2037-26-5		Toluene d8	52.9	106	50	47.6	95	76 - 134	48.6	97		
17060-07-0		1,2-Dichloroethane-d4	52.6	105	50	51.4	103	71 - 127	51.5	103		

GC/MS Volatiles Quality Control Summary

Analytical Batch	542302	Client ID	MTWMW-8	ug/L	Spike	Result	% R	Control	Result	% R	Result	% R	RPD	RPD
Prep Batch	N/A	GCAL ID	21409300804	RDL	Added			Limits % R					Limit	
		Sample Type	SAMPLE											
		Analytical Date	10/03/2014 20:10											
		Matrix	Water											
EPA 8260B														
71-55-6	1,1,1-Trichloroethane		0.00	1.23	500	493	99	76 - 126	497	99	497	99	1	30
79-34-5	1,1,2,2-Tetrachloroethane		0.00	1.09	500	536	107	70 - 122	542	108	542	108	1	30
79-00-5	1,1,2-Trichloroethane		0.00	1.59	500	490	98	72 - 121	484	97	484	97	1	30
75-34-3	1,1-Dichloroethane		0.00	1.71	500	682	136*	74 - 127	791	158*	791	158*	15	30
75-35-4	1,1-Dichloroethene		0.00	2.08	500	513	103	69 - 129	501	100	501	100	2	20
120-82-1	1,2,4-Trichlorobenzene		0.00	1.05	500	468	94	61 - 135	459	92	459	92	2	30
96-12-8	1,2-Dibromo-3-chloropropane		0.00	1.94	500	501	100	57 - 121	494	99	494	99	1	30
106-93-4	1,2-Dibromoethane		0.00	1.02	500	479	96	70 - 124	476	95	476	95	1	30
95-50-1	1,2-Dichlorobenzene		0.00	1.35	500	506	101	71 - 126	500	100	500	100	1	30
107-06-2	1,2-Dichloroethane		0.00	1.16	500	516	103	71 - 129	505	101	505	101	2	30
78-87-5	1,2-Dichloropropane		0.00	1.50	500	520	104	72 - 128	501	100	501	100	4	30
541-73-1	1,3-Dichlorobenzene		0.00	1.38	500	501	100	74 - 126	506	101	506	101	1	30
106-46-7	1,4-Dichlorobenzene		0.00	0.831	500	483	97	72 - 122	480	96	480	96	1	30
78-93-3	2-Butanone		0.00	1.42	500	478	96	58 - 137	476	95	476	95	0	30
110-75-8	2-ChloroethylVinyl ether		0.00	1.46	500	500	100	56 - 124	495	99	495	99	1	30
591-78-6	2-Hexanone		0.00	1.22	500	496	99	50 - 135	480	96	480	96	3	30
108-10-1	4-Methyl-2-pentanone		0.00	1.20	500	525	105	57 - 132	509	102	509	102	3	30
67-64-1	Acetone		0.00	1.93	500	549	110	44 - 156	531	106	531	106	3	30
71-43-2	Benzene		0.00	1.11	500	512	102	70 - 129	491	98	491	98	4	20
75-27-4	Bromodichloromethane		0.00	0.834	500	523	105	74 - 125	512	102	512	102	2	30
75-25-2	Bromoform		0.00	2.15	500	448	90	64 - 122	445	89	445	89	1	30
74-83-9	Bromomethane		0.00	4.27	500	502	100	47 - 138	523	105	523	105	4	30
75-15-0	Carbon disulfide		0.00	1.90	500	519	104	69 - 136	514	103	514	103	1	30
56-23-5	Carbon tetrachloride		0.00	2.48	500	503	101	76 - 128	508	102	508	102	1	30
108-90-7	Chlorobenzene		0.00	0.828	500	485	97	74 - 123	477	95	477	95	2	20
75-00-3	Chloroethane		0.00	2.35	500	520	104	62 - 141	523	105	523	105	1	30
67-66-3	Chloroform		0.00	1.55	500	536	107	75 - 122	509	102	509	102	5	30
74-87-3	Chloromethane		0.00	1.44	500	481	96	59 - 132	499	100	499	100	4	30
110-82-7	Cyclohexane		0.00	3.37	500	548	110	69 - 132	500	100	500	100	9	30
124-48-1	Dibromochloromethane		0.00	0.539	500	486	97	71 - 123	469	94	469	94	4	30
75-71-8	Dichlorodifluoromethane		0.00	1.45	500	494	99	58 - 140	490	98	490	98	1	30
100-41-4	Ethylbenzene		0.00	1.09	500	509	102	74 - 126	480	96	480	96	6	30
98-82-8	Isopropylbenzene (Cumene)		0.00	1.30	500	453	91	71 - 125	441	88	441	88	3	30

GC/MS Volatiles Quality Control Summary

Analytical Batch		542302	Client ID		MTWMW-8		MTWMW-8 MS		MTWMW-8 MSD			
Prep Batch		N/A	GCAL ID	21409300804	21409300807	21409300807	21409300808	MSD				
			Sample Type	SAMPLE	MS	MS	MSD					
			Analytical Date	10/03/2014 20:10	10/03/2014 20:31	10/03/2014 20:31	10/03/2014 20:52					
			Matrix	Water	Water	Water	Water					
EPA 8260B			Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	Limit
79-20-9		Methyl Acetate	0.00	1.59	500	513	103	57 - 139	503	101	2	30
108-87-2		Methylcyclohexane	0.00	1.43	500	554	111	67 - 138	523	105	6	30
75-09-2		Methylene chloride	10.7	1.49	500	611	120	68 - 132	602	118	1	30
100-42-5		Styrene	0.00	0.894	500	455	91	71 - 127	447	89	2	30
127-18-4		Tetrachloroethene	914	1.93	500	1220	61*	68 - 128	1220	61*	0	30
108-88-3		Toluene	0.00	1.22	500	476	95	72 - 120	465	93	2	20
79-01-6		Trichloroethene	405	1.61	500	894	98	76 - 129	878	95	2	20
75-69-4		Trichlorofluoromethane	0.00	1.57	500	519	104	72 - 136	513	103	1	30
76-13-1		Trichlorotrifluoroethane	0.00	1.58	500	535	107	72 - 136	523	105	2	30
108-05-4		Vinyl acetate	0.00	1.51	500	1290	258*	54 - 147	1160	232*	11	30
75-01-4		Vinyl chloride	0.00	1.27	500	509	102	68 - 132	511	102	0	30
1330-20-7		Xylene (total)	0.00	1.79	1500	1370	91	74 - 127	1330	89	3	30
156-59-2		cis-1,2-Dichloroethene	96.8	1.03	500	697	120	73 - 130	606	102	14	30
10061-01-5		cis-1,3-Dichloropropene	0.00	1.24	500	476	95	71 - 132	468	94	2	30
136777-61-2		m,p-Xylene	0.00	1.23	1000	923	92	74 - 126	898	90	3	30
95-47-6		o-Xylene	0.00	0.554	500	444	89	73 - 130	429	86	3	30
1634-04-4		tert-Butyl methyl ether (MTBE)	0.00	0.777	500	617	123	71 - 125	601	120	3	30
156-60-5		trans-1,2-Dichloroethene	0.00	0.769	500	599	120	69 - 132	578	116	4	30
10061-02-6		trans-1,3-Dichloropropene	0.00	1.28	500	484	97	71 - 131	479	96	1	30
Surrogate												
460-00-4		4-Bromofluorobenzene	395	79	500	427	85	78 - 130	435	87		
1868-53-7		Dibromofluoromethane	495	99	500	508	102	77 - 127	512	102		
2037-26-5		Toluene d8	521	104	500	475	95	76 - 134	482	96		
17060-07-0		1,2-Dichloroethane-d4	522	104	500	502	100	71 - 127	516	103		

GC/MS Volatiles Quality Control Summary

Analytical Batch		542462	Client ID		MB542462		LCS542462		LCSD542462		
Prep Batch		N/A	GCAL ID	1366898	1366899	1366900	LCS		LCSD		
			Sample Type	Method Blank			10/07/2014 10:48		10/07/2014 09:17		
			Analytical Date	10/07/2014 10:48			10/07/2014 08:55		10/07/2014 09:17		
			Matrix	Water			Water		Water		
EPA 8260B			Units	ug/L	Spike	Control	Result	% R	Limit	RPD	Limit
			Result	RDL	Added	Limits % R		% R		Result	
67-64-1	Acetone		0.193U	0.193	50.0	44.9	90	44 - 156	49.3	99	9
75-27-4	Bromodichloromethane		0.083U	0.083	50.0	45.9	92	74 - 125	50.9	102	10
75-25-2	Bromoform		0.215U	0.215	50.0	44.6	89	64 - 122	48.5	97	8
74-83-9	Bromomethane		0.427U	0.427	50.0	41.7	83	47 - 138	50.4	101	19
75-15-0	Carbon disulfide		0.190U	0.190	50.0	50.6	101	69 - 136	52.2	104	3
56-23-5	Carbon tetrachloride		0.248U	0.248	50.0	43.8	88	76 - 128	44.9	90	2
75-00-3	Chloroethane		0.235U	0.235	50.0	48.0	96	62 - 141	49.3	99	3
136777-61-2	m,p-Xylene		0.123U	0.123	100	87.0	87	74 - 126	91.5	92	5
67-66-3	Chloroform		0.155U	0.155	50.0	44.7	89	75 - 122	47.1	94	5
74-87-3	Chloromethane		0.144U	0.144	50.0	51.3	103	59 - 132	44.6	89	14
124-48-1	Dibromochloromethane		0.054U	0.054	50.0	45.5	91	71 - 123	49.8	100	9
75-71-8	Dichlorodifluoromethane		0.145U	0.145	50.0	49.0	98	58 - 140	45.2	90	8
75-34-3	1,1-Dichloroethane		0.171U	0.171	50.0	41.3	83	74 - 127	45.3	91	9
107-06-2	1,2-Dichloroethane		0.116U	0.116	50.0	45.9	92	71 - 129	50.0	100	9
156-59-2	cis-1,2-Dichloroethene		0.103U	0.103	50.0	44.5	89	73 - 130	47.1	94	6
156-60-5	trans-1,2-Dichloroethene		0.077U	0.077	50.0	48.7	97	69 - 132	51.9	104	6
75-09-2	Methylene chloride		0.277J	0.149	50.0	48.7	97	68 - 132	51.9	104	6
78-87-5	1,2-Dichloropropane		0.150U	0.150	50.0	45.0	90	72 - 128	49.5	99	10
10061-01-5	cis-1,3-Dichloropropene		0.124U	0.124	50.0	48.0	96	71 - 132	52.7	105	9
10061-02-6	trans-1,3-Dichloropropene		0.128U	0.128	50.0	48.6	97	71 - 131	54.7	109	12
100-41-4	Ethylbenzene		0.109U	0.109	50.0	41.8	84	74 - 126	43.9	88	5
591-78-6	2-Hexanone		0.122U	0.122	50.0	48.5	97	50 - 135	51.0	102	5
98-82-8	Isopropylbenzene (Cumene)		0.130U	0.130	50.0	46.8	94	71 - 125	48.5	97	4
78-93-3	2-Butanone		0.142U	0.142	50.0	45.3	91	58 - 137	47.6	95	5
108-10-1	4-Methyl-2-pentanone		0.120U	0.120	50.0	48.3	97	57 - 132	51.3	103	6
100-42-5	Styrene		0.089U	0.089	50.0	48.0	96	71 - 127	51.2	102	6
127-18-4	Tetrachloroethene		0.193U	0.193	50.0	42.4	85	68 - 128	43.4	87	2
79-34-5	1,1,2,2-Tetrachloroethane		0.109U	0.109	50.0	48.0	96	70 - 122	54.0	108	12
120-82-1	1,2,4-Trichlorobenzene		0.105U	0.105	50.0	47.8	96	61 - 135	53.5	107	11
71-55-6	1,1,1-Trichloroethane		0.123U	0.123	50.0	41.7	83	76 - 126	42.7	85	2
79-00-5	1,1,2-Trichloroethane		0.159U	0.159	50.0	43.4	87	72 - 121	48.1	96	10
75-69-4	Trichlorofluoromethane		0.157U	0.157	50.0	49.3	99	72 - 136	50.3	101	2
75-01-4	Vinyl chloride		0.127U	0.127	50.0	49.6	99	68 - 132	45.6	91	8

