Voluntary Remediation Program Status Report #10

Former Estech General Chemical Site
Atlanta, Fulton County, Georgia
Parcels 17-0191-LL0244 and 17-0191-LL0400
HSI Site No. 10196

Prepared for:	BFEL Indemnitor, Inc. Chicago, Illinois
Date:	February 8, 2017
Prepared by:	Amec Foster Wheeler Environment & Infrastructure, Inc. 1075 Big Shanty Road NW, Suite 100, Kennesaw, Georgia 30144
Project No.:	6122080154

February 8, 2017

Mr. David Brownlee
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Via: Paper Copy and PDF copy on CD

Subject: **Voluntary Remediation Plan Status Report No. 10**
Former Estech General Chemicals Site - Atlanta, Georgia
HSI Site No. 10196 Parcels 17-0191-LL0244 and 17-0191-LL0400
Amec Foster Wheeler Project 6122-08-0154

Dear Mr. Brownlee:

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), on behalf of BFEL Indemnitor, Inc. (BFEL) is hereby submitting the attached Status Report No.10 for Voluntary Remediation Program Remediation activities for the Former Estech General Chemicals Site in Atlanta, Fulton County, Georgia (HSI Site No. 10196, Tax Parcels 17-0191-LL0244 and 17-0191-LL0400).

This status report is required by the Voluntary Remediation Program statue and requested by the Georgia Environmental Protection Division (EPD) in their approval letter dated February 8, 2012. This status report covers the period from August 2016 to February 2017. The report includes information on the recent site-wide groundwater and surface water monitoring, further evaluation of the M&J Solvent site VOC plume impact on the Estech site, and a summary of professional hours. BFEL and Amec Foster Wheeler would like to meet with you in the near term to discuss the path forward for the site.

Please review the attached report and contact Greg Wrenn at (770) 421-3472 with any questions you may have.

Sincerely,

Amec Foster Wheeler Environment & Infrastructure, Inc.

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1.0 PE CERTIFICATION

"I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.

Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.

The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Gregory J. Wrenn/ Georgia P.E. #25565
Printed Name and GA PE Number

February 6, 2017
Date



Signature and Stamp

2.0 INTRODUCTION AND BACKGROUND

This Voluntary Remediation Program Semi-Annual Status Report No. 10 (Status Report) was prepared, on behalf of BFEL Indemnitor, Inc. (BFEL), in accordance with the Voluntary Remediation Program (VRP) for the Former Estech General Chemicals site, Hazardous Site Inventory (HSI) No. 10196/Tax Parcel Parcels 17-0191-LL0244 and 17-0191-LL0400. The Georgia Environmental Protection Division (EPD) requested in their February 8, 2012 approval letter that status reports be submitted in August and February. This tenth Status Report covers the activities conducted from August 2016 until shortly before the submittal of this status report (February 2017).

The Former Estech General Chemicals site is located at 1551 Marietta Road in Atlanta, Fulton County, Georgia inside of the Inman Railyards. The CSX Transportation Tilford Yard is within the Inman Railyards and surrounds the Estech property. The site soil and groundwater impacts for site constituents (organochlorine-pesticides, arsenic, lead, and polynuclear aromatic hydrocarbons) were delineated under the Georgia Hazardous Site Response Act (HSRA) and certified to risk reduction standards. The most recent HSRA Compliance Status Report (CSR) was prepared and submitted October 19, 2007. EPD issued comments on the CSR, dated November 18, 2008. BFEL responded to the comments on February 27, 2009. EPD commented on the responses on December 18, 2009 and requested a Corrective Action Plan (CAP). An initial VRP Application, dated March 18, 2010 and an Addendum, dated March 16, 2011, were submitted to EPD to enter the site into the VRP. The VRP Application and Addendum were submitted in lieu of a HSRA CAP. The VRP Application Addendum contained a revised Voluntary Investigation and Remediation Plan (VIRP) and addressed the EPD VRP Application comment letter dated July 23, 2010. On February 8, 2012, EPD approved the VIRP and accepted the Former Estech General Chemicals site into the VRP. The activities conducted subsequent to the date the site was accepted into the VRP have been documented in semi-annual VRP Status Reports.

In accordance with the VIRP, a pilot test was conducted from January 2013 through April 2014 to evaluate the effectiveness of an EHC-M permeable reactive barrier (PRB) to address groundwater impacts. Because the EHC-M injections did not demonstrate that the EHC-M PRB was effective, VRP Status Report No. 5 (August 2014) presented a revised Remediation Plan. The Revised Remediation Plan was discussed with EPD in a meeting on September 18, 2014, and EPD subsequently issued comments on VRP Status Reports Nos. 4 and No. 5 in correspondence dated October 7, 2014 and December 1, 2014. BFEL continues to evaluate the proposed remediation approach based upon the feedback from EPD. A key consideration currently affecting implementation of the revised Remediation Plan is the presence of an up-gradient volatile organic compound (VOC) plume that is impacting a portion of the BFEL site, as discussed in greater detail in this VRP Status Report. EPD provided comments on VRP Status Reports Nos. 6 through 9 in correspondence dated September 22, 2016 and BFEL responses as provided herein.

3.0 WORK PERFORMED FROM AUGUST 2016 TO FEBRUARY 2017

The activities currently identified to be performed at the Estech site under the VRP are outlined in the VIRP, dated March 16, 2011, the EPD VIRP approval letter dated February 8, 2012, and the EPD VIRP comment letter dated February 8, 2012. The activities conducted from August 2016 through February 2017 have included semi-annual groundwater and surface water sampling and analysis, evaluation of a surface water remedy, and response to EPD September 22, 2016 comments on VRP Status Report Nos 6 through 9. These activities are described in the following sections.

3.1 Semi-Annual Groundwater Sampling and Analysis

Groundwater samples were collected from 39 permanent monitoring wells located on the Estech and CSX properties from November 9 to 14, 2016 (Figure 1). The following monitoring wells were sampled:

MW-22	MW-25	MW-26	MW-1B	MW-101	MW-102
MW-104A	MW-104D	MW-105	MW-106D	MW-107D	MW-108
MW-109	MW-110	MW-111	MW-112	MW-113	MW-114
MW-115	MW-116	MW-117	MW-119	MW-120	MW-121
TW-1	TW-2	TW-3	TW-4	TW-5	TW-6
TW-7	TW-8	TW-9	TW-10	TW-11	TW-12
OW-1	OW-2	OW-3			

Well MW-21 was dry and was not sampled in November 2016. The PVC casing for well MW-24 was broken off below the ground surface and could not be sampled. A summary of the groundwater sample data are presented on Table 1. The depth to water was measured in the 39 site monitoring wells including those listed above and the groundwater elevations were calculated. The groundwater elevations are summarized on Table 2 and were used to generate the potentiometric surface map on Figure 2. Groundwater analytical results are summarized on Table 3.

The monitoring wells were purged using low flow/low stress methodology and were sampled following Region 4 USEPA Science and Ecosystem Support Division (SESD) procedure SESDPROC-301-R3. Submersible or peristaltic pumps were used to purge the wells. Three well volumes were purged from each well. Water quality parameters pH, conductivity, temperature, turbidity, dissolved oxygen (DO) and oxidation-reduction potential (ORP) were measured and recorded. Groundwater samples were collected after pH, specific conductivity, turbidity, and temperature parameters had stabilized, and the water was visibly free of sediment (Appendix A). In accordance with SESDPROC-301-R3, the groundwater samples were collected using the submersible and peristaltic pumps. The temporary wells TW-1 through TW-12 are one-inch diameter monitoring wells and are purged and sampled using either a submersible bladder or peristaltic pump. The permanent monitoring wells (MWs) are two-inch diameter wells and were purged and sampled with a submersible Grundfos Redi-Flo2 pump. The groundwater samples were collected and analyzed for the following constituents:

- Organochlorine pesticides using USEPA Method 8081B
- Arsenic, Lead, Copper, and Zinc using USEPA Method 6020B (total and dissolved analyses)
- Nitrate and Sulfate using USEPA Method 9056A

To further investigate if volatile organic compounds (VOCs) from the upgradient M&J Solvents' site are potentially impacting the Estech site, groundwater samples from select monitoring wells were analyzed for VOCs using USEPA method 8260B. The wells sampled and analyzed for VOCs are:

MW-22	MW-25	MW-26	MW-1B	MW-101	MW-102
MW-104A	MW-104D	MW-106D	MW-107D	MW-108	MW-109
MW-110	MW-111	MW-112	MW-113	MW-114	MW-115
MW-116	MW-117	MW-119	MW-120	MW-121	TW-1
TW-2	TW-3	TW-4	TW-5	TW-6	TW-7
TW-8	TW-9	TW-10	OW-1	OW-2	OW-3

3.2 Surface Water Sampling and Analysis

Eight surface water samples were collected on November 15, 2016 from the un-named stream on CSX property. The sample identifications are:

SW-2010-5	SW-2010-10	SW-2010-11	SW-2010-14
SW-2010-15	SW-2010-17	SW2014-20 (seep)	SW2014-21 (seep)

Surface water sample SW-2010-5 was collected in the stream adjacent to well location MW-106D/MW-119. Samples SW-2010-10 and SW-2010-11 were collected from the stream, upstream and downstream, respectively, of the culvert beneath the "pork-barrel" rail line. Samples SW-2010-14, SW-2010-15, and SW-2010-17 were collected in the stream downstream of the culvert and upstream of Marietta Boulevard (Figure 1). Two water samples (SW2014-20 and SW2014-21) were collected in November 2016 from seeps in a drainage feature on the west side of the railroad tracks and upstream of the culvert. The samples were collected from water seeping from the side of the drainage feature. The surface water samples were collected by filling the sample containers directly from the stream. The surface water collection data are summarized on Table 1, analytical results are summarized on Table 4, and the laboratory reports are provided in Appendix A. The surface water samples were analyzed for the following constituents:

- Organochlorine pesticides using USEPA Method 8081B
- Dissolved Arsenic, Lead, Copper, and Zinc using USEPA Method 6020B
- Nitrate and Sulfate using USEPA Method 9056A

Three surface water samples (SW-2010-10, SW-2010-15, and SW-2014-20) were collected and analyzed for total hardness using Standard Method SM2340 B. During this sampling event, the

elevation of the stream's surface water was measured at the four staff gauge locations to help better evaluate the groundwater/surface water connectivity.

3.3 Results of the Semi-Annual Groundwater and Surface Water Investigation

The second semi-annual groundwater and surface-water sampling event for 2016 was conducted from November 7 to 15, 2016. The sampling event consisted of measuring the depth to water in monitoring wells, gauging the surface water elevation at four locations along the un-named stream, and sampling and analyzing groundwater samples from monitoring wells and surface water samples from the un-named stream. The interpreted groundwater flow direction and gradients and groundwater and surface water analytical results are discussed below.

3.3.1 Groundwater Flow Direction, Gradients and Velocity

The depth to water was measured in 39 monitoring wells on November 7, 2016 at locations on the Estech and CSX properties. The data were used to generate a potentiometric surface map to evaluate the groundwater flow direction and velocity. The groundwater elevations are summarized on Table 2. The highest elevation was 894.34 feet in well MW-101 and the lowest elevation was 833.79 feet in well MW-107D. The November 2016 groundwater elevations are on average about four feet lower than the May 2016 elevations and are on average about two feet lower than the November 2015 groundwater elevations. The lower groundwater elevations are attributed to lack of or lower than normal precipitation amounts during the second half of 2016. Figure 2 is a site potentiometric surface map indicating the groundwater flow direction is from the west side of the Estech property to the east and discharging to the un-named stream. The horizontal gradient across the site is estimated to be 0.035 to 0.043 feet per foot based on the November 2016 potentiometric map. The groundwater seepage velocity was estimated using an average hydraulic conductivity of 0.84 feet /day or $3x10^{-4}$ cm/sec from the residuum soils based on slug tests performed in monitoring wells MW-1, MW-4, MW-12, DW-2A, and MW-22 and a site-specific effective porosity of the residuum of 0.23. An average seepage velocity through residual soils is calculated to be 0.13 to 0.16 feet per day or 46 to 58 feet per year which is consistent with previous velocities.

The vertical gradients were evaluated in monitoring well pairs MW-104A/MW-104D, MW-110/ MW-111, MW-106D/MW-121, and MW-119/MW-120. The vertical gradients were calculated by dividing the difference in the groundwater elevations by the distance between the mid-points of each well's screen. There was very little difference in the groundwater elevations in well pair MW-104A/MW-104D with a slight downward gradient of 0.0021 feet/foot. A downward gradient (0.22 and 0.15 feet/foot) from the residual soil to the fractured bedrock was present at well pairs MW-110/MW-111 and MW-119/MW-120, respectively. There was also a downward gradient (0.26 feet/foot) at well pair MW-106D/MW-121.

The groundwater elevation in well MW-121 (861.55 feet), screening the uppermost fractured bedrock next to the un-named stream was about one feet lower than the surface water elevation (862.74 feet) in the stream next to the well pair. With the exception of November 2016, the groundwater elevations in well MW-121 have been above the surface water elevations. The groundwater elevation in well MW-106D (851.44 feet), screening a deeper depth in the fractured

bedrock was about 11 feet lower than the surface water elevation. The surface water elevation (839.80 feet) at Staff Gauge #3 was about 9 feet lower than the groundwater elevation in well MW-119 (849.38 feet) and about 7 feet lower in elevation than the groundwater elevation (847.14 feet) in bedrock well MW-120. The groundwater elevation in well MW-107D (833.79) is about 2.5 feet lower than the stream elevation at Staff Gauge #4 (836.35 feet). The data indicate groundwater in the deep residual soil, soil/bedrock interface, and shallow fractured bedrock interact with the stream. Groundwater in the deeper bedrock does not appear to be in communication with the surface water.

3.3.2 Groundwater Analytical Results for Estech Site Constituents

Groundwater samples were collected from the site monitoring wells and analyzed for organochlorine pesticides, total and dissolved arsenic, copper, lead, zinc, total nitrate and sulfate. The BHC isomers were the predominant pesticides detected with beta-BHC being detected most often in the November samples. Copper and zinc were the predominant metals detected, followed by lead. The dissolved metal concentrations were similar, though generally lower than the total metals concentrations. Nitrate and sulfate were also detected. Monitoring well TW-8 had the highest pesticide concentrations. Well TW-7 had the highest metals. Well TW-7 also had the highest nitrate and sulfate concentrations in the November 2016 event.