GC/MS Volatiles Quality Control Summary

Analytical Batch		542462	Client ID		MB542462		LCS542462		LCSD542462			
Prep Batch		N/A	GCAL ID		1366898		1366899		1366900			
			Sample Type		Method Blank		LCS		LCSD			
			Analytical Date		10/07/2014 10:48		10/07/2014 08:55		10/07/2014 09:17			
			Matrix		Water		Water		Water			
EPA 8260B			Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
			Result	RDL	Added			Limits % R			Limit	
95-47-6	o-Xylene		0.055U	0.055	50.0	45.5	91	73 - 130	48.8	98	7	30
96-12-8	1,2-Dibromo-3-chloropropane		0.194U	0.194	50.0	47.1	94	57 - 121	51.2	102	8	30
106-93-4	1,2-Dibromoethane		0.102U	0.102	50.0	42.9	86	70 - 124	47.9	96	11	30
108-05-4	Vinyl acetate		0.151U	0.151	50.0	45.7	91	54 - 147	47.8	96	4	30
1634-04-4	tert-Butyl methyl ether (MTBE)		0.078U	0.078	50.0	47.5	95	71 - 125	52.4	105	10	30
1330-20-7	Xylene (total)		0.179U	0.179	150	133	89	74 - 127	140	93	5	30
108-87-2	Methylcyclohexane		0.143U	0.143	50.0	44.1	88	67 - 138	45.4	91	3	30
110-82-7	Cyclohexane		0.337U	0.337	50.0	44.5	89	69 - 132	44.3	89	1	30
79-20-9	Methyl Acetate		0.159U	0.159	50.0	48.0	96	57 - 139	52.1	104	8	30
76-13-1	Trichlorotrifluoroethane		0.158U	0.158	50.0	46.8	94	72 - 136	48.5	97	4	30
110-75-8	2-Chloroethylvinyl ether		0.146U	0.146	50.0	33.1	66	56 - 124	36.1	72	9	30
541-73-1	1,3-Dichlorobenzene		0.138U	0.138	50.0	44.7	89	74 - 126	48.8	98	9	30
106-46-7	1,4-Dichlorobenzene		0.083U	0.083	50.0	44.0	88	72 - 122	48.6	97	10	30
95-50-1	1,2-Dichlorobenzene		0.135U	0.135	50.0	43.9	88	71 - 126	49.3	99	12	30
75-35-4	1,1-Dichloroethene		0.208U	0.208	50.0	47.8	96	69 - 129	48.5	97	1	20
71-43-2	Benzene		0.111U	0.111	50.0	45.2	90	70 - 129	47.2	94	4	20
79-01-6	Trichloroethene		0.161U	0.161	50.0	43.6	87	76 - 129	45.7	91	5	20
108-88-3	Toluene		0.122U	0.122	50.0	44.0	88	72 - 120	46.5	93	6	20
108-90-7	Chlorobenzene		0.083U	0.083	50.0	43.9	88	74 - 123	47.1	94	7	20
Surrogate												
460-00-4	4-Bromofluorobenzene		47.2	94	50	50	100	78 - 130	48.5	97		
1868-53-7	Dibromofluoromethane		48.9	98	50	49.1	98	77 - 127	47.3	95		
2037-26-5	Toluene d8		51.6	103	50	49.1	98	76 - 134	48.7	97		
17060-07-0	1,2-Dichloroethane-d4		51.2	102	50	51.3	103	71 - 127	50	100		

GC/MS Volatiles Quality Control Summary

Analytical Batch 542462 Prep Batch N/A		Client ID GCAL ID Sample Type Analytical Date Matrix		M-098-10 21410022313 SAMPLE 10/07/2014 11:11 Water		M-098-10-MS 21410022321 MS 10/07/2014 15:01 Water		M-098-10-MSD 21410022322 MSD 10/07/2014 15:23 Water		RPD Limit			
EPA 8260B				Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	Limit
67-64-1	Acetone			0.00	0.193	50.0	29.0	58	44 - 156	29.5	59	2	30
75-27-4	Bromodichloromethane			0.00	0.083	50.0	52.4	105	74 - 125	51.8	104	1	30
76-13-1	Trichlorotrifluoroethane			0.00	0.158	50.0	52.5	105	72 - 136	51.6	103	2	30
75-25-2	Bromoform			0.00	0.215	50.0	50.7	101	64 - 122	50.9	102	0	30
74-83-9	Bromomethane			0.00	0.427	50.0	45.1	90	47 - 138	52.4	105	15	30
75-15-0	Carbon disulfide			0.00	0.190	50.0	52.9	106	69 - 136	52.5	105	1	30
56-23-5	Carbon tetrachloride			0.00	0.248	50.0	52.2	104	76 - 128	50.5	101	3	30
75-00-3	Chloroethane			0.00	0.235	50.0	45.6	91	62 - 141	49.1	98	7	30
136777-61-2	m,p-Xylene			0.00	0.123	100	97.6	98	74 - 126	96.6	97	1	30
67-66-3	Chloroform			1.73	0.155	50.0	52.3	101	75 - 122	51.6	100	1	30
74-87-3	Chloromethane			0.00	0.144	50.0	47.7	95	59 - 132	50.5	101	6	30
124-48-1	Dibromochloromethane			0.00	0.054	50.0	50.8	102	71 - 123	51.2	102	1	30
75-71-8	Dichlorodifluoromethane			0.00	0.145	50.0	50.1	100	58 - 140	51.1	102	2	30
75-34-3	1,1-Dichloroethane			3.33	0.171	50.0	51.9	97	74 - 127	51.9	97	0	30
107-06-2	1,2-Dichloroethane			10.0	0.116	50.0	63.9	107	71 - 129	64.7	109	1	30
75-09-2	Methylene chloride			0.00	0.149	50.0	52.6	105	68 - 132	52.5	105	0	30
78-87-5	1,2-Dichloropropane			0.00	0.150	50.0	51.0	102	72 - 128	51.0	102	0	30
10061-01-5	cis-1,3-Dichloropropene			0.00	0.124	50.0	52.7	105	71 - 132	52.4	105	1	30
10061-02-6	trans-1,3-Dichloropropene			0.00	0.128	50.0	54.9	110	71 - 131	55.5	111	1	30
100-41-4	Ethylbenzene			0.00	0.109	50.0	47.4	95	74 - 126	46.9	94	1	30
591-78-6	2-Hexanone			0.00	0.122	50.0	50.6	101	50 - 135	51.6	103	2	30
98-82-8	Isopropylbenzene (Cumene)			0.00	0.130	50.0	53.4	107	71 - 125	52.7	105	1	30
78-93-3	2-Butanone			0.00	0.142	50.0	43.1	86	58 - 137	43.5	87	1	30
108-10-1	4-Methyl-2-pentanone			0.00	0.120	50.0	57.6	115	57 - 132	59.1	118	3	30
100-42-5	Styrene			0.00	0.089	50.0	53.3	107	71 - 127	53.2	106	0	30
95-50-1	1,2-Dichlorobenzene			0.00	0.135	50.0	50.3	101	71 - 126	50.8	102	1	30
127-18-4	Tetrachloroethene			0.00	0.193	50.0	49.1	98	68 - 128	47.6	95	3	30
79-34-5	1,1,2,2-Tetrachloroethane			0.00	0.109	50.0	57.5	115	70 - 122	58.5	117	2	30
120-82-1	1,2,4-Trichlorobenzene			0.00	0.105	50.0	52.4	105	61 - 135	55.4	111	6	30
71-55-6	1,1,1-Trichloroethane			0.00	0.123	50.0	48.3	97	76 - 126	47.3	95	2	30
79-00-5	1,1,2-Trichloroethane			0.00	0.159	50.0	49.7	99	72 - 121	49.8	100	0	30
156-60-5	trans-1,2-Dichloroethene			0.00	0.077	50.0	55.1	110	69 - 132	54.4	109	1	30
156-59-2	cis-1,2-Dichloroethene			0.213	0.103	50.0	51.4	102	73 - 130	51.5	103	0	30

GC/MS Volatiles Quality Control Summary

Analytical Batch 542462 Prep Batch N/A		Client ID GCAL ID Sample Type Analytical Date Matrix		M-098-10 21410022313 SAMPLE 10/07/2014 11:11 Water		M-098-10-MS 21410022321 MS 10/07/2014 15:01 Water		M-098-10-MSD 21410022322 MSD 10/07/2014 15:23 Water		RPD Limit			
EPA 8260B				Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	
75-69-4	Trichlorofluoromethane			0.00	0.157	50.0	54.9	110	72 - 136	54.4	109	1	30
110-75-8	2-Chloroethylvinyl ether			0.00	0.146	50.0	0.00	0*	56 - 124	0.00	0*	0	30
75-01-4	Vinyl chloride			0.00	0.127	50.0	52.0	104	68 - 132	52.6	105	1	30
95-47-6	o-Xylene			0.00	0.055	50.0	51.3	103	73 - 130	51.2	102	0	30
96-12-8	1,2-Dibromo-3-chloropropane			0.00	0.194	50.0	55.5	111	57 - 121	58.1	116	5	30
106-93-4	1,2-Dibromoethane			0.00	0.102	50.0	49.1	98	70 - 124	50.9	102	4	30
108-05-4	Vinyl acetate			0.00	0.151	50.0	47.8	96	54 - 147	48.4	97	1	30
1634-04-4	tert-Butyl methyl ether (MTBE)			0.00	0.078	50.0	50.8	102	71 - 125	50.9	102	0	30
541-73-1	1,3-Dichlorobenzene			0.00	0.138	50.0	48.8	98	74 - 126	49.1	98	1	30
106-46-7	1,4-Dichlorobenzene			0.00	0.083	50.0	48.2	96	72 - 122	48.8	98	1	30
1330-20-7	Xylene (total)			0.00	0.179	150	149	99	74 - 127	148	99	1	30
75-35-4	1,1-Dichloroethene			0.00	0.208	50.0	51.1	102	69 - 129	50.4	101	1	20
71-43-2	Benzene			0.517	0.111	50.0	51.7	102	70 - 129	51.0	101	1	20
79-01-6	Trichloroethene			0.00	0.161	50.0	49.6	99	76 - 129	48.3	97	3	20
108-88-3	Toluene			0.00	0.122	50.0	50.2	100	72 - 120	49.7	99	1	20
108-90-7	Chlorobenzene			0.617	0.083	50.0	50.1	99	74 - 123	49.6	98	1	20
Surrogate													
460-00-4	4-Bromofluorobenzene					50	49.4	99	78 - 130	49.7	99		
1868-53-7	Dibromofluoromethane					50	49.7	99	77 - 127	49.1	98		
2037-26-5	Toluene d8					50	49.8	100	76 - 134	49.4	99		
17060-07-0	1,2-Dichloroethane-d4					50	51.2	102	71 - 127	50.7	101		

General Chromatography Quality Control Summary

Analytical Batch		542552	Client ID		MB542552		LCS542552		
Prep Batch		N/A	GCAL ID		1367429		1367430		
			Sample Type		Method Blank		LCS		
			Analytical Date		10/08/2014 15:09		10/08/2014 14:55		
			Matrix		Water		Water		
EPA RSK-175			Units Result		ug/L	Spike Added	Result	% R	Control Limits % R
			Result		RDL				
74-82-8	Methane		0.435U		0.435	17.5	15.1	86	39 - 120
74-85-1	Ethene		0.071U		0.071	3.06	2.78	91	45 - 134
74-84-0	Ethane		0.087U		0.087	3.28	3.09	94	45 - 128
Surrogate									
115-07-1	Propene		28.2		70	40.5	25.3	62	40 - 143

Analytical Batch	542552	Client ID	MTWMW-8	MTWMW-8 MS		
Prep Batch	N/A	GCAL ID	21409300804	21409300807	MSD	
		Sample Type	SAMPLE	MS	10/08/2014 16:48	
		Analytical Date	10/08/2014 16:24	10/08/2014 16:43	Water	
		Matrix	Water	Water		
EPA RSK-175		Units	ug/L	Spike	Result	Control
		Result	RDL	Added	% R	Limits % R
74-84-0	Ethane	0.00	0.087	3.28	3.25	45 - 128
74-85-1	Ethene	0.00	0.071	3.06	3.06	45 - 134
74-82-8	Methane	0.00	0.435	17.5	15.1	39 - 120
Surrogate						
115-07-1	Propene	31.4	78	40.5	32.1	40 - 143
					% R	RPD
					90	9
					94	6
					83	4
					76	
					Result	RPD
					2.96	29
					2.89	25
					14.5	27
					30.7	

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	542074 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542074 1364771 Method Blank 09/30/2014 12:16 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
EPA 9060A			Units Result	0.30U	0.30	49.0	98	80 - 120
C-012	Total Organic Carbon				50.0			

Analytical Batch Prep Batch	542074 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MTWMW-8 21409300804 SAMPLE 09/30/2014 18:15 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD Limit
EPA 9060A			Units Result	0.89	0.30	48.9	96	75 - 125	48.9	96	0
C-012	Total Organic Carbon				50.0						25

Analytical Batch Prep Batch	542074 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	U31PPDC 21409300702 SAMPLE 09/30/2014 12:39 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD Limit
EPA 9060A			Units Result	15.0	0.30	63.6	97	75 - 125	64.2	98	1
C-012	Total Organic Carbon				50.0						25

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	542206 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542206 1365483 Method Blank 10/02/2014 08:20 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
SM 4500-S2 F-2011								
18496-25-8	Sulfide		2.00U	2.00	25.0	26.3	105	80 - 120