The groundwater analytical results are summarized on Table 3, and the laboratory reports are provided in Appendix A. Total copper concentrations ranged from 0.00259 to 132 mg/L while dissolved copper ranged from 0.00297 to 140 mg/L. Total zinc concentrations ranged from 0.0114 to 327 mg/L while dissolved zinc ranged from 0.0284 to 311 mg/L. Figure 3 presents the metals data for the monitoring wells from November 2016. The metals in groundwater are delineated based on the Type 1 RRS as shown on Figure 3. The groundwater plume as indicated on Figure 3 is located on the northern and eastern portions of the Estech property and the CSX property abutting the Estech eastern property boundary. The data indicates the lower pH readings generally correlate to higher metals concentrations, particularly copper and zinc. The lower pH groundwater coincides with groundwater metals concentrations that are greater than the Type 1 RRS. The copper and zinc concentrations above the Type 1 RRS are primarily located on the eastern portion of the Estech property and the western portion of the CSX property adjacent to Estech, and north of well MW-117 and south of wells MW-104A/MW-104D. Metals concentrations in groundwater on the western and southern portions of the Estech property and on the eastern portion of the CSX property near the stream are either non-detect or below the Type 1 RRS. Downgradient wells (MW-105, MW-106D, MW-107D, MW-117, MW-119, MW-120, and MW-121) adjacent to the stream are less than Type 1 RRS. The area with metal concentrations above the Type 1 RRS is bounded by areas that are either non-detect or below the Type 1 RRS. Generally, the surface water concentrations were less than the site groundwater concentrations.

Total and dissolved arsenic and lead were also analyzed in the groundwater samples. Arsenic and lead concentrations were either non-detect or slightly above the Type 1 RRS and were generally less than the copper and zinc concentrations (Table 3). The total arsenic concentrations ranged from 0.0116 to 0.108 mg/L, while the dissolved concentrations ranged

from 0.011 to 0.0784 mg/L. The total lead concentrations ranged from 0.00103 to 0.636 mg/L, while the dissolved concentrations ranged from 0.00112 to 0.162 mg/L. The November 2016 total metals concentrations were similar to the May 2016 total metals concentrations. The extent of arsenic and lead in groundwater is defined based on Type 1 RRS values (Figure 3).

Pesticides in groundwater are generally delineated based on Type 1 RRS values, as is shown on Figure 4. One to four of the BHC isomers were detected in 28 wells across the site. Alpha-BHC concentrations ranged from 0.000059 to 0.26 mg/L. Beta-BHC concentrations ranged from 0.00027 to 0.034 mg/L. Delta-BHC concentrations ranged from 0.000051 to 0.18 mg/L while gamma-BHC concentrations ranged from 0.000065 to 0.086 mg/L. The November 2016 BHC concentrations were lower than the June 2016 concentrations. BHC concentrations in well TW-8 increased from November 2014 to November 2015 with June 2016 similar to the previous events, but were less than the 2012 to January 2014 concentrations. The November 2016 concentration was less than, by half of June 2016 concentrations. Pesticides were detected for the first time in wells TW-10 and TW-11 in November 2015, the wells had been non-detect for the previous six sampling events. The 2016 concentrations in TW-10 were less than those detected in 2015 while TW-11 2016 concentrations returned to non-detect. Pesticides were not detected in well MW-121 during the November 2015 event, but had pesticide concentrations in the previous six events and were detected in 2016. There were one detection each of DDD, DDE, and DDT at concentrations ranging from 0.00042 to 0.0008 mg/L in well TW-1 which has a history of these constituents' detections. Dieldrin (0.00012 to 0.00015 mg/L) was detected in wells MW-108 and MW-111.

The November 2016 total pesticide concentrations showed a decrease from the June 2016 concentrations. The total metals concentrations in the November 2016 groundwater samples were slightly higher than the June 2016 concentrations.

Nitrate and sulfate do not have Type 1 RRS because they are not regulated constituents under HSRA or VRP. The extent of nitrate and sulfate in groundwater is shown on Figure 5. The higher sulfate concentrations generally coincide with lower pH values and higher metals concentrations in the groundwater. Nitrate concentrations in November 2016 ranged from 0.29 to 110 mg/L and were similar to the June 2016 results. Sulfate concentrations in November 2016 ranged from 21 to 3400 mg/L and were higher than the June 2016 results with wells TW-7 and MW-113 having the highest concentrations, respectively.

3.3.3 Groundwater Analytical Results for M&J Solvents'Volatile Organic Compounds

In November 2016, 36 monitoring wells on the Estech and CSX properties were sampled and analyzed for VOCs (Table 5). The sampling was conducted at the request of EPD because of concern that a pump-and-treat remediation could potentially pull the M&J Solvents site VOC groundwater plume toward or onto the Estech property. This is the fourth site-wide sampling for M&J Solvents' VOCs on the Estech site. The purpose of this sampling was to further evaluate the extent of VOCs, previously detected in June 2016 and earlier on the Estech property, from the M&J Solvents site and their potential impact on the construction of an Estech site pump-and-treat groundwater remediation system. Monitoring wells located across the Estech property and

wells on the CSX property associated with the Estech pesticide and metals plumes were sampled and analyzed. The November 2016 data indicated the M&J Solvents site VOC groundwater plume was present across the northern third of the Estech property, but did not appear to be present south of well TW-3. Figure 6 indicates the horizontal extent of the VOCs detected in Estech monitoring wells.

As shown on Figure 6, potentiometric surface contours indicate groundwater on the M&J Solvents site is flowing radially to the east, southeast, south, and southwest while the Estech property groundwater flow is from the west to the east toward the stream. The M&J site potentiometric surface contours show groundwater flow toward the unnamed stream and generally toward the northern and western Estech property boundaries. However, there are no groundwater wells or elevation data from the southern portion of the Whitaker Oil site to confirm the direction of groundwater flow from the southern portion of the Whitaker Oil property in relation to the Estech property. Sixteen VOCs were detected and included benzene, toluene xylenes (BTEX), to chlorinated VOCs (trichloroethene, tetrachloroethene, cis-1,2-dichloroethene, tetrahydrofuran, and vinyl chloride) to ketones (acetone, 2-butanone and 4-methyl-2-pentanone) (Table 5). Well MW-104D, located on CSX property and sidegradient to the Estech property, but directly downgradient of M&J Solvents had the highest concentrations of VOCs, including tetrahydrofuran, with the ketones comprising the majority of the constituents. Wells MW-113 and MW-120, also on CSX property and downgradient of M&J, had elevated VOCs, mostly chlorinated VOCs. Wells TW-1, TW-2, and TW-3, located on Estech and downgradient of M&J also had elevated concentrations of chlorinated VOCs. Wells OW-1 to OW-3 were sampled for the second time in November 2016 and had low concentrations of chlorobenzene. The VOC impact to these 7 wells is very likely from the M&J Solvents site.

Wells TW-8, MW-111, OW-1, OW-2, and OW-3 located in the former pond area of Estech had detections of chlorobenzene (0.018 to 0.22 mg/L). Well TW-3 also had a detection of chlorobenzene (0.019 mg/L) and is side gradient to wells TW-8, OW-1 to OW-3, and MW-111. Upgradient wells MW-112, MW-26, and MW-101 did not detect VOCs. There are several wells surrounding TW-8, TW-9 and MW-111 that are non-detect for VOCs (Figure 6). Bedrock well MW-110 was also non-detect for VOCs.

3.3.4 Surface Water Analytical Results

Eight surface water samples were collected from the unnamed stream in November 2016 and analyzed for site constituents. The four metals were analyzed for dissolved phase concentrations. BHCs, DDD, dieldrin, arsenic, copper, lead, zinc, nitrate, and sulfate were detected. The analytical results are summarized on Table 4. The BHCs ranged in concentrations of alpha-BHC 0.2 to 0.54 µg/L, beta-BHC 0.083 to 3.9 µg/L, delta-BHC 0.041 to 0.3 µg/L, and gamma-BHC 0.021 to 0.25 µg/L based on a laboratory quantitation limit of 0.05 µg/L. The November 2016 BHC concentrations were slightly higher than the June 2016 concentrations. Methoxychlor was only detected in one of the seep samples, below the reporting limit, and has not been detected in previous or current groundwater or surface water samples. Dieldrin was not detected above the laboratory reporting limit of 0.1 µg/L, but was

above the method detection limit of 0.002 µg/L and DDD was not detected above the reporting limit of 0.1 µg/L, but was slightly above the method detection limit of 0.002 µg/L.

The November 2016 dissolved metals concentrations were slightly higher than the June 2016 concentrations with samples SW-2010-11, SW-2014-21, and SW-2014-21 showing the most increase. Dissolved arsenic was below the laboratory reporting limit of 0.005 mg/L in the eight samples. Dissolved copper was detected at concentrations ranging from 0.00659 to 0.901 mg/L, and dissolved zinc was detected at concentrations ranging from 0.557 to 12.4 mg/L. Dissolved lead was below the laboratory reporting limit of 0.001 mg/L.

Nitrate was detected at 0.9 to 11 mg/L, sulfate was detected at 97 to 420 mg/L, and both were similar to the June 2016 concentrations. The SW-2014-20 and SW2014-21 samples were collected from water in the drainage feature on the west side of the railroad tracks upstream of the culvert and had higher concentrations for beta and gamma-BHCs, copper and zinc than the five samples collected downstream from the main channel of the unnamed stream. Sample SW-2010-11, immediately downstream of the SW-2014-21 and SW-1014-21 locations, had higher pesticide and inorganics concentrations than the other five channel samples collected further downstream, but less than the SW-2014-20 and 21 locations.

Dissolved copper and zinc concentrations are greater than the Georgia Instream Water Quality Criteria (ISWQC) for aquatic life receptors (Table 4) and are less than the human health criteria. There is no ISWQC for nitrate and sulfate. Constituent concentrations in samples (SW2010-5 and SW-2010-10) collected upstream of the railroad culvert on the east side of the railroad track are lower than the concentrations of samples (SW2010-11 to SW2010-17) collected downstream of the railroad culvert on the west side of the tracks. The highest concentrations were detected at seep sample locations (SW2014-20 and SW2014-21) and main stream channel surface water samples SW2010-11 to SW2010-17. The drainage feature that branches off the main channel upstream of the culvert on the west side of the tracks has been identified be a point of discharge for elevated concentrations of site contaminants, particularly zinc. The unnamed stream located on CSX property is not an exposure point for human receptors because the stream is not a source of drinking water, is not accessible to the public, and does not have habitat for a fishery for human consumption. Aquatic receptors are more likely to be exposed to the stream than humans as such the aquatic life water quality criteria are the more appropriate criteria.

The concentrations were compared to the ISWQC for aquatic life and human health receptors. Concentrations of alpha and beta-BHCs are greater than the ISWQC for human health exposure. The gamma-BHC concentrations were less than the criteria for human and aquatic exposures. The dissolved arsenic and lead concentrations are below the ISWQC while the copper and zinc are above the ISWQC.

The November 2016 data were also evaluated using concentrations normalized based on annual average stream flow. Appendix B provides an explanation of the evaluation method and the calculations for normalizing the concentrations. The pesticides and arsenic have annual average or higher flow criteria under the Georgia ISWQC. Locations SW-2010-5 and SW-2010-10 had normalized beta-BHC concentration less than the value for human health exposure via

water consumption. The normalized pesticides concentrations, like the un-normalized pesticide concentrations are above the human health criteria of ISWQC.

3.4 Revised Remediation Approach

BFEL and Amec Foster Wheeler representatives met with EPD representatives on September 18, 2014 to discuss the proposed revised Remediation Plan presented in VRP Status Report No. 5. The revised Remediation Plan called for a groundwater recirculating system with a limestone infiltration gallery treatment process. The recirculating system would capture contaminated groundwater, treat the water by raising the pH, and allow the treated water to reinfiltrate back into the subsurface to help flush contaminants in soil and groundwater toward the pumping-induced capture zone while raising the pH in the subsurface soil and groundwater to reduce solubility and mobility of dissolved constituents, particularly zinc. A surficial limestone PRB was also proposed to be installed at the seep area and drainage feature near the unnamed stream on CSX property. A Type 5 Risk Reduction Standard was proposed to address impacted soil via engineering and institutional controls to limit human exposure potential until a viable re-use for the property is identified. EPD expressed concerns that a pump-and-treat system on the Estech property could pull the M&J Solvents site VOCs groundwater plume toward/onto the downgradient Estech property. As discussed earlier, additional groundwater sampling for VOCs was conducted on the Estech property in November 2016 and confirmed VOC impacts on the Estech property (Figure 6). Implementation of the proposed pump-and-treat system is currently on-hold pending discussions with EPD and further delineation of the groundwater VOC plume by M&J Solvents' representatives. BFEL plans to first implement the surficial PRB in the drainage feature and evaluate its performance before proceeding with the pump-and-treat system. Land surveying of the proposed surficial PRB location in the seep area along with a wetlands survey were conducted in early February 2017.

In a second quarter 2016 meeting with M&J Solvent's representatives, the M&J Solvents site remediation plan was presented. The VOC source on the M&J site is being treated with air-sparge/soil vacuum extraction while enhanced monitored natural attenuation is being applied to the dissolved-phase groundwater plume. Currently, there are no plans to conduct remediation activities to control migration of the VOC groundwater plume. M&J Solvents' representatives proposed installing additional wells downgradient of their site on the Estech and CSX properties as part of their on-going step-wise delineation of their groundwater plume. An access agreement has been executed between BFEL and the M&J Solvents Site responsible party to install monitoring wells on the Estech property. Additionally, BFEL is currently in discussions with a party potentially interested in purchasing and re-developing the site, which may also affect the implementation of site remediation.

A laboratory bench-scale treatability study was conducted in May and June 2015 to evaluate the feasibility and effectiveness of the limestone and bio-available adsorbent carbon media (BAM) treatment processes. The treatability study was presented in Status Report No. 7 (August 2015). The limestone was batch tested for treatment of metals and pesticides in both groundwater and surface water while the BAM was batch tested for treatment of metals, pesticides and VOCs in groundwater. Groundwater and surface water collected from the site

were used to test the limestone and BAM. The limestone raised the pH of the groundwater and surface water and reduced the metals concentrations, with copper concentrations showing the greatest reductions in the surface water. Pesticide concentrations also showed reductions in response to the limestone in the surface water. The BAM reduced metals concentrations, but at a lesser percentage than the limestone. However, the BAM showed a greater percentage reduction in pesticide concentrations than the limestone in the groundwater. The BAM also reduced VOC concentrations in groundwater. The limestone and BAM used in combination appear to have applicability as a treatment process for the constituents present in groundwater at the site.