Analytical Batch Prep Batch	542206 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MTWMW-8 21409300804 SAMPLE 10/02/2014 08:20 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD Limit
SM 4500-S2 F-2011											
18496-25-8	Sulfide		0.000	2.00	25.0	26.1	104	75 - 125	26.5	106	2

General Chemistry Quality Control Summary

Analytical Batch		Client ID	Units	Spike	Result	% R	Control
542075		GCAL ID	mg/L	Added			Limits % R
Prep Batch	N/A	Sample Type	Result				
		Analytical Date					
		Matrix					
EPA 9056A							
16887-00-6	Chloride		0.050U	2.50	2.24	90	80 - 120
14797-55-8	Nitrate		0.050U	2.50	2.38	95	80 - 120
14808-79-8	Sulfate		0.050U	2.50	2.47	99	80 - 120

Analytical Batch	542075	Client ID	MTWMW-8	MTWMW-8 MS	MTWMW-8 MSD	RPD	Limit
Prep Batch	N/A	GCAL ID	21409300804	21409300807	21409300808		
		Sample Type	SAMPLE	MS	MSD		
		Analytical Date	10/01/2014 08:10	10/01/2014 08:28	10/01/2014 08:45		
		Matrix	Water	Water	Water		
EPA 9056A							
		Units	mg/L	Result	Result	% R	RPD
		Result	RDL				Limit
14797-55-8	Nitrate	2.95	0.100	7.71	7.69	95	0
							15

Analytical Batch		542075	Client ID		MTWMW-8		MTWMW-8 MS		MTWMW-8 MSD		RPD	
Prep Batch	N/A		GCAL ID	21409300804		21409300807		21409300808				
			Sample Type	SAMPLE		MS		MSD				
			Analytical Date	09/30/2014 21:33		09/30/2014 21:51		09/30/2014 22:08				
			Matrix	Water		Water		Water				
EPA 9056A												
16887-00-6	Chloride		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	Limit
14808-79-8	Sulfate		17.3	0.500	25.0	37.2	79*	80 - 120	37.5	81	1	15
			25.3	0.500	25.0	50.9	102	80 - 120	51.1	103	0	15

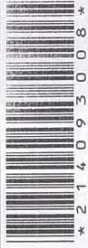
General Chemistry Quality Control Summary

Analytical Batch Prep Batch	542075 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	B-CMW-1 21409301204 SAMPLE 09/30/2014 18:39 Water	mg/L RDL	Spike Added	1364800MS				1364800MSD			
						1364813 MS 09/30/2014 19:31 Water	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
14797-55-8	Nitrate		Units Result	1.46	0.050	2.50	3.98	101	80 - 120	4.00	102	0	15



Client ID: 214093008
SDG: 214093008
Due Date: 10/09/14

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

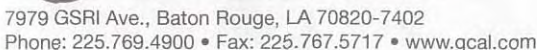


* 2 1 4 0 9 3 0 0 8 *

SAMPLE DELIVERY GROUP 214093008		CHECKLIST						
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX	Were all samples received using proper thermal preservation?	☒	YES	☐	NO	☐	NA
		When used, were all custody seals intact?	☒		☒		☐	
		Were all samples received in proper containers?	☒		☒		☐	
Profile Number 249065	Received By Saucier, Charlotte M.	Were all samples received using proper chemical preservation?	☒		☒		☐	
		Was preservative added to any container at the lab?	☐		☐		☒	
		Were all containers received in good condition?	☒		☒		☐	
		Were all VOA vials received with no head space?	☒		☒		☐	
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/30/14	Do all sample labels match the Chain of Custody?	☒		☒		☐	
		Did the Chain of Custody list the sampling technician?	☒		☒		☐	
		Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐		☐		☒	

COOLERS		DISCREPANCIES		LAB PRESERVATIONS	
Airbill 7713 1751 5344	Thermometer ID: E24	Temp(°C) 2.1	None	None	

NOTES	



Client ID: 4829 - AMEC Environment & Infrastructure, Inc.

SDG: 214093008



Due Date: 10/09/14

Report to:						Bill to:						Analytical Requests & Method								GCAL use only:						
Client: AMEC E&I Address: 1075 Big Sandy Rd. Kennesaw, GA 30144 Contact: david.morris@amec.com Phone: 770-547-4409 E-mail:						Client: Address: Contact: Phone: E-mail:						VOC's TOC Methanediene / Ethane Chloride + Sulfate NITRATE Sulfide								Custody Seal 249 used ☒ yes ☐ no intact ☒ yes ☐ no Temperature °C 2.1 EZ4						
P.O. Number		Project Name/Number Woodall Creek MNA #1																								
Sampled By: Daniel Morris & Tala Monickas																										
Matrix¹	Date	Time (2400)	Comp	Grab	Sample Description	No Con-tainers ↓	Hcl	Hcl	Hcl	HC	HC	CHLORIDE + SULFATE	NITRATE	SULFIDE												
W	9/29	1035		X	HOAMW-3	10	x	x	x	x	x	x	x	x												
		1310			HOAMW-5																					
		1420			HOAMW-5I																					
		1105			MTUMW-8																					
		1450			JPMW-22																					
		1105			MJMSD-MTUMW-8																					
↓	↓	/		↓	TRP BLANK	3	↓	*	*	*	*	*	*	*	(DM)											
↓	↓	1105		↓	MS-MTUMW-8MS	10	x	x	x	x	x	x	x	x												
↓	↓	1105		↓	MTNMW-8MSD	10	x	x	x	x	x	x	x	x												
Air Bill No: 7713 1751 5344																										
Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote)																										
Relinquished by: (Signature) HGW Ane z		Date: 9/29/14		Time: 15:00		Received by: (Signature) Naucies		Date: 9/30/14		Time: 9:20		Note:														
Relinquished by: (Signature) Fred Ex		Date: 9/30/14		Time: 9:20		Received by: (Signature)		Date: 		Time: 																
By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.																										

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

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



SAMPLE DELIVERY GROUP 214093008		
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX	
Profile Number 249065	Received By Saucier, Charlotte M.	
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 09/30/14	

CHECKLIST	YES	NO	NA
Were all samples received using proper thermal preservation?	☒	☐	☐
When used, were all custody seals intact?	☒	☐	☐
Were all samples received in proper containers?	☒	☐	☐
Were all samples received using proper chemical preservation?	☒	☐	☐
Was preservative added to any container at the lab?	☐	☒	☐
Were all containers received in good condition?	☒	☐	☐
Were all VOA vials received with no head space?	☒	☐	☐
Do all sample labels match the Chain of Custody?	☒	☐	☐
Did the Chain of Custody list the sampling technician?	☒	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐	☒	☐

COOLERS		
Airbill	Thermometer ID: E24	Temp(°C)
7713 1751 5344		2.1

DISCREPANCIES
None

LAB PRESERVATIONS
None

NOTES

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

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

Report Date 10/13/2014

GCAL Report 214100106



Deliver To AMEC E&I
396 Plasters Ave NE
Atlanta, GA 30324
770-547-4409

Attn Daniel Morris

Project Woodall Creek MNA#1

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.

Report: 214100106

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

VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis, sample 21410010601 (MTMW-9) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilution is reflected in elevated detection limits.

In the EPA 8260B analysis for analytical batch 542543, the MS/MSD exhibited recovery failures. The LCS/LCSD recoveries are acceptable.

In the EPA 8260B analysis for 542462, the MS/MSD recoveries for 2-Chloroethylvinyl ether are not applicable because this compound is not recovered in acidified samples.

CONVENTIONALS

In the EPA 9056A analysis, sample 21410010601 (MTMW-9) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

Laboratory Endorsement

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

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

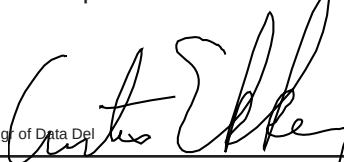
J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

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


Curtis Ekker/Mgr of Data Del

Authorized Signature

GCAL REPORT 214100106

THIS REPORT CONTAINS 24 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410010601	MTMW-9	Water	09/30/2014 11:40	10/01/2014 09:20
21410010602	TRIP BLANK	Water	09/30/2014 00:00	10/01/2014 09:20

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410010601	MTMW-9	Water	09/30/2014 11:40	10/01/2014 09:20

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	3.36	0.200	0.050	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	384	50.0	1.93	ug/L
79-01-6	Trichloroethene	176	50.0	1.61	ug/L
156-59-2	cis-1,2-Dichloroethene	39.7J	50.0	1.03	ug/L

EPA 9060A

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.9	1.0	0.30	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	Sulfate	26.8	2.00	0.500	mg/L

EPA 9056A

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	Chloride	73.4	10.0	2.50	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410010601	MTMW-9	Water	09/30/2014 11:40	10/01/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/07/2014 14:38	LBH	542462

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	1.23U	50.0	1.23	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.09U	50.0	1.09	ug/L
79-00-5	1,1,2-Trichloroethane	1.59U	50.0	1.59	ug/L
75-34-3	1,1-Dichloroethane	1.71U	50.0	1.71	ug/L
75-35-4	1,1-Dichloroethene	2.08U	50.0	2.08	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.05U	50.0	1.05	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1.94U	50.0	1.94	ug/L
106-93-4	1,2-Dibromoethane	1.02U	50.0	1.02	ug/L
95-50-1	1,2-Dichlorobenzene	1.35U	50.0	1.35	ug/L
107-06-2	1,2-Dichloroethane	1.16U	50.0	1.16	ug/L
78-87-5	1,2-Dichloropropane	1.50U	50.0	1.50	ug/L
541-73-1	1,3-Dichlorobenzene	1.38U	50.0	1.38	ug/L
106-46-7	1,4-Dichlorobenzene	0.831U	50.0	0.831	ug/L
78-93-3	2-Butanone	1.42U	50.0	1.42	ug/L
110-75-8	2-Chloroethylvinyl ether	1.46U	50.0	1.46	ug/L
591-78-6	2-Hexanone	1.22U	50.0	1.22	ug/L
108-10-1	4-Methyl-2-pentanone	1.20U	50.0	1.20	ug/L
67-64-1	Acetone	1.93U	50.0	1.93	ug/L
71-43-2	Benzene	1.11U	50.0	1.11	ug/L
75-27-4	Bromodichloromethane	0.834U	50.0	0.834	ug/L
75-25-2	Bromoform	2.15U	50.0	2.15	ug/L
74-83-9	Bromomethane	4.27U	50.0	4.27	ug/L
75-15-0	Carbon disulfide	1.90U	50.0	1.90	ug/L
56-23-5	Carbon tetrachloride	2.48U	50.0	2.48	ug/L
108-90-7	Chlorobenzene	0.828U	50.0	0.828	ug/L
75-00-3	Chloroethane	2.35U	50.0	2.35	ug/L
67-66-3	Chloroform	1.55U	50.0	1.55	ug/L
74-87-3	Chloromethane	1.44U	50.0	1.44	ug/L
110-82-7	Cyclohexane	3.37U	50.0	3.37	ug/L
124-48-1	Dibromochloromethane	0.539U	50.0	0.539	ug/L
75-71-8	Dichlorodifluoromethane	1.45U	50.0	1.45	ug/L
100-41-4	Ethylbenzene	1.09U	50.0	1.09	ug/L
98-82-8	Isopropylbenzene (Cumene)	1.30U	50.0	1.30	ug/L
79-20-9	Methyl Acetate	1.59U	50.0	1.59	ug/L
108-87-2	Methylcyclohexane	1.43U	50.0	1.43	ug/L
75-09-2	Methylene chloride	1.49U	50.0	1.49	ug/L
100-42-5	Styrene	0.894U	50.0	0.894	ug/L
127-18-4	Tetrachloroethene	384	50.0	1.93	ug/L
108-88-3	Toluene	1.22U	50.0	1.22	ug/L
79-01-6	Trichloroethene	176	50.0	1.61	ug/L
75-69-4	Trichlorofluoromethane	1.57U	50.0	1.57	ug/L
76-13-1	Trichlorotrifluoroethane	1.58U	50.0	1.58	ug/L
108-05-4	Vinyl acetate	1.51U	50.0	1.51	ug/L
75-01-4	Vinyl chloride	1.27U	50.0	1.27	ug/L
1330-20-7	Xylene (total)	1.79U	150	1.79	ug/L
156-59-2	cis-1,2-Dichloroethene	39.7J	50.0	1.03	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.24U	50.0	1.24	ug/L
136777-61-2	m,p-Xylene	1.23U	100	1.23	ug/L
95-47-6	o-Xylene	0.554U	50.0	0.554	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.777U	50.0	0.777	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410010601	MTMW-9	Water	09/30/2014 11:40	10/01/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/07/2014 14:38	LBH	542462

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.769U	50.0	0.769	ug/L
10061-02-6	trans-1,3-Dichloropropene	1.28U	50.0	1.28	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	461	ug/L	92	78 - 130
1868-53-7	Dibromofluoromethane	500	507	ug/L	101	77 - 127
2037-26-5	Toluene d8	500	519	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	531	ug/L	106	71 - 127