The results of the bench-scale treatability study appear favorable for raising the pH of the water and treating metals. The surficial limestone PRB installation proposed for installation along the seep area on the west bank of the CSX stream could proceed, as it will not negatively affect migration of the VOC plume. Construction of the PRB in the seep area is anticipated to be initiated in early second quarter 2017.

BFEL also continues to evaluate other potential in-situ remedies. BFEL continues to evaluate the most appropriate plan for implementation of remediation so as not to exacerbate the up-gradient VOC impacts.

4.0 WORK TO BE PERFORMED

On-going activities include semi-annual groundwater and surface water monitoring and reporting. Additional activities include pilot testing and further evaluation of the design for the proposed active remedial measures previously proposed in light of the upgradient VOC groundwater plume. The sections below describe the status of the activities yet to be performed. Figure 7 is the updated Gantt Chart Schedule of VRP Activities.

4.1 Groundwater and Surface Sampling and Analysis

Groundwater and surface water samples will be collected in May-June 2017 as part of the next semi-annual monitoring event for the site. The following monitoring wells will be sampled and analyzed for site constituents:

MW-22	MW-25	MW-26	MW-1B	MW-101	MW-102
MW-104A	MW-104D	MW-105	MW-106D	MW-107D	MW-108
MW-109	MW-110	MW-111	MW-112	MW-113	MW-114
MW-115	MW-116	MW-117	MW-119	MW-120	MW-121
TW-1 to TW-12		OW-1 to OW-3			

Constituents to be analyzed: Organochlorine Pesticides, Total and Dissolved Metals (Arsenic, Lead, Copper, Zinc), Nitrate, and Sulfate, and VOCs.

Surface Water Sampling and Analysis

Eight surface water locations in the unnamed stream located on CSX property will be sampled and analyzed for the site constituents:

SW2010-5 SW2010-10 SW2010-11 SW2010-14 SW2010-15 SW2010-17 SW2014-20 SW2014-21

Constituents analyzed: Organochlorine Pesticides, Dissolved Metals (Arsenic, Lead, Copper, and Zinc), Nitrate, and Sulfate.

4.2 Pilot Testing

Plans to conduct pilot tests to assist with the design of the proposed pump-and-treat recirculation system are currently on hold due to the VOC impacts from the up-gradient M&J Solvents site. BFEL believes that it is premature to move forward with this approach without a better understanding of further remediation plans for the M&J Solvents site along with the results of proposed assessment to be conducted on BFEL and CSX properties by M&J Solvents' representatives. However, upon concurrence from EPD, BFEL plans to proceed with installation of the surficial limestone PRB as a pilot test to provide additional data to evaluate the efficacy of the limestone/pH adjustment treatment concept and its future use to address other portions of the site. The use of a carbon reactive mat to line the limestone channel and assist in pesticide treatment is also planned. It is estimated to take approximately a year following installation to evaluate the performance of the surficial PRB and its effects on surface water quality. Therefore, an extension to the initial 5-year VRP implementation period is necessary due to the changing remediation plans

and up-gradient impacts from M&J Solvents. BFEL would like to schedule a meeting with EPD to further discuss the path forward and schedule.

4.3 Surficial Permeable Reactive Barrier

Upon concurrence from EPD with the revised Remediation Plan, BFEL proposes to contact CSX and begin negotiations to obtain access to their property to construct the pilot PRB. Additionally, Amec Foster Wheeler believes that the drainage swale/stream, is classified as a State Water. The proposed project will include minor excavation of the swale/stream bed soils, installing the reactive blanket, and restoring the area adjacent to the blanket disturbed during construction. Therefore, the proposed construction will require an approved stream buffer variance from the EPD.

Amec Foster Wheeler will prepare the 25-foot buffer encroachment application package for signature by the owner of the project based on the Erosion, Sedimentation and Pollution Control Plan and the Design Drawings for the remediation project and submit the buffer encroachment application package to EPD for review.

In addition to the stream buffer variance permit, a U.S. Army Corps of Engineers (USACE) Section 404 permit will be required. A jurisdictional waters delineation and Pre-Construction Notification (PCN) will be prepared for submittal to USACE.

Amec Foster Wheeler expects that the proposed activities can be authorized under the USACE Nationwide Permit (NWP) program. Potential impacts to jurisdictional waters may be authorized under NWP 38 (cleanup of hazardous and toxic waste). The discharge must not cause the loss of greater than ½ acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed. Assuming that project impacts are determined to be less than 0.1 acre of wetlands and 100 linear feet of stream, no compensatory mitigation will be required as a part of the PCN.

5.0 PROFESSIONAL SERVICES HOURS THIS PERIOD

Approximately 317.1 professional service hours have been provided by Amec Foster Wheeler Environment & Infrastructure, Inc. from July 23, 2016 to December 23, 2016. A table of the breakdown of Amec Foster Wheeler hours by month along with a description of the services provided is presented on Table 6. The registered professional engineer responsible for implementation of the VRP at this site is Mr. Gregory Wrenn. Mr. Wrenn has personally charged 13 labor hours to the project to direct and review the various aspects of implementation of the VRP during this reporting period.

TABLES

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
TW-1	23.0	890.8/893.00	12.5-22.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/30/2012	New well to investigate Copper and Zinc in groundwater
TW-1	23.0	890.8/893.00	12.5-22.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/29/2013	site-wide groundwater monitoring
TW-1	23.0	890.8/893.00	12.5-22.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	11/13/2013	site-wide groundwater monitoring
TW-1	23.0	890.8/893.00	12.5-22.5		Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/14/2014	site-wide groundwater monitoring
TW-1	23.0	890.8/893.00	12.5-22.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	11/12/2014	site-wide groundwater monitoring
TW-1	23.0	890.8/893.00	12.5-22.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	5/28/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-1	23.0	890.8/893.00	12.5-22.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	11/11/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-1	23.0	890.8/893.00	12.5-22.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	6/2/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-1	23.0	890.8/893.00	12.5-22.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	11/9/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-2	27.2	895.5/897.89	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/30/2012	New well to investigate Copper and Zinc in groundwater
TW-2	27.2	895.5/897.89	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/29/2013	site-wide groundwater monitoring
TW-2	27.2	895.5/897.89	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	11/14/2013	site-wide groundwater monitoring
TW-2	27.2	895.5/897.89	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/14/2014	site-wide groundwater monitoring
TW-2	27.2	895.5/897.89	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	11/12/2014	site-wide groundwater monitoring

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WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
TW-2	27.2	895.5/897.89	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/28/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	29.1				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-2	27.2	895.5/897.89	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	29.1 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-2	27.2	895.5/897.89	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/2/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	29.1 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-2	27.2	895.5/897.89	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/9/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	29.0 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-3	36.6	893.9/897.44	26.4-36.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/31/2012	New well to investigate Copper and Zinc in groundwater
					Pesticides		
					Nitrate and Sulfate		
TW-3	36.6	893.9/897.44	26.4-36.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/30/2013	site-wide groundwater monitoring
	39.9 btoc				Pesticides		
					Nitrate and Sulfate		
TW-3	36.6	893.9/897.44	26.4-36.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2013	site-wide groundwater monitoring
	39.8 btoc				Pesticides		
					Nitrate and Sulfate		
TW-3	36.6	893.9/897.44	26.4-36.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/15/2014	site-wide groundwater monitoring
	39.8 btoc				Pesticides		
					Nitrate and Sulfate		
TW-3	36.6	893.9/897.44	26.4-36.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2014	site-wide groundwater monitoring
	39.8 btoc				Pesticides		
					Nitrate and Sulfate		
TW-3	36.6	893.9/897.44	26.4-36.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/15/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL Sampled for treatability study of VOCs
	39.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-3	36.6	893.9/897.44	26.4-36.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	39.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-3	36.6	893.9/897.44	26.4-36.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/3/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	39.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-3	36.6	893.9/897.44	26.4-36.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	35.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		

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WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
TW-4	32.3	897.2/899.36	21.8-31.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/31/2012	New well to investigate Copper and Zinc in groundwater
TW-4	32.3 33.6 btoc	897.2/899.36	21.8-31.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/30/2013	site-wide groundwater monitoring
TW-4	32.3 33.5 btoc	897.2/899.36	21.8-31.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	11/15/2013	site-wide groundwater monitoring
TW-4	32.3 33.5 btoc	897.2/899.36	21.8-31.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/15/2014	site-wide groundwater monitoring
TW-4	32.3 33.5 btoc	897.2/899.36	21.8-31.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	11/13/2014	site-wide groundwater monitoring
TW-4	32.3 33.5 btoc	897.2/899.36	21.8-31.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	5/29/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-4	32.3 33.5 btoc	897.2/899.36	21.8-31.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	11/12/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-4	32.3 33.5 btoc	897.2/899.36	21.8-31.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	6/3/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-4	32.3 33.4 btoc	897.2/899.36	21.8-31.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	11/9/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-5	30.0	888.8/891.90	19.8-29.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/30/2012	New well to investigate Copper and Zinc in groundwater
TW-5	30.0	888.8/891.90	19.8-29.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/29/2013	New well to investigate Copper and Zinc in groundwater
TW-5	30.0 29.8 btoc	888.8/891.90	19.8-29.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	11/15/2013	site-wide groundwater monitoring
TW-5	30.0 32.5 btoc	888.8/891.90	19.8-29.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/21/2014	site-wide groundwater monitoring
TW-5	30.0 31.5 btoc	888.8/891.90	19.8-29.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/21/2014	site-wide groundwater monitoring

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WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
TW-5	30.0	888.8/891.90	19.8-29.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2014	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	31.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-5	30.0	888.8/891.90	19.8-29.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/1/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	31.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-5	30.0	888.8/891.90	19.8-29.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.3 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-5	30.0	888.8/891.90	19.8-29.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/3/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.3 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-5	30.0	888.8/891.90	19.8-29.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.1 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-6	37.9	905.8/908.34	27.7-37.7	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/30/2012	New well to investigate Copper and Zinc in groundwater
					Pesticides		
					Nitrate and Sulfate		
TW-6	37.9	905.8/908.34	27.7-37.7	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/29/2013	site-wide groundwater monitoring
	39.9 btoc				Pesticides		
					Nitrate and Sulfate		
TW-6	37.9	905.8/908.34	27.7-37.7	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/18/2013	site-wide groundwater monitoring
	39.9 btoc				Pesticides		
					Nitrate and Sulfate		
TW-6	37.9	905.8/908.34	27.7-37.7	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/21/2014	site-wide groundwater monitoring
	39.9 btoc				Pesticides		
					Nitrate and Sulfate		
TW-6	37.9	905.8/908.34	27.7-37.7	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2014	site-wide groundwater monitoring
	39.9 btoc				Pesticides		
					Nitrate and Sulfate		
TW-6	37.9	905.8/908.34	27.7-37.7	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/1/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	39.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-6	37.9	905.8/908.34	27.7-37.7	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/16/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	39.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		

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WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
TW-6	37.9	905.8/908.34	27.7-37.7	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/6/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	39.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-6	37.9	905.8/908.34	27.7-37.7	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/11/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	40 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-7	31.0	897.9/899.22	20.8-30.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/1/2012	New well to investigate Copper and Zinc in groundwater
					Pesticides		
					Nitrate and Sulfate		
TW-7	31.0	897.9/899.22	20.8-30.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/28/2013	site-wide groundwater monitoring
	32.3 btoc				Pesticides		
					Nitrate and Sulfate		
TW-7	31.0	897.9/899.22	20.8-30.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/19/2013	site-wide groundwater monitoring
	32.3 btoc				Pesticides		
					Nitrate and Sulfate		
TW-7	31.0	897.9/899.22	20.8-30.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/22/2014	site-wide groundwater monitoring
	32.3 btoc				Pesticides		
					Nitrate and Sulfate		
TW-7	31.0	897.9/899.22	20.8-30.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/18/2014	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.3 btoc				Pesticides		
					Site-Specific VOCs		
					Nitrate and Sulfate		
TW-7	31.0	897.9/899.22	20.8-30.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/5/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL Sampled for treatability study of Metals in GW
	32.3 btoc				Pesticides		
					Site-Specific VOCs		
					Nitrate and Sulfate		
TW-7	31.0	897.9/899.22	20.8-30.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/17/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.2 btoc				Pesticides		
					Site-Specific VOCs		
					Nitrate and Sulfate		
TW-7	31.0	897.9/899.22	20.8-30.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/6/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.2 btoc				Pesticides		
					Site-Specific VOCs		
					Nitrate and Sulfate		
TW-7	31.0	897.9/899.22	20.8-30.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/11/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.3 btoc				Pesticides		
					Site-Specific VOCs		
					Nitrate and Sulfate		
TW-8	29.2	899.3/900.36	19-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/31/2012	New well to investigate Copper and Zinc in groundwater
					Pesticides		
					Nitrate and Sulfate		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
TW-8	29.2	899.3/900.36	19-29	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	1/21/2013	site-wide groundwater monitoring and parameters for EHC injection pilot study Base line sampling prior to EHC injection
					Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
TW-8	29.5	899.3/900.36	19-29	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	4/15/2013	site-wide groundwater monitoring and parameters for EHC injection pilot study 1st quarter sampling after EHC injection
					Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
TW-8	29.5	899.3/900.36	19-29	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	7/16/2013	site-wide groundwater monitoring and parameters for EHC injection pilot study 2nd quarter sampling after EHC injection
					Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
TW-8	29.5	899.3/900.36	19-29	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	10/9/2013	site-wide groundwater monitoring and parameters for EHC injection pilot study 3rd quarter sampling after EHC injection
					Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
TW-8	29.5	899.3/900.36	19-29		Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	1/8/2014	site-wide groundwater monitoring and parameters for EHC injection pilot study 4th quarter sampling after EHC injection
				Groundwater	Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Carbon		
					Total Alkalinity		
TW-8	29.9	899.3/900.36	19-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/19/2014	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
TW-8	29.9	899.3/900.36	19-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2014	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
TW-8	29.9	899.3/900.36	19-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/2/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL Sampled for treatability study of Pesticides
					Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-8	29.9	899.3/900.36	19-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
					Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
TW-8	29.9	899.3/900.36	19-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	6/6/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-8	29.9 29.2	899.3/900.36	19-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	11/14/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-9	33.2	899.2/901.56	23-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/31/2012	New well to investigate Copper and Zinc in groundwater
TW-9	33.2 35.0 btoc	899.2/901.56	23-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/28/2013	site-wide groundwater monitoring
TW-9	33.2 34.9 btoc	899.2/901.56	23-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	11/18/2013	site-wide groundwater monitoring
TW-9	33.2 34.5 btoc	899.2/901.56	23-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/22/2014	site-wide groundwater monitoring
TW-9	33.2 34.9 btoc	899.2/901.56	23-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	11/17/2014	site-wide groundwater monitoring
TW-9	33.2 34.9 btoc	899.2/901.56	23-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	6/8/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-9	33.2 34.9 btoc	899.2/901.56	23-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	11/17/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-9	33.2 34.9 btoc	899.2/901.56	23-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	6/7/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-9	33.2 34.9 btoc	899.2/901.56	23-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	11/14/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
TW-10	29.4	895.6/896.56	19.2-29.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/31/2012	New well to investigate Copper and Zinc in groundwater
TW-10	29.4 30.0 btoc	895.6/896.56	19.2-29.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/24/2013	site-wide groundwater monitoring