EPA RSK-175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 17:21	JAR	542552

CAS#	Parameter	Result	RDL	MDL	Units
74-84-0	Ethane	0.087U	1.00	0.087	ug/L
74-85-1	Ethene	0.071U	1.00	0.071	ug/L
74-82-8	Methane	0.435U	2.00	0.435	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	42.4	ug/L	105	40 - 143

EPA 9060A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/03/2014 13:13	KGL2	542274

CAS#	Parameter	Result	RDL	MDL	Units
C-012	Total Organic Carbon	1.9	1.0	0.30	mg/L

SM 4500-S2 F-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/07/2014 08:45	DMT	542452

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8	Sulfide	2.00U	2.00	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410010601	MTMW-9	Water	09/30/2014 11:40	10/01/2014 09:20

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/01/2014 11:57	JEM	542075
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		3.36	0.200	0.050	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	10/01/2014 12:14	JEM	542075
CAS#	Parameter		Result	RDL	MDL	Units
14808-79-8	Sulfate		26.8	2.00	0.500	mg/L

EPA 9056A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	10/08/2014 13:23	JEM	542415
CAS#	Parameter		Result	RDL	MDL	Units
16887-00-6	Chloride		73.4	10.0	2.50	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410010602	TRIP BLANK	Water	09/30/2014 00:00	10/01/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 13:51	JCK	542543

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410010602	TRIP BLANK	Water	09/30/2014 00:00	10/01/2014 09:20

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/08/2014 13:51	JCK	542543

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	45.8	ug/L	92	78 - 130
1868-53-7	Dibromofluoromethane	50	49.8	ug/L	100	77 - 127
2037-26-5	Toluene d8	50	51.1	ug/L	102	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.5	ug/L	101	71 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch		542462	Client ID		MB542462		LCS542462		LCSD542462	
Prep Batch		N/A	GCAL ID	1366898	1366899	1366900	LCS		LCSD	
			Sample Type	Method Blank			10/07/2014 08:55		10/07/2014 09:17	
			Analytical Date	10/07/2014 10:48			Water		Water	
			Matrix	Water						
EPA 8260B										
				Units	ug/L	Spike		Control	Result	RPD
				Result	RDL	Added		Limits % R		Limit
67-64-1	Acetone			0.193U	0.193	50.0		90	44.9	99
75-27-4	Bromodichloromethane			0.083U	0.083	50.0		92	45.9	102
75-25-2	Bromoform			0.215U	0.215	50.0		89	44.6	97
74-83-9	Bromomethane			0.427U	0.427	50.0		83	41.7	101
75-15-0	Carbon disulfide			0.190U	0.190	50.0		101	50.6	104
56-23-5	Carbon tetrachloride			0.248U	0.248	50.0		88	43.8	90
75-00-3	Chloroethane			0.235U	0.235	50.0		96	48.0	99
136777-61-2	m,p-Xylene			0.123U	0.123	100		87	87.0	92
67-66-3	Chloroform			0.155U	0.155	50.0		89	44.7	94
74-87-3	Chloromethane			0.144U	0.144	50.0		103	51.3	89
124-48-1	Dibromochloromethane			0.054U	0.054	50.0		91	45.5	100
75-71-8	Dichlorodifluoromethane			0.145U	0.145	50.0		98	49.0	90
75-34-3	1,1-Dichloroethane			0.171U	0.171	50.0		83	41.3	91
107-06-2	1,2-Dichloroethane			0.116U	0.116	50.0		92	45.9	100
156-59-2	cis-1,2-Dichloroethene			0.103U	0.103	50.0		89	44.5	94
156-60-5	trans-1,2-Dichloroethene			0.077U	0.077	50.0		97	48.7	104
75-09-2	Methylene chloride			0.277J	0.149	50.0		97	48.7	104
78-87-5	1,2-Dichloropropane			0.150U	0.150	50.0		90	45.0	99
10061-01-5	cis-1,3-Dichloropropene			0.124U	0.124	50.0		96	48.0	105
10061-02-6	trans-1,3-Dichloropropene			0.128U	0.128	50.0		97	48.6	109
100-41-4	Ethylbenzene			0.109U	0.109	50.0		84	41.8	88
591-78-6	2-Hexanone			0.122U	0.122	50.0		97	48.5	102
98-82-8	Isopropylbenzene (Cumene)			0.130U	0.130	50.0		94	46.8	97
78-93-3	2-Butanone			0.142U	0.142	50.0		91	45.3	95
108-10-1	4-Methyl-2-pentanone			0.120U	0.120	50.0		97	48.3	103
100-42-5	Styrene			0.089U	0.089	50.0		96	48.0	102
127-18-4	Tetrachloroethene			0.193U	0.193	50.0		85	42.4	87
79-34-5	1,1,2,2-Tetrachloroethane			0.109U	0.109	50.0		96	48.0	108
120-82-1	1,2,4-Trichlorobenzene			0.105U	0.105	50.0		96	47.8	107
71-55-6	1,1,1-Trichloroethane			0.123U	0.123	50.0		83	41.7	85
79-00-5	1,1,2-Trichloroethane			0.159U	0.159	50.0		87	43.4	96
75-69-4	Trichlorofluoromethane			0.157U	0.157	50.0		99	49.3	101
75-01-4	Vinyl chloride			0.127U	0.127	50.0		99	49.6	91

GC/MS Volatiles Quality Control Summary

Analytical Batch		542462	Client ID		MB542462		LCS542462		LCSD542462		RPD	
Prep Batch		N/A	GCAL ID		1366898		1366899		1366900		Limit	
			Sample Type		Method Blank		LCS		LCSD			
			Analytical Date		10/07/2014 10:48		10/07/2014 08:55		10/07/2014 09:17			
			Matrix		Water		Water		Water			
EPA 8260B			Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	Limit
			Result	RDL	Added			Limits % R				
95-47-6	o-Xylene		0.055U	0.055	50.0		45.5	91	73 - 130	48.8	98	7
96-12-8	1,2-Dibromo-3-chloropropane		0.194U	0.194	50.0		47.1	94	57 - 121	51.2	102	8
106-93-4	1,2-Dibromoethane		0.102U	0.102	50.0		42.9	86	70 - 124	47.9	96	11
108-05-4	Vinyl acetate		0.151U	0.151	50.0		45.7	91	54 - 147	47.8	96	4
1634-04-4	tert-Butyl methyl ether (MTBE)		0.078U	0.078	50.0		47.5	95	71 - 125	52.4	105	10
1330-20-7	Xylene (total)		0.179U	0.179	150		133	89	74 - 127	140	93	5
108-87-2	Methylcyclohexane		0.143U	0.143	50.0		44.1	88	67 - 138	45.4	91	3
110-82-7	Cyclohexane		0.337U	0.337	50.0		44.5	89	69 - 132	44.3	89	1
79-20-9	Methyl Acetate		0.159U	0.159	50.0		48.0	96	57 - 139	52.1	104	8
76-13-1	Trichlorotrifluoroethane		0.158U	0.158	50.0		46.8	94	72 - 136	48.5	97	4
110-75-8	2-Chloroethylvinyl ether		0.146U	0.146	50.0		33.1	66	56 - 124	36.1	72	9
541-73-1	1,3-Dichlorobenzene		0.138U	0.138	50.0		44.7	89	74 - 126	48.8	98	9
106-46-7	1,4-Dichlorobenzene		0.083U	0.083	50.0		44.0	88	72 - 122	48.6	97	10
95-50-1	1,2-Dichlorobenzene		0.135U	0.135	50.0		43.9	88	71 - 126	49.3	99	12
75-35-4	1,1-Dichloroethene		0.208U	0.208	50.0		47.8	96	69 - 129	48.5	97	1
71-43-2	Benzene		0.111U	0.111	50.0		45.2	90	70 - 129	47.2	94	4
79-01-6	Trichloroethene		0.161U	0.161	50.0		43.6	87	76 - 129	45.7	91	5
108-88-3	Toluene		0.122U	0.122	50.0		44.0	88	72 - 120	46.5	93	6
108-90-7	Chlorobenzene		0.083U	0.083	50.0		43.9	88	74 - 123	47.1	94	7
Surrogate												
460-00-4	4-Bromofluorobenzene		47.2	94	50		50	100	78 - 130	48.5	97	
1868-53-7	Dibromofluoromethane		48.9	98	50		49.1	98	77 - 127	47.3	95	
2037-26-5	Toluene d8		51.6	103	50		49.1	98	76 - 134	48.7	97	
17060-07-0	1,2-Dichloroethane-d4		51.2	102	50		51.3	103	71 - 127	50	100	

GC/MS Volatiles Quality Control Summary

Analytical Batch		Client ID		M-098-10		M-098-10-MS		M-098-10-MSD	
542462	N/A	GCAL ID	21410022313	21410022321	21410022322	MS		MSD	
Prep Batch		Sample Type	SAMPLE	MS		10/07/2014 15:01		10/07/2014 15:23	
		Analytical Date	10/07/2014 11:11	Water		Water		Water	
EPA 8260B		Matrix	Units	ug/L	Spike	Result	% R	Control	RPD
			Result	RDL	Added			Limits % R	Limit
67-64-1	Acetone		0.00	0.193	50.0	29.0	58	44 - 156	2
75-27-4	Bromodichloromethane		0.00	0.083	50.0	52.4	105	74 - 125	1
76-13-1	Trichlorotrifluoroethane		0.00	0.158	50.0	52.5	105	72 - 136	2
75-25-2	Bromoform		0.00	0.215	50.0	50.7	101	64 - 122	0
74-83-9	Bromomethane		0.00	0.427	50.0	45.1	90	47 - 138	15
75-15-0	Carbon disulfide		0.00	0.190	50.0	52.9	106	69 - 136	1
56-23-5	Carbon tetrachloride		0.00	0.248	50.0	52.2	104	76 - 128	3
75-00-3	Chloroethane		0.00	0.235	50.0	45.6	91	62 - 141	7
136777-61-2	m,p-Xylene		0.00	0.123	100	97.6	98	74 - 126	1
67-66-3	Chloroform		1.73	0.155	50.0	52.3	101	75 - 122	1
74-87-3	Chloromethane		0.00	0.144	50.0	47.7	95	59 - 132	6
124-48-1	Dibromochloromethane		0.00	0.054	50.0	50.8	102	71 - 123	1
75-71-8	Dichlorodifluoromethane		0.00	0.145	50.0	50.1	100	58 - 140	2
75-34-3	1,1-Dichloroethane		3.33	0.171	50.0	51.9	97	74 - 127	0
107-06-2	1,2-Dichloroethane		10.4	0.116	50.0	63.9	107	71 - 129	1
75-09-2	Methylene chloride		0.00	0.149	50.0	52.6	105	68 - 132	0
78-87-5	1,2-Dichloropropane		0.00	0.150	50.0	51.0	102	72 - 128	0
10061-01-5	cis-1,3-Dichloropropene		0.00	0.124	50.0	52.7	105	71 - 132	1
10061-02-6	trans-1,3-Dichloropropene		0.00	0.128	50.0	54.9	110	71 - 131	1
100-41-4	Ethylbenzene		0.00	0.109	50.0	47.4	95	74 - 126	1
591-78-6	2-Hexanone		0.00	0.122	50.0	50.6	101	50 - 135	2
98-82-8	Isopropylbenzene (Cumene)		0.00	0.130	50.0	53.4	107	71 - 125	1
78-93-3	2-Butanone		0.00	0.142	50.0	43.1	86	58 - 137	1
108-10-1	4-Methyl-2-pentanone		0.00	0.120	50.0	57.6	115	57 - 132	3
100-42-5	Styrene		0.00	0.089	50.0	53.3	107	71 - 127	0
95-50-1	1,2-Dichlorobenzene		0.00	0.135	50.0	50.3	101	71 - 126	1
127-18-4	Tetrachloroethene		0.00	0.193	50.0	49.1	98	68 - 128	3
79-34-5	1,1,2,2-Tetrachloroethane		0.00	0.109	50.0	57.5	115	70 - 122	2
120-82-1	1,2,4-Trichlorobenzene		0.00	0.105	50.0	52.4	105	61 - 135	6
71-55-6	1,1,1-Trichloroethane		0.00	0.123	50.0	48.3	97	76 - 126	2
79-00-5	1,1,2-Trichloroethane		0.00	0.159	50.0	49.7	99	72 - 121	0
156-60-5	trans-1,2-Dichloroethene		0.00	0.077	50.0	55.1	110	69 - 132	1
156-59-2	cis-1,2-Dichloroethene		0.213	0.103	50.0	51.4	102	73 - 130	0

GC/MS Volatiles Quality Control Summary

Analytical Batch		542462	Client ID		M-098-10		M-098-10-MS		M-098-10-MSD		
Prep Batch		N/A	GCAL ID	21410022313	21410022321	21410022322	MS	10/07/2014 15:01	MSD	10/07/2014 15:23	
			Sample Type	SAMPLE	MS	MSD		10/07/2014 15:01		Water	
			Analytical Date	10/07/2014 11:11	10/07/2014 15:01	10/07/2014 15:23		Water		Water	
			Matrix	Water	Water	Water		Water		Water	
EPA 8260B			Units	ug/L	Spike	Control	% R	Result	% R	RPD	
			Result	RDL	Added	Limits % R				Limit	
75-69-4	Trichlorofluoromethane		0.00	0.157	50.0	72 - 136	110	54.9	54.4	109	30
110-75-8	2-Chloroethylvinyl ether		0.00	0.146	50.0	56 - 124	0*	0.00	0.00	0*	30
75-01-4	Vinyl chloride		0.00	0.127	50.0	68 - 132	104	52.0	52.6	105	30
95-47-6	o-Xylene		0.00	0.055	50.0	73 - 130	103	51.3	51.2	102	30
96-12-8	1,2-Dibromo-3-chloropropane		0.00	0.194	50.0	57 - 121	111	55.5	58.1	116	30
106-93-4	1,2-Dibromoethane		0.00	0.102	50.0	70 - 124	98	49.1	50.9	102	30
108-05-4	Vinyl acetate		0.00	0.151	50.0	54 - 147	96	47.8	48.4	97	30
1634-04-4	tert-Butyl methyl ether (MTBE)		0.00	0.078	50.0	71 - 125	102	50.8	50.9	102	30
541-73-1	1,3-Dichlorobenzene		0.00	0.138	50.0	74 - 126	98	48.8	49.1	98	30
106-46-7	1,4-Dichlorobenzene		0.00	0.083	50.0	72 - 122	96	48.2	48.8	98	30
1330-20-7	Xylene (total)		0.00	0.179	150	74 - 127	99	149	148	99	30
75-35-4	1,1-Dichloroethene		0.00	0.208	50.0	69 - 129	102	51.1	50.4	101	20
71-43-2	Benzene		0.517	0.111	50.0	70 - 129	102	51.7	51.0	101	20
79-01-6	Trichloroethene		0.00	0.161	50.0	76 - 129	99	49.6	48.3	97	20
108-88-3	Toluene		0.00	0.122	50.0	72 - 120	100	50.2	49.7	99	20
108-90-7	Chlorobenzene		0.617	0.083	50.0	74 - 123	99	50.1	49.6	98	20
Surrogate											
460-00-4	4-Bromofluorobenzene				50	78 - 130	99	49.4	49.7	99	
1868-53-7	Dibromofluoromethane				50	77 - 127	99	49.7	49.1	98	
2037-26-5	Toluene d8				50	76 - 134	100	49.8	49.4	99	
17060-07-0	1,2-Dichloroethane-d4				50	71 - 127	102	51.2	50.7	101	

Analytical Batch 542543 Prep Batch N/A		Client ID GCAL ID Sample Type Analytical Date Matrix	MB542543 1367400 Method Blank 10/08/2014 10:48 Water	LC5542543 1367401 LCS 10/08/2014 08:52 Water	LCSD542543 1367402 LCSD 10/08/2014 09:14 Water	RPD Limit					
EPA 8260B			Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD
67-64-1	Acetone		0.193U	0.193	50.0	41.1	82	44 - 156	42.0	84	2
75-27-4	Bromodichloromethane		0.083U	0.083	50.0	48.6	97	74 - 125	49.5	99	2
75-25-2	Bromoform		0.215U	0.215	50.0	45.7	91	64 - 122	47.4	95	4

GC/MS Volatiles Quality Control Summary

Analytical Batch		542543	Client ID		MB542543		LCS542543		LCS542543		LCS542543	
Prep Batch		N/A	GCAL ID		1367400		1367400		1367401		1367402	
			Sample Type		Method Blank		LCS		LCS		LCS	
			Analytical Date		10/08/2014 10:48		10/08/2014 08:52		10/08/2014 08:52		10/08/2014 09:14	
			Matrix		Water		Water		Water		Water	
EPA 8260B			Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
			Result	RDL	Added			Limits % R			Limit	Limit
74-83-9	Bromomethane		0.427U	0.427	50.0	42.3	85	47 - 138	49.4	99	15	30
75-15-0	Carbon disulfide		0.190U	0.190	50.0	46.8	94	69 - 136	47.2	94	1	30
56-23-5	Carbon tetrachloride		0.248U	0.248	50.0	47.8	96	76 - 128	48.2	96	1	30
75-00-3	Chloroethane		0.235U	0.235	50.0	42.5	85	62 - 141	43.2	86	2	30
136777-61-2	m,p-Xylene		0.123U	0.123	100	90.0	90	74 - 126	91.6	92	2	30
67-66-3	Chloroform		0.155U	0.155	50.0	47.5	95	75 - 122	47.9	96	1	30
74-87-3	Chloromethane		0.144U	0.144	50.0	47.6	95	59 - 132	51.1	102	7	30
124-48-1	Dibromochloromethane		0.054U	0.054	50.0	47.7	95	71 - 123	49.2	98	3	30
75-71-8	Dichlorodifluoromethane		0.145U	0.145	50.0	46.9	94	58 - 140	47.4	95	1	30
75-34-3	1,1-Dichloroethane		0.171U	0.171	50.0	45.8	92	74 - 127	46.8	94	2	30
107-06-2	1,2-Dichloroethane		0.116U	0.116	50.0	47.5	95	71 - 129	48.4	97	2	30
156-59-2	cis-1,2-Dichloroethene		0.103U	0.103	50.0	47.7	95	73 - 130	48.6	97	2	30
156-60-5	trans-1,2-Dichloroethene		0.077U	0.077	50.0	47.1	94	69 - 132	47.1	94	0	30
75-09-2	Methylene chloride		0.149U	0.149	50.0	45.7	91	68 - 132	46.7	93	2	30
78-87-5	1,2-Dichloropropane		0.150U	0.150	50.0	47.6	95	72 - 128	49.1	98	3	30
10061-01-5	cis-1,3-Dichloropropene		0.124U	0.124	50.0	50.4	101	71 - 132	51.2	102	2	30
10061-02-6	trans-1,3-Dichloropropene		0.128U	0.128	50.0	51.9	104	71 - 131	52.9	106	2	30
100-41-4	Ethylbenzene		0.109U	0.109	50.0	43.6	87	74 - 126	43.8	88	1	30
591-78-6	2-Hexanone		0.122U	0.122	50.0	49.0	98	50 - 135	51.5	103	5	30
98-82-8	Isopropylbenzene (Cumene)		0.130U	0.130	50.0	49.6	99	71 - 125	50.5	101	2	30
78-93-3	2-Butanone		0.142U	0.142	50.0	47.5	95	58 - 137	48.6	97	2	30
108-10-1	4-Methyl-2-pentanone		0.120U	0.120	50.0	49.7	99	57 - 132	51.9	104	4	30
100-42-5	Styrene		0.089U	0.089	50.0	49.3	99	71 - 127	50.4	101	2	30
127-18-4	Tetrachloroethene		0.193U	0.193	50.0	45.6	91	68 - 128	45.8	92	0	30
79-34-5	1,1,2,2-Tetrachloroethane		0.109U	0.109	50.0	51.4	103	70 - 122	53.5	107	4	30
120-82-1	1,2,4-Trichlorobenzene		0.105U	0.105	50.0	52.9	106	61 - 135	55.0	110	4	30
71-55-6	1,1,1-Trichloroethane		0.123U	0.123	50.0	45.1	90	76 - 126	45.3	91	0	30
79-00-5	1,1,2-Trichloroethane		0.159U	0.159	50.0	46.5	93	72 - 121	47.7	95	3	30
75-69-4	Trichlorofluoromethane		0.157U	0.157	50.0	48.1	96	72 - 136	48.4	97	1	30
75-01-4	Vinyl chloride		0.127U	0.127	50.0	47.7	95	68 - 132	50.1	100	5	30
95-47-6	o-Xylene		0.055U	0.055	50.0	47.9	96	73 - 130	48.9	98	2	30
96-12-8	1,2-Dibromo-3-chloropropane		0.194U	0.194	50.0	51.6	103	57 - 121	51.6	103	0	30
106-93-4	1,2-Dibromoethane		0.102U	0.102	50.0	45.9	92	70 - 124	48.0	96	4	30

GC/MS Volatiles Quality Control Summary

Analytical Batch		542543	Client ID		MB542543		LCS542543		LCS542543		RPD Limit	
Prep Batch		N/A	GCAL ID		1367400		1367401		1367402		RPD	
			Sample Type		Method Blank		LCS		LCS			
			Analytical Date		10/08/2014 10:48		10/08/2014 08:52		10/08/2014 09:14			
			Matrix		Water		Water		Water			
EPA 8260B			Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	Limit
			Result	RDL	Added			Limits % R				
108-05-4	Vinyl acetate		0.151U	0.151	50.0	49.3	99	54 - 147	50.2	100	2	30
1634-04-4	tert-Butyl methyl ether (MTBE)		0.078U	0.078	50.0	44.1	88	71 - 125	45.3	91	3	30
1330-20-7	Xylene (total)		0.179U	0.179	150	138	92	74 - 127	141	94	2	30
108-87-2	Methylcyclohexane		0.143U	0.143	50.0	48.4	97	67 - 138	48.1	96	1	30
110-82-7	Cyclohexane		0.337U	0.337	50.0	50.2	100	69 - 132	50.5	101	1	30
79-20-9	Methyl Acetate		0.159U	0.159	50.0	46.7	93	57 - 139	47.1	94	1	30
76-13-1	Trichlorotrifluoroethane		0.158U	0.158	50.0	46.6	93	72 - 136	45.6	91	2	30
110-75-8	2-Chloroethylvinyl ether		0.146U	0.146	50.0	39.6	79	56 - 124	42.4	85	7	30
541-73-1	1,3-Dichlorobenzene		0.138U	0.138	50.0	48.0	96	74 - 126	49.2	98	2	30
106-46-7	1,4-Dichlorobenzene		0.083U	0.083	50.0	47.3	95	72 - 122	48.4	97	2	30
95-50-1	1,2-Dichlorobenzene		0.135U	0.135	50.0	47.1	94	71 - 126	50.5	101	7	30
75-35-4	1,1-Dichloroethene		0.208U	0.208	50.0	44.5	89	69 - 129	45.6	91	2	20
71-43-2	Benzene		0.111U	0.111	50.0	47.2	94	70 - 129	48.3	97	2	20
79-01-6	Trichloroethene		0.161U	0.161	50.0	45.3	91	76 - 129	45.4	91	0	20
108-88-3	Toluene		0.122U	0.122	50.0	46.0	92	72 - 120	47.2	94	3	20
108-90-7	Chlorobenzene		0.083U	0.083	50.0	45.4	91	74 - 123	46.2	92	2	20
Surrogate												
460-00-4	4-Bromofluorobenzene		45.8	92	50	49.3	99	78 - 130	49.6	99		
1868-53-7	Dibromofluoromethane		50.6	101	50	49	98	77 - 127	48.8	98		
2037-26-5	Toluene d8		51.1	102	50	49.3	99	76 - 134	49.7	99		
17060-07-0	1,2-Dichloroethane-d4		51.5	103	50	51.2	102	71 - 127	51.1	102		

Analytical Batch 542543 Prep Batch N/A		Client ID GCAL ID Sample Type Analytical Date Matrix	WIMW02_73 21410072503 SAMPLE 10/08/2014 11:21 Water	WIMW02_73 MS 21410072515 MS 10/08/2014 12:20 Water	WIMW02_73 MSD 21410072516 MSD 10/08/2014 12:42 Water							
EPA 8260B			Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	Limit
67-64-1	Acetone		0.00	0.967	250	122	49	44 - 156	127	51	4	30
75-27-4	Bromodichloromethane		0.00	0.417	250	256	102	74 - 125	252	101	2	30
76-13-1	Trichlorotrifluoroethane		0.00	0.790	250	234	94	72 - 136	222	89	5	30