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
TW-10	29.4	895.6/896.56	19.2-29.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/18/2013	site-wide groundwater monitoring
	29.9 btoc				Pesticides		
					Nitrate and Sulfate		
TW-10	29.4	895.6/896.56	19.2-29.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/22/2014	site-wide groundwater monitoring
	29.4 btoc				Pesticides		
					Nitrate and Sulfate		
TW-10	29.4	895.6/896.56	19.2-29.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/17/2014	site-wide groundwater monitoring
	29.4 btoc				Pesticides		
					Nitrate and Sulfate		
TW-10	29.4	895.6/896.56	19.2-29.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/31/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	29.4 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-10	29.4	895.6/896.56	19.2-29.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/17/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	30.0 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-10	29.4	895.6/896.56	19.2-29.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/7/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	30.0 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-10	29.4	895.6/896.56	19.2-29.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	30.2 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-11	42.0	914.7/918.08	31.8-41.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/31/2012	New well to investigate Copper and Zinc in groundwater
					Pesticides		
					Nitrate and Sulfate		
TW-11	42.0	914.7/918.08	31.8-41.8		Total and Dissolved As, Cu, Pb, and Zn	5/23/2013	site-wide groundwater monitoring
	44.9 btoc				Pesticides		
					Nitrate and Sulfate		
TW-11	42.0	914.7/918.08	31.8-41.8		Total and Dissolved As, Cu, Pb, and Zn	11/13/2013	site-wide groundwater monitoring
	44.8 btoc				Pesticides		
					Nitrate and Sulfate		
TW-11	42.0	914.7/918.08	31.8-41.8		Total and Dissolved As, Cu, Pb, and Zn	5/13/2014	site-wide groundwater monitoring
	44.8 btoc				Pesticides		
					Nitrate and Sulfate		
TW-11	42.0	914.7/918.08	31.8-41.8		Total and Dissolved As, Cu, Pb, and Zn	11/11/2014	site-wide groundwater monitoring
	44.8 btoc				Pesticides		
					Nitrate and Sulfate		
TW-11	42.0	914.7/918.08	31.8-41.8		Total and Dissolved As, Cu, Pb, and Zn	5/27/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	44.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		

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WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
TW-11	42.0	914.7/918.08	31.8-41.8		Total and Dissolved As, Cu, Pb, and Zn	11/11/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	45.03 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-11	42.0	914.7/918.08	31.8-41.8		Total and Dissolved As, Cu, Pb, and Zn	6/1/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	45.03 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-11	42.0	914.7/918.08	31.8-41.8		Total and Dissolved As, Cu, Pb, and Zn	11/8/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	44.7 btoc				Pesticides		
					Nitrate and Sulfate		
TW-12	44.0	927.6/929.03	33.8-43.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/31/2012	New well to investigate Copper and Zinc in groundwater
					Pesticides		
					Nitrate and Sulfate		
TW-12	44.0	927.6/929.03	33.8-43.8		Total and Dissolved As, Cu, Pb, and Zn	5/23/2013	site-wide groundwater monitoring
	44.9 btoc				Pesticides		
					Nitrate and Sulfate		
TW-12	44.0	927.6/929.03	33.8-43.8		Total and Dissolved As, Cu, Pb, and Zn	11/12/2013	site-wide groundwater monitoring
	44.9 btoc				Pesticides		
					Nitrate and Sulfate		
TW-12	44.0	927.6/929.03	33.8-43.8		Total and Dissolved As, Cu, Pb, and Zn	5/13/2014	site-wide groundwater monitoring
	44.9 btoc				Pesticides		
					Nitrate and Sulfate		
TW-12	44.0	927.6/929.03	33.8-43.8		Total and Dissolved As, Cu, Pb, and Zn	11/11/2014	site-wide groundwater monitoring
	44.9 btoc				Pesticides		
					Nitrate and Sulfate		
TW-12	44.0	927.6/929.03	33.8-43.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/27/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	44.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-12	44.0	927.6/929.03	33.8-43.8		Total and Dissolved As, Cu, Pb, and Zn	11/11/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	45.05 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-12	44.0	927.6/929.03	33.8-43.8		Total and Dissolved As, Cu, Pb, and Zn	6/1/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	44.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
TW-12	44.0	927.6/929.03	33.8-43.8		Total and Dissolved As, Cu, Pb, and Zn	11/8/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	44.9 btoc				Pesticides		
					Nitrate and Sulfate		
MW-1B	30.0	913.5/915.95*	20-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn		site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate	11/13/2012	

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WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-1B	30.0	913.5/915.95*	20-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/21/2013	site-wide groundwater monitoring
	32.3 btoc				Pesticides		
					Nitrate and Sulfate		
MW-1B	30.0	913.5/915.95*	20-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2013	site-wide groundwater monitoring
	32.2 btoc				Pesticides		
					Nitrate and Sulfate		
MW-1B	30.0	913.5/915.95*	20-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/13/2014	site-wide groundwater monitoring
	32.2 btoc				Pesticides		
					Nitrate and Sulfate		
MW-1B	30.0	913.5/915.95*	20-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/11/2014	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.46 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-1B	30.0	913.5/915.95*	20-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/27/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.46 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-1B	30.0	913.5/915.95*	20-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.17 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-1B	30.0	913.5/915.95*	20-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/1/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.17 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-1B	30.0	913.5/915.95*	20-29	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/8/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.17 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-22	27.0	894.23	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-22	27.0	894.23	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/22/2013	site-wide groundwater monitoring
	28.9 btoc				Pesticides		
					Nitrate and Sulfate		
MW-22	27.0	894.23	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2013	site-wide groundwater monitoring
	28.9 btoc				Pesticides		
					Nitrate and Sulfate		
MW-22	27.0	894.23	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/19/2014	site-wide groundwater monitoring
	28.9 btoc				Pesticides		
					Nitrate and Sulfate		
MW-22	27.0	894.23	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2014	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	28.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		