GC/MS Volatiles Quality Control Summary

Analytical Batch Prep Batch	542543 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	WIMW02_73 21410072503 SAMPLE 10/08/2014 11:21 Water	ug/L RDL	Spike Added	Units Result	WIMW02_73 MS 21410072515 MS 10/08/2014 12:20 Water	Control Limits % R	% R	Result	% R	RPD	RPD Limit	WIMW02_73 MSD 21410072516 MSD 10/08/2014 12:42 Water
EPA 8260B														
75-25-2	Bromoform		0.00	1.08	250		245	98	98	246	98	0	30	
74-83-9	Bromomethane		0.00	2.14	250		235	94	94	241	96	3	30	
75-15-0	Carbon disulfide		0.00	0.950	250		239	96	96	234	94	2	30	
56-23-5	Carbon tetrachloride		0.00	1.24	250		253	101	101	246	98	3	30	
75-00-3	Chloroethane		0.00	1.18	250		210	84	84	208	83	1	30	
136777-61-2	m,p-Xylene		0.00	0.617	500		478	96	96	464	93	3	30	
67-66-3	Chloroform		0.00	0.775	250		249	100	100	243	97	2	30	
74-87-3	Chloromethane		0.00	0.718	250		253	101	101	251	100	1	30	
124-48-1	Dibromochloromethane		0.00	0.270	250		254	102	102	252	101	1	30	
75-71-8	Dichlorodifluoromethane		0.00	0.724	250		245	98	98	239	96	2	30	
75-34-3	1,1-Dichloroethane		40.8	0.856	250		281	96	96	276	94	2	30	
107-06-2	1,2-Dichloroethane		0.00	0.591	250		249	100	100	248	99	0	30	
75-09-2	Methylene chloride		0.00	0.745	250		236	94	94	233	93	1	30	
78-87-5	1,2-Dichloropropane		0.00	0.752	250		252	101	101	250	100	1	30	
10061-01-5	cis-1,3-Dichloropropene		0.00	0.621	250		264	106	106	259	104	2	30	
10061-02-6	trans-1,3-Dichloropropene		0.00	0.639	250		267	107	107	267	107	0	30	
100-41-4	Ethylbenzene		0.00	0.545	250		229	92	92	225	90	2	30	
591-78-6	2-Hexanone		0.00	0.612	250		233	93	93	243	97	4	30	
98-82-8	Isopropylbenzene (Cumene)		0.00	0.651	250		260	104	104	253	101	3	30	
78-93-3	2-Butanone		0.00	0.711	250		199	80	80	202	81	1	30	
108-10-1	4-Methyl-2-pentanone		0.00	0.600	250		266	106	106	271	108	2	30	
100-42-5	Styrene		0.00	0.447	250		262	105	105	257	103	2	30	
95-50-1	1,2-Dichlorobenzene		0.00	0.674	250		255	102	102	253	101	1	30	
127-18-4	Tetrachloroethene		518	0.963	250		672	62*	62*	645	51*	4	30	
79-34-5	1,1,2,2-Tetrachloroethane		0.00	0.546	250		272	109	109	279	112	3	30	
120-82-1	1,2,4-Trichlorobenzene		0.00	0.526	250		258	103	103	265	106	3	30	
71-55-6	1,1,1-Trichloroethane		34.6	0.615	250		265	92	92	259	90	2	30	
79-00-5	1,1,2-Trichloroethane		0.00	0.795	250		245	98	98	240	96	2	30	
156-60-5	trans-1,2-Dichloroethene		0.00	0.385	250		245	98	98	240	96	2	30	
156-59-2	cis-1,2-Dichloroethene		38.3	0.517	250		293	102	102	289	100	1	30	
75-69-4	Trichlorofluoromethane		0.00	0.785	250		246	98	98	240	96	2	30	
75-01-4	Vinyl chloride		0.00	0.636	250		251	100	100	253	101	1	30	
95-47-6	o-Xylene		0.00	0.277	250		252	101	101	247	99	2	30	

GC/MS Volatiles Quality Control Summary

Analytical Batch Prep Batch	542543 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix		WIMW02_73 21410072503 SAMPLE 10/08/2014 11:21 Water		WIMW02_73 MS 21410072515 MS 10/08/2014 12:20 Water		WIMW02_73 MSD 21410072516 MSD 10/08/2014 12:42 Water		RPD Limit		
		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R			
EPA 8260B												
96-12-8	1,2-Dibromo-3-chloropropane		0.00	0.971	250	261	104	57 - 121	272	109	4	30
106-93-4	1,2-Dibromoethane		0.00	0.512	250	247	99	70 - 124	247	99	0	30
1634-04-4	tert-Butyl methyl ether (MTBE)		0.00	0.389	250	227	91	71 - 125	232	93	2	30
541-73-1	1,3-Dichlorobenzene		0.00	0.689	250	240	96	74 - 126	242	97	1	30
108-87-2	Methylcyclohexane		0.00	0.717	250	254	102	67 - 138	241	96	5	30
106-46-7	1,4-Dichlorobenzene		0.00	0.416	250	235	94	72 - 122	235	94	0	30
110-82-7	Cyclohexane		0.00	1.69	250	262	105	69 - 132	254	102	3	30
75-35-4	1,1-Dichloroethene		235	1.04	250	422	75	69 - 129	413	71	2	20
71-43-2	Benzene		0.00	0.555	250	250	100	70 - 129	244	98	2	20
79-01-6	Trichloroethene		39.4	0.807	250	271	93	76 - 129	265	90	2	20
79-20-9	Methyl Acetate		0.00	0.797	250	241	96	57 - 139	238	95	1	30
108-88-3	Toluene		0.00	0.609	250	245	98	72 - 120	238	95	3	20
108-90-7	Chlorobenzene		0.00	0.414	250	240	96	74 - 123	238	95	1	20
Surrogate												
460-00-4	4-Bromofluorobenzene				250	249	100	78 - 130	247	99		
1868-53-7	Dibromofluoromethane				250	246	98	77 - 127	247	99		
2037-26-5	Toluene d8				250	248	99	76 - 134	248	99		
17060-07-0	1,2-Dichloroethane-d4				250	253	101	71 - 127	257	103		

General Chromatography Quality Control Summary

Analytical Batch	542552	Client ID	MB542552	LCS542552		
Prep Batch	N/A	GCAL ID	1367429	1367430		
		Sample Type	Method Blank	LCS		
		Analytical Date	10/08/2014 15:09	10/08/2014 14:55		
		Matrix	Water	Water		
EPA RSK-175		Units	ug/L	Spike	Result	Control
		Result	RDL	Added	% R	Limits % R
74-82-8	Methane	0.435U	0.435	17.5	15.1	39 - 120
74-85-1	Ethene	0.071U	0.071	3.06	2.78	45 - 134
74-84-0	Ethane	0.087U	0.087	3.28	3.09	45 - 128
Surrogate						
115-07-1	Propene	28.2	70	40.5	25.3	40 - 143

Analytical Batch	542552	Client ID	MTWMW-8	MTWMW-8 MS		
Prep Batch	N/A	GCAL ID	21409300804	21409300807		
		Sample Type	SAMPLE	MS		
		Analytical Date	10/08/2014 16:24	10/08/2014 16:43		
		Matrix	Water	Water		
EPA RSK-175		Units	ug/L	Spike	Result	Control
		Result	RDL	Added	% R	Limits % R
74-82-8	Methane	0.00	0.435	17.5	15.1	39 - 120
74-85-1	Ethene	0.00	0.071	3.06	3.06	45 - 134
74-84-0	Ethane	0.00	0.087	3.28	3.25	45 - 128
Surrogate						
115-07-1	Propene			40.5	32.1	40 - 143
				Result	% R	RPD
				14.5	83	4
				2.89	94	6
				2.96	90	9
				30.7	76	

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	542274 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542274 1365906 Method Blank 10/03/2014 01:07 Water	mg/L RDL	Spike Added	LCS542274 1365907 LCS 10/03/2014 09:52 Water		
						Units Result	Result	Control Limits % R
C-012	Total Organic Carbon		0.30U	0.30	50.0		48.5	80 - 120

Analytical Batch Prep Batch	542274 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	Ave C (003) 21410021303 SAMPLE 10/03/2014 15:02 Water	mg/L RDL	Spike Added	1365565MS 1366303 MS 10/03/2014 15:19 Water		
						Units Result	Result	Control Limits % R
C-012	Total Organic Carbon		4.6	0.30	50.0		54.3	75 - 125
							54.0	
							% R	% R
							99	99
							RPD	RPD
							Limit	Limit
							25	25

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	542452 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542452 1366848 Method Blank 10/07/2014 08:45 Water	mg/L RDL	Spike Added	LCS542452 1366849 LCS 10/07/2014 08:45 Water		
						Result	% R	Control Limits % R
SM 4500-S2 F-2011			Units Result	2.00U	25.0	26.1	104	80 - 120
18496-25-8	Sulfide			2.00				

General Chemistry Quality Control Summary

Analytical Batch		542075	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542075 1364779 Method Blank 09/30/2014 15:45 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
Prep Batch	N/A								
EPA 9056A									
14797-55-8	Nitrate				0.050U	0.050	2.38	95	80 - 120
14808-79-8	Sulfate				0.050U	0.050	2.47	99	80 - 120

Analytical Batch Prep Batch	542415 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB542415 1366515 Method Blank 10/07/2014 17:04 Water	mg/L RDL	Spike Added	Result	% R	Control Limits % R
EPA 9056A								
16887-00-6	Chloride		0.050U	0.050	2.50	2.63	105	80 - 120

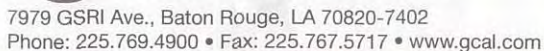


SAMPLE RECEIVING CHECKLIST



* 2 1 4 1 0 0 1 0 6 *

SAMPLE DELIVERY GROUP 214100106	
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX
Profile Number 249065	Received By Saucier, Charlotte M.
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 10/01/14
COOLERS	
Airbill 7713 3111 0600	Thermometer ID: E24 Temp(°C) 3.4
DISCREPANCIES	
None	
LAB PRESERVATIONS	
None	
CHECKLIST	
Were all samples received using proper thermal preservation?	YES ☒ NO ☐ NA ☐
When used, were all custody seals intact?	YES ☒ NO ☐ NA ☐
Were all samples received in proper containers?	YES ☒ NO ☐ NA ☐
Were all samples received using proper chemical preservation?	YES ☒ NO ☐ NA ☐
Was preservative added to any container at the lab?	YES ☐ NO ☒ NA ☐
Were all containers received in good condition?	YES ☒ NO ☐ NA ☐
Were all VOA vials received with no head space?	YES ☒ NO ☐ NA ☐
Do all sample labels match the Chain of Custody?	YES ☒ NO ☐ NA ☐
Did the Chain of Custody list the sampling technician?	YES ☒ NO ☐ NA ☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	YES ☒ NO ☒ NA ☐
NOTES	



Client ID: 4829 - AMEC Environment & Infrastructure, Inc

[illegible]

Due Date: 10/10/14

Report to: Client: AMEC E+I Address: 1075 Big Shanty Rd Kennesaw, GA Contact: Daniel Morris Phone: 770-547-4409 E-mail: daniel.morris@amec.com						Bill to: Client: Address: Contact: Phone: E-mail:						Analytical Requests & Method VOC's TOC Methane, Ethane, Ethylene Chloride / Sulfate Sulfide Nitrate								GCAL use only: Custody Seal used ☐ yes ☒ no intact ☐ yes ☒ no Temperature °C 3.4 EZ4			
P.O. Number			Project Name/Number													☐ Dissolved Analysis Requested ☐ Field filtered ☐ Lab filtered							
Sampled By: Tela Noreikas																							
Matrix¹	Date	Time (2400)	Comp	Grab	Sample Description	No Con-tainers ↓													Preservative ←				
W	9/30	1140		X	mtmw-9 Trip Blank	10	X	X	X	X	X	X							↓ Z				
							X																
Air Bill No:	7713 3111 01000																						
Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote)																							
Relinquished by: (Signature) Tela Noreikas					Date: 9/30/14		Time: 11:45		Received by: (Signature) Hino Auec					Date: 9/30/14		Time: 13:45		Note: Nitrate					
Relinquished by: (Signature) [Signature]					Date: 9/30/14		Time: 14:30		Received by: (Signature) [Signature]					Date:		Time:							
Relinquished by: (Signature) [Signature]					Date: 10/1/14		Time: 19:20		Received by: (Signature) [Signature]					Date: 10/1/14		Time: 19:20		By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.					

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

Matrix¹: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

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



SAMPLE DELIVERY GROUP 214100106			CHECKLIST			YES	NO	NA
Client 4829 - AMEC Environment & Infrastructure, Inc.		Transport Method FEDEX	Were all samples received using proper thermal preservation?			☒	☐	☐
			When used, were all custody seals intact?			☒	☐	☐
Profile Number 249065		Received By Saucier, Charlotte M.	Were all samples received in proper containers?			☒	☐	☐
			Were all samples received using proper chemical preservation?			☒	☐	☐
Line Item(s) 1 - Water TCL VOCs		Receive Date(s) 10/01/14	Was preservative added to any container at the lab?			☐	☒	☐
			Were all containers received in good condition?			☒	☐	☐
			Were all VOA vials received with no head space?			☒	☐	☐
			Do all sample labels match the Chain of Custody?			☒	☐	☐
			Did the Chain of Custody list the sampling technician?			☒	☐	☐
			Was the COC maintained i.e. all signatures, dates and time of receipt included?			☒	☒	☐
COOLERS			DISCREPANCIES			LAB PRESERVATIONS		
Airbill	Thermometer ID: E24	Temp(°C)	None			None		
7713 3111 0600		3.4						
NOTES								

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC

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

Report Date 10/28/2014

GCAL Report 214102001



Deliver To AMEC E&I
396 Plasters Ave NE
Atlanta, GA 30324
770-547-4409

Attn Daniel Morris

Project Woodall Creek

Case Narrative

Client: AMEC Environment & Infrastructure, Inc. **Report:** 214102001

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

This report was revised on 10/28/14. The client ID was revised for all samples.

VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis for analytical batch 543722, the LCS/LCSD RPD is above the control limit for Vinyl chloride.

Laboratory Endorsement

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

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

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

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

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

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

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


Karen Melnick, Quality Assurance Manager

Authorized Signature

GCAL REPORT 214102001

THIS REPORT CONTAINS 39 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200101	S01	Water	10/13/2014 16:05	10/18/2014 09:40
21410200102	S06	Water	10/13/2014 16:00	10/18/2014 09:40
21410200103	S09	Water	10/13/2014 15:48	10/18/2014 09:40
21410200104	S10	Water	10/13/2014 15:42	10/18/2014 09:40
21410200105	S11	Water	10/13/2014 15:37	10/18/2014 09:40
21410200106	S12	Water	10/13/2014 15:32	10/18/2014 09:40
21410200107	S13	Water	10/13/2014 15:24	10/18/2014 09:40
21410200108	S14	Water	10/13/2014 15:19	10/18/2014 09:40
21410200109	S15	Water	10/13/2014 15:14	10/18/2014 09:40
21410200110	S16	Water	10/13/2014 15:08	10/18/2014 09:40
21410200111	S17	Water	10/13/2014 15:02	10/18/2014 09:40
21410200112	S18	Water	10/13/2014 14:56	10/18/2014 09:40
21410200113	S19	Water	10/13/2014 14:50	10/18/2014 09:40
21410200114	PB	Water	10/13/2014 14:42	10/18/2014 09:40

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200101	S01	Water	10/13/2014 16:05	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-64-1	Acetone	16.3	5.00	0.193	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200102	S06	Water	10/13/2014 16:00	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-64-1	Acetone	16.4	5.00	0.193	ug/L
127-18-4	Tetrachloroethene	3.98J	5.00	0.193	ug/L
79-01-6	Trichloroethene	1.54J	5.00	0.161	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200103	S09	Water	10/13/2014 15:48	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.344J	5.00	0.208	ug/L
67-64-1	Acetone	7.01	5.00	0.193	ug/L
127-18-4	Tetrachloroethene	7.54	5.00	0.193	ug/L
79-01-6	Trichloroethene	3.37J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	1.82J	5.00	0.103	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200104	S10	Water	10/13/2014 15:42	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.379J	5.00	0.208	ug/L
67-64-1	Acetone	6.48	5.00	0.193	ug/L
127-18-4	Tetrachloroethene	7.57	5.00	0.193	ug/L
79-01-6	Trichloroethene	3.58J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	2.01J	5.00	0.103	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200105	S11	Water	10/13/2014 15:37	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-64-1	Acetone	7.93	5.00	0.193	ug/L
127-18-4	Tetrachloroethene	7.67	5.00	0.193	ug/L
79-01-6	Trichloroethene	3.53J	5.00	0.161	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200105	S11	Water	10/13/2014 15:37	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
156-59-2	cis-1,2-Dichloroethene	2.01J	5.00	0.103	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200106	S12	Water	10/13/2014 15:32	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-64-1	Acetone	5.85	5.00	0.193	ug/L
127-18-4	Tetrachloroethene	8.56	5.00	0.193	ug/L
79-01-6	Trichloroethene	3.91J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	2.16J	5.00	0.103	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200107	S13	Water	10/13/2014 15:24	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	10.0	5.00	0.193	ug/L
79-01-6	Trichloroethene	4.19J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	2.33J	5.00	0.103	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200108	S14	Water	10/13/2014 15:19	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-64-1	Acetone	5.29	5.00	0.193	ug/L
127-18-4	Tetrachloroethene	10.5	5.00	0.193	ug/L
79-01-6	Trichloroethene	4.47J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	2.76J	5.00	0.103	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200109	S15	Water	10/13/2014 15:14	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	11.0	5.00	0.193	ug/L
79-01-6	Trichloroethene	4.55J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	2.75J	5.00	0.103	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200110	S16	Water	10/13/2014 15:08	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	10.7	5.00	0.193	ug/L
79-01-6	Trichloroethene	4.39J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	2.72J	5.00	0.103	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200111	S17	Water	10/13/2014 15:02	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	10.5	5.00	0.193	ug/L
79-01-6	Trichloroethene	4.37J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	2.76J	5.00	0.103	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200112	S18	Water	10/13/2014 14:56	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	10.2	5.00	0.193	ug/L
79-01-6	Trichloroethene	4.04J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	2.61J	5.00	0.103	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200113	S19	Water	10/13/2014 14:50	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	1.96J	5.00	0.116	ug/L
127-18-4	Tetrachloroethene	8.82	5.00	0.193	ug/L
79-01-6	Trichloroethene	3.59J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	2.20J	5.00	0.103	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200114	PB	Water	10/13/2014 14:42	10/18/2014 09:40

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	6.75	5.00	0.193	ug/L
79-01-6	Trichloroethene	2.77J	5.00	0.161	ug/L
156-59-2	cis-1,2-Dichloroethene	1.90J	5.00	0.103	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200101	S01	Water	10/13/2014 16:05	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 16:14	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	16.3	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200101	S01	Water	10/13/2014 16:05	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 16:14	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51	ug/L	102	78 - 130
1868-53-7	Dibromofluoromethane	50	48.8	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	51.6	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.7	ug/L	97	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200102	S06	Water	10/13/2014 16:00	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 16:36	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	16.4	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	3.98J	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	1.54J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200102	S06	Water	10/13/2014 16:00	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 16:36	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.8	ug/L	102	78 - 130
1868-53-7	Dibromofluoromethane	50	49.2	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	52.5	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.5	ug/L	99	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200103	S09	Water	10/13/2014 15:48	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 16:58	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.344J	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	7.01	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	7.54	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	3.37J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	1.82J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200103	S09	Water	10/13/2014 15:48	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 16:58	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51.9	ug/L	104	78 - 130
1868-53-7	Dibromofluoromethane	50	48.7	ug/L	97	77 - 127
2037-26-5	Toluene d8	50	52.5	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.5	ug/L	101	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200104	S10	Water	10/13/2014 15:42	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 17:20	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.379J	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	6.48	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	7.57	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	3.58J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	2.01J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200104	S10	Water	10/13/2014 15:42	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 17:20	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.6	ug/L	101	78 - 130
1868-53-7	Dibromofluoromethane	50	49.5	ug/L	99	77 - 127
2037-26-5	Toluene d8	50	52.2	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.2	ug/L	100	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200105	S11	Water	10/13/2014 15:37	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 17:42	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	7.93	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	7.67	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	3.53J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	2.01J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200105	S11	Water	10/13/2014 15:37	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 17:42	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51.9	ug/L	104	78 - 130
1868-53-7	Dibromofluoromethane	50	49.2	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	51.6	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.6	ug/L	101	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200106	S12	Water	10/13/2014 15:32	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 18:03	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	5.85	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	8.56	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	3.91J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	2.16J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200106	S12	Water	10/13/2014 15:32	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 18:03	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51.1	ug/L	102	78 - 130
1868-53-7	Dibromofluoromethane	50	49.5	ug/L	99	77 - 127
2037-26-5	Toluene d8	50	51.8	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.7	ug/L	101	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200107	S13	Water	10/13/2014 15:24	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 18:24	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	10.0	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	4.19J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	2.33J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200107	S13	Water	10/13/2014 15:24	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 18:24	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.7	ug/L	101	78 - 130
1868-53-7	Dibromofluoromethane	50	48.9	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	52.6	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.8	ug/L	100	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200108	S14	Water	10/13/2014 15:19	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 18:46	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	5.29	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	10.5	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	4.47J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	2.76J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200108	S14	Water	10/13/2014 15:19	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 18:46	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51.7	ug/L	103	78 - 130
1868-53-7	Dibromofluoromethane	50	49.9	ug/L	100	77 - 127
2037-26-5	Toluene d8	50	51.3	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.3	ug/L	101	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200109	S15	Water	10/13/2014 15:14	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 19:08	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	11.0	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	4.55J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	2.75J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200109	S15	Water	10/13/2014 15:14	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 19:08	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51.8	ug/L	104	78 - 130
1868-53-7	Dibromofluoromethane	50	49.1	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	52.6	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50	ug/L	100	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200110	S16	Water	10/13/2014 15:08	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 19:30	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	10.7	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	4.39J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	2.72J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200110	S16	Water	10/13/2014 15:08	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 19:30	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51.9	ug/L	104	78 - 130
1868-53-7	Dibromofluoromethane	50	49.7	ug/L	99	77 - 127
2037-26-5	Toluene d8	50	52.4	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.4	ug/L	101	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200111	S17	Water	10/13/2014 15:02	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 19:52	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	10.5	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	4.37J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	2.76J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200111	S17	Water	10/13/2014 15:02	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 19:52	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	52.7	ug/L	105	78 - 130
1868-53-7	Dibromofluoromethane	50	48.6	ug/L	97	77 - 127
2037-26-5	Toluene d8	50	52.9	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.8	ug/L	100	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200112	S18	Water	10/13/2014 14:56	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 20:14	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	10.2	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	4.04J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	2.61J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200112	S18	Water	10/13/2014 14:56	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 20:14	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	52.1	ug/L	104	78 - 130
1868-53-7	Dibromofluoromethane	50	49.7	ug/L	99	77 - 127
2037-26-5	Toluene d8	50	52.7	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.6	ug/L	99	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200113	S19	Water	10/13/2014 14:50	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 20:36	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	1.96J	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	8.82	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	3.59J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	2.20J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200113	S19	Water	10/13/2014 14:50	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 20:36	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51.9	ug/L	104	78 - 130
1868-53-7	Dibromofluoromethane	50	48.9	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	52.1	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.4	ug/L	101	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200114	PB	Water	10/13/2014 14:42	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 20:57	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
110-75-8	2-Chloroethylvinyl ether	0.146U	5.00	0.146	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	5.00	0.111	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
110-82-7	Cyclohexane	0.337U	5.00	0.337	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
79-20-9	Methyl Acetate	0.159U	5.00	0.159	ug/L
108-87-2	Methylcyclohexane	0.143U	5.00	0.143	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	6.75	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	2.77J	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
108-05-4	Vinyl acetate	0.151U	5.00	0.151	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	1.90J	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410200114	PB	Water	10/13/2014 14:42	10/18/2014 09:40

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	10/24/2014 20:57	CLH	543722

CAS#	Parameter	Result	RDL	MDL	Units
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	52.3	ug/L	105	78 - 130
1868-53-7	Dibromofluoromethane	50	49.3	ug/L	99	77 - 127
2037-26-5	Toluene d8	50	51.8	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.3	ug/L	99	71 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch		543722	Client ID		MB543722		LCS543722		LCS543722		LCS543722		RPD	
Prep Batch		N/A	GCAL ID	Sample Type	Method Blank	1373778	1373779	1373779	1373780	LCS		RPD Limit		
			Analytical Date	Matrix	10/24/2014 15:39	10/24/2014 13:49	10/24/2014 13:49	10/24/2014 13:49	10/24/2014 14:34	Water				
EPA 8260B														
67-64-1	Acetone		0.193U	ug/L	0.193	50.0	51.9	% R	Control Limits % R	Result	% R	RPD	Limit	
75-27-4	Bromodichloromethane		0.083U		0.083	50.0	49.8	100	74 - 125	47.7	95	4	30	
75-25-2	Bromoform		0.215U		0.215	50.0	52.8	106	64 - 122	53.7	107	2	30	
74-83-9	Bromomethane		0.427U		0.427	50.0	56.5	113	47 - 138	44.6	89	24	30	
75-15-0	Carbon disulfide		0.190U		0.190	50.0	54.1	108	69 - 136	45.0	90	18	30	
56-23-5	Carbon tetrachloride		0.248U		0.248	50.0	50.5	101	76 - 128	46.4	93	8	30	
75-00-3	Chloroethane		0.235U		0.235	50.0	41.3	83	62 - 141	33.9	68	20	30	
136777-61-2	m,p-Xylene		0.123U		0.123	100	102	102	74 - 126	98.2	98	4	30	
67-66-3	Chloroform		0.155U		0.155	50.0	47.6	95	75 - 122	45.0	90	6	30	
74-87-3	Chloromethane		0.144U		0.144	50.0	52.7	105	59 - 132	38.9	78	30	30	
124-48-1	Dibromochloromethane		0.054U		0.054	50.0	50.7	101	71 - 123	50.7	101	0	30	
75-71-8	Dichlorodifluoromethane		0.145U		0.145	50.0	51.2	102	58 - 140	41.0	82	22	30	
75-34-3	1,1-Dichloroethane		0.171U		0.171	50.0	46.5	93	74 - 127	43.8	88	6	30	
107-06-2	1,2-Dichloroethane		0.116U		0.116	50.0	47.6	95	71 - 129	46.1	92	3	30	
156-59-2	cis-1,2-Dichloroethene		0.103U		0.103	50.0	48.4	97	73 - 130	45.6	91	6	30	
156-60-5	trans-1,2-Dichloroethene		0.077U		0.077	50.0	49.1	98	69 - 132	44.4	89	10	30	
75-09-2	Methylene chloride		0.149U		0.149	50.0	46.2	92	68 - 132	43.7	87	6	30	
78-87-5	1,2-Dichloropropane		0.150U		0.150	50.0	46.7	93	72 - 128	44.2	88	6	30	
10061-01-5	cis-1,3-Dichloropropene		0.124U		0.124	50.0	46.6	93	71 - 132	44.0	88	6	30	
10061-02-6	trans-1,3-Dichloropropene		0.128U		0.128	50.0	47.3	95	71 - 131	45.1	90	5	30	
100-41-4	Ethylbenzene		0.109U		0.109	50.0	49.3	99	74 - 126	47.1	94	5	30	
591-78-6	2-Hexanone		0.122U		0.122	50.0	54.0	108	50 - 135	56.9	114	5	30	
98-82-8	Isopropylbenzene (Cumene)		0.130U		0.130	50.0	54.3	109	71 - 125	51.8	104	5	30	
78-93-3	2-Butanone		0.142U		0.142	50.0	53.0	106	58 - 137	53.6	107	1	30	
108-10-1	4-Methyl-2-pentanone		0.120U		0.120	50.0	51.7	103	57 - 132	54.2	108	5	30	
100-42-5	Styrene		0.089U		0.089	50.0	53.5	107	71 - 127	52.0	104	3	30	
127-18-4	Tetrachloroethene		0.193U		0.193	50.0	50.1	100	68 - 128	49.0	98	2	30	
79-34-5	1,1,2,2-Tetrachloroethane		0.109U		0.109	50.0	48.7	97	70 - 122	47.1	94	3	30	
120-82-1	1,2,4-Trichlorobenzene		0.105U		0.105	50.0	50.9	102	61 - 135	48.9	98	4	30	
71-55-6	1,1,1-Trichloroethane		0.123U		0.123	50.0	51.0	102	76 - 126	46.9	94	8	30	
79-00-5	1,1,2-Trichloroethane		0.159U		0.159	50.0	49.9	100	72 - 121	50.4	101	1	30	
75-69-4	Trichlorofluoromethane		0.157U		0.157	50.0	53.4	107	72 - 136	43.9	88	20	30	
75-01-4	Vinyl chloride		0.127U		0.127	50.0	56.8	114	68 - 132	40.4	81	34*	30	

GC/MS Volatiles Quality Control Summary

Analytical Batch		543722	Client ID		MB543722		LCS543722		LCS543722		LCSD543722			
Prep Batch		N/A	GCAL ID		1373778		1373779		1373779		1373780			
			Sample Type		Method Blank		LCS		LCS		LCSD			
			Analytical Date		10/24/2014 15:39		10/24/2014 13:49		10/24/2014 13:49		10/24/2014 14:34			
			Matrix		Water		Water		Water		Water			
EPA 8260B					Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
95-47-6	o-Xylene				0.055U	0.055	50.0	52.6	105	73 - 130	51.2	102	3	30
96-12-8	1,2-Dibromo-3-chloropropane				0.194U	0.194	50.0	46.6	93	57 - 121	46.5	93	0	30
106-93-4	1,2-Dibromoethane				0.102U	0.102	50.0	49.8	100	70 - 124	49.6	99	0	30
108-05-4	Vinyl acetate				0.151U	0.151	50.0	31.7	63	54 - 147	27.6	55	14	30
1634-04-4	tert-Butyl methyl ether (MTBE)				0.078U	0.078	50.0	47.7	95	71 - 125	45.5	91	5	30
1330-20-7	Xylene (total)				0.179U	0.179	150	154	103	74 - 127	149	99	3	30
108-87-2	Methylcyclohexane				0.143U	0.143	50.0	52.5	105	67 - 138	48.4	97	8	30
110-82-7	Cyclohexane				0.337U	0.337	50.0	52.8	106	69 - 132	48.8	98	8	30
79-20-9	Methyl Acetate				0.159U	0.159	50.0	48.0	96	57 - 139	45.1	90	6	30
76-13-1	Trichlorotrifluoroethane				0.158U	0.158	50.0	53.7	107	72 - 136	45.7	91	16	30
110-75-8	2-Chloroethylvinyl ether				0.146U	0.146	50.0	47.4	95	56 - 124	46.5	93	2	30
541-73-1	1,3-Dichlorobenzene				0.138U	0.138	50.0	49.2	98	74 - 126	47.8	96	3	30
106-46-7	1,4-Dichlorobenzene				0.083U	0.083	50.0	48.9	98	72 - 122	46.8	94	4	30
95-50-1	1,2-Dichlorobenzene				0.135U	0.135	50.0	47.7	95	71 - 126	46.6	93	2	30
75-35-4	1,1-Dichloroethene				0.208U	0.208	50.0	54.7	109	69 - 129	46.1	92	17	20
71-43-2	Benzene				0.111U	0.111	50.0	51.3	103	70 - 129	47.6	95	7	20
79-01-6	Trichloroethene				0.161U	0.161	50.0	49.6	99	76 - 129	47.5	95	4	20
108-88-3	Toluene				0.122U	0.122	50.0	48.1	96	72 - 120	46.6	93	3	20
108-90-7	Chlorobenzene				0.083U	0.083	50.0	48.5	97	74 - 123	47.1	94	3	20
Surrogate														
460-00-4	4-Bromofluorobenzene				51.9	104	50	52.5	105	78 - 130	52.1	104		
1868-53-7	Dibromofluoromethane				49.2	98	50	50.1	100	77 - 127	48.5	97		
2037-26-5	Toluene d8				52	104	50	49.3	99	76 - 134	49.6	99		
17060-07-0	1,2-Dichloroethane-d4				50.3	101	50	50	100	71 - 127	49	98		



Client ID: 4829 - AMEC Environment & Infrastructure, Inc.
SDG: 214102001
Due Date: 10/29/14

Revision 1



SAMPLE RECEIVING CHECKLIST



* 2 1 4 1 0 2 0 0 1 *

SAMPLE DELIVERY GROUP 214102001		CHECKLIST		
		YES	NO	NA
Client 4829 - AMEC Environment & Infrastructure, Inc.	Transport Method FEDEX	☒	☐	☐
Profile Number 249065	Received By Naquin, Allison	☒	☐	☐
Line Item(s) 1 - Water TCL VOCs	Receive Date(s) 10/18/14	☒	☐	☐
		☒	☐	☐
		☒	☐	☐
		☒	☐	☐
		☒	☐	☐
		☒	☐	☐
		☒	☐	☐
		☒	☐	☐
		☐	☒	☐
		☒	☐	☐
		☒	☐	☐
		☒	☐	☐
		☐	☒	☐

COOLERS		DISCREPANCIES		LAB PRESERVATIONS	
Airbill	Thermometer ID: E24	Temp(°C)		None	
7715 3542 3182		2.2			

NOTES	

APPENDIX C
DEFOORS FERRY GAGE DATA
13 OCTOBER 2014



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[USGS Water Resources](#)

Data Category:

Current Conditions

Geographic Area:

United States

GO

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USGS 02336313 WOODALL CREEK AT DEFOORS FERRY RD, AT ATLANTA, GA

PROVISIONAL DATA SUBJECT TO REVISION

Available data for this site

Time-series: Current/Historical Observations

GO

Click to hide station-specific text



The USGS operation and maintenance of this real-time streamgage and water-quality monitor is funded in cooperation with the City of Atlanta, Georgia.

This station managed by the USGS Atlanta Field Office.

Available Parameters

- ☐ All 8 Available Parameters for this site
- ☐ 00060 Discharge
- ☐ 00065 Gage height
- ☐ 00045 Precipitation
- ☐ 00010 Temperature, water
- ☐ 00095 Specific cond at 25C
- ☐ 00300 Dissolved oxygen
- ☐ 00400 pH
- ☐ 63680 Turbidity, Form Neph

Available Period

2007-10-01 2014-12-17
 2007-10-01 2014-12-17
 2007-10-01 2014-12-17
 2007-10-01 2014-12-17
 2007-10-01 2014-12-17
 2007-10-01 2014-12-17
 2007-10-01 2014-12-17
 2007-10-01 2014-12-17
 2007-10-01 2014-12-17

Output format

- ☒ Graph
- ☐ Graph w/ stats
- ☐ Graph w/o stats

- Graph w/ (up to 3) parms
- Table
- Tab-separated

Days (0)

[Summary of all available data for this site](#)
[Instantaneous-data availability statement](#)

GO

-- or --

Begin date

End date

Discharge, cubic feet per second

TIME	Oct 13
00:00 EDT	0.87 ^P
00:15 EDT	0.87 ^P
00:30 EDT	0.87 ^P
00:45 EDT	0.87 ^P
01:00 EDT	0.87 ^P
01:15 EDT	0.87 ^P
01:30 EDT	0.80 ^P
01:45 EDT	0.80 ^P
02:00 EDT	0.80 ^P
02:15 EDT	0.80 ^P
02:30 EDT	0.73 ^P
02:45 EDT	0.73 ^P
03:00 EDT	0.73 ^P
03:15 EDT	0.67 ^P
03:30 EDT	0.67 ^P
03:45 EDT	0.67 ^P
04:00 EDT	0.61 ^P
04:15 EDT	0.61 ^P
04:30 EDT	0.61 ^P
04:45 EDT	0.56 ^P
05:00 EDT	0.56 ^P

TIME	Oct 13
05:15 EDT	0.56 ^P
05:30 EDT	0.51 ^P
05:45 EDT	0.56 ^P
06:00 EDT	0.51 ^P
06:15 EDT	0.51 ^P
06:30 EDT	0.51 ^P
06:45 EDT	0.51 ^P
07:00 EDT	0.51 ^P
07:15 EDT	0.51 ^P
07:30 EDT	0.51 ^P
07:45 EDT	0.46 ^P
08:00 EDT	0.51 ^P
08:15 EDT	0.46 ^P
08:30 EDT	0.46 ^P
08:45 EDT	0.46 ^P
09:00 EDT	0.46 ^P
09:15 EDT	0.46 ^P
09:30 EDT	0.46 ^P
09:45 EDT	0.46 ^P
10:00 EDT	0.46 ^P
10:15 EDT	0.46 ^P
10:30 EDT	0.51 ^P
10:45 EDT	0.51 ^P
11:00 EDT	0.46 ^P
11:15 EDT	0.46 ^P
11:30 EDT	0.46 ^P
11:45 EDT	0.46 ^P
12:00 EDT	0.46 ^P
12:15 EDT	

TIME	Oct 13
	0.46 ^P
12:30 EDT	0.46 ^P
12:45 EDT	0.42 ^P
13:00 EDT	0.46 ^P
13:15 EDT	0.46 ^P
13:30 EDT	0.46 ^P
13:45 EDT	0.46 ^P
14:00 EDT	0.46 ^P
14:15 EDT	0.46 ^P
14:30 EDT	0.46 ^P
14:45 EDT	0.51 ^P
15:00 EDT	0.56 ^P
15:15 EDT	0.56 ^P
15:30 EDT	0.56 ^P
15:45 EDT	0.56 ^P
16:00 EDT	0.56 ^P
16:15 EDT	0.56 ^P
16:30 EDT	0.51 ^P
16:45 EDT	0.51 ^P
17:00 EDT	0.56 ^P
17:15 EDT	0.51 ^P
17:30 EDT	0.51 ^P
17:45 EDT	0.51 ^P
18:00 EDT	0.51 ^P
18:15 EDT	0.51 ^P
18:30 EDT	0.46 ^P
18:45 EDT	0.46 ^P
19:00 EDT	0.51 ^P
19:15 EDT	

TIME	Oct 13
	0.46 ^P
19:30 EDT	0.46 ^P
19:45 EDT	0.46 ^P
20:00 EDT	0.46 ^P
20:15 EDT	0.46 ^P
20:30 EDT	0.46 ^P
20:45 EDT	0.46 ^P
21:00 EDT	0.46 ^P
21:15 EDT	0.46 ^P
21:30 EDT	0.46 ^P
21:45 EDT	0.42 ^P
22:00 EDT	0.42 ^P
22:15 EDT	0.42 ^P
22:30 EDT	0.42 ^P
22:45 EDT	0.42 ^P
23:00 EDT	0.42 ^P
23:15 EDT	0.42 ^P
23:30 EDT	0.42 ^P
23:45 EDT	0.42 ^P
COUNT	96
MAX	0.87
MIN	0.42

Explanation

P	Provisional data subject to revision.
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URL: <http://waterdata.usgs.gov/nwis/uv?>



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0.5 0.49 caww02