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WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-22	27.0	894.23	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/29/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	28.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-22	27.0	894.23	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	28.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-22	27.0	894.23	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/6/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	28.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-22	27.0	894.23	17-27	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/8/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	28.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-25	28.0	895.05	18-28		Well Dry Not Sampled	November and May 2012	
MW-25	28.0	895.05	18-28	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/24/2013	site-wide groundwater monitoring
	29.6 btoc				Pesticides		
					Nitrate and Sulfate		
MW-25					Well Dry Not Sampled	November 2013 and May 2014	
MW-25	28.0	895.05	18-28	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/18/2014	site-wide groundwater monitoring
	29.8 btoc				Pesticides		
					Nitrate and Sulfate		
MW-25	28.0	895.05	18-28	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/2/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	29.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-25	28.0	895.05	18-28	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	29.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-25	28.0	895.05	18-28	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/7/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	29.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-25	28.0	895.05	18-28	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	29.7 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-26	19.0	904.99	9-19	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-26	19.0	904.99	9-19	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/22/2013	site-wide groundwater monitoring
	20.7 btoc				Pesticides		
					Nitrate and Sulfate		

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WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-26	19.0	904.99	9-19	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2013	site-wide groundwater monitoring
	20.7 btoc				Pesticides		
					Nitrate and Sulfate		
MW-26	19.0	904.99	9-19	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/14/2014	site-wide groundwater monitoring
	20.7 btoc				Pesticides		
					Nitrate and Sulfate		
MW-26	19.0	904.99	9-19	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2014	site-wide groundwater monitoring
	20.9 btoc				Pesticides		
					Nitrate and Sulfate		
MW-26	19.0	904.99	9-19	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/28/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	20.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-26	19.0	904.99	9-19	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/11/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	20.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-26	19.0	904.99	9-19	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/2/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	20.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-26	19.0	904.99	9-19	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/9/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	21.1 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-101	25.0	912.55	14.4-24.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-101	25.0	912.55	14.4-24.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/21/2013	site-wide groundwater monitoring
	27.1 btoc				Pesticides		
					Nitrate and Sulfate		
MW-101	25.0	912.55	14.4-24.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2013	site-wide groundwater monitoring
	27.0 btoc				Pesticides		
					Nitrate and Sulfate		
MW-101	25.0	912.55	14.4-24.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/13/2014	site-wide groundwater monitoring
	26.98 btoc				Pesticides		
					Nitrate and Sulfate		
MW-101	25.0	912.55	14.4-24.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/11/2014	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	27.20 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-101	25.0	912.55	14.4-24.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/27/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	27.20 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-101	25.0	912.55	14.4-24.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	26.87 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-101	25.0	912.55	14.4-24.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/1/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	26.87 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-101	25.0	912.55	14.4-24.4	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/8/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	26.70 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-102	31.2	915.19	21.1-30.1	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-102	31.2	915.19	21.1-30.1	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/21/2013	site-wide groundwater monitoring
	32.7 btoc				Pesticides		
					Nitrate and Sulfate		
MW-102	31.2	915.19	21.1-30.1	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2013	site-wide groundwater monitoring
	32.6 btoc				Pesticides		
					Nitrate and Sulfate		
MW-102	31.2	915.19	21.1-30.1	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/13/2014	site-wide groundwater monitoring
	32.6 btoc				Pesticides		
					Nitrate and Sulfate		
MW-102	31.2	915.19	21.1-30.1	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/11/2014	site-wide groundwater monitoring
	32.6 btoc				Pesticides		
					Nitrate and Sulfate		
MW-102	31.2	915.19	21.1-30.1	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/27/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.6 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-102	31.2	915.19	21.1-30.1	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-102	31.2	915.19	21.1-30.1	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/2/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	33.1 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-102	31.2	915.19	21.1-30.1	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/8/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	32.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-104A	40.0	898.00	30.0-39.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-104A	40.0	898.00	30.0-39.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/28/2013	site-wide groundwater monitoring
	39.3 btoc				Pesticides		
					Nitrate and Sulfate		
MW-104A	40.0	898.00	30.0-39.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2013	site-wide groundwater monitoring
	39.3 btoc				Pesticides		
					Nitrate and Sulfate		
MW-104A	40.0	898.00	30.0-39.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/14/2014	site-wide groundwater monitoring
	39.3 btoc				Pesticides		
					Nitrate and Sulfate		
MW-104A	40.0	898.00	30.0-39.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2014	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	39.6 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-104A	40.0	898.00	30.0-39.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/1/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	39.6 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-104A	40.0	898.00	30.0-39.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/11/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	39.35 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-104A	40.0	898.00	30.0-39.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/3/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	39.35 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-104A	40.0	898.00	30.0-39.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/8/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	39.6 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-104D	80.0	901.59	69.5-79.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-104D	80.0	901.59	69.5-79.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/28/2013	site-wide groundwater monitoring
	82.5 btoc				Pesticides		
					Nitrate and Sulfate		
MW-104D	80.0	901.59	69.5-79.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2013	site-wide groundwater monitoring
	82.5 btoc				Pesticides		
					Nitrate and Sulfate		
MW-104D	80.0	901.59	69.5-79.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/15/2014	site-wide groundwater monitoring
	82.6 btoc				Pesticides		
					Nitrate and Sulfate		
MW-104D	80.0	901.59	69.5-79.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2014	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	82.7 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-104D	80.0	901.59	69.5-79.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/3/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL Sampled for treatability study of VOCs in GW
	82.7 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-104D	80.0	901.59	69.5-79.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	82.92 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-104D	80.0	901.59	69.5-79.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/6/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	82.92 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-104D	80.0	901.59	69.5-79.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/9/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	82.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-105	25.0	904.55	14.8-23.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/21/2013	site-wide groundwater monitoring
	27.2 btoc				Pesticides		
					Nitrate and Sulfate		
MW-105	25.0	904.55	14.8-23.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2013	site-wide groundwater monitoring
	27.1 btoc				Pesticides		
					Nitrate and Sulfate		
MW-105	25.0	904.55	14.8-23.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/13/2014	site-wide groundwater monitoring
	27.1 btoc				Pesticides		
					Nitrate and Sulfate		
MW-105	25.0	904.55	14.8-23.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2014	site-wide groundwater monitoring
	27.4 btoc				Pesticides		
					Nitrate and Sulfate		
MW-105	25.0	904.55	14.8-23.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2014	site-wide groundwater monitoring
	27.4 btoc				Pesticides		
					Nitrate and Sulfate		
MW-105	25.0	904.55	14.8-23.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2015	site-wide groundwater monitoring
	26.97 btoc				Pesticides		
					Nitrate and Sulfate		
MW-105	25.0	904.55	14.8-23.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/6/2016	site-wide groundwater monitoring
	26.97 btoc				Pesticides		
					Nitrate and Sulfate		
MW-105	25.0	904.55	14.8-23.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/8/2016	site-wide groundwater monitoring
	27.4 btoc				Pesticides		
					Nitrate and Sulfate		
MW-106D	70.0	878.6*	60-69	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/15/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-106D	70.0	878.6*	60-69	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/29/2013	site-wide groundwater monitoring
	72.8 btoc				Pesticides		
					Nitrate and Sulfate		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-106D	70.0	878.6*	60-69	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/15/2013	site-wide groundwater monitoring
	72.7 btoc				Pesticides		
					Nitrate and Sulfate		
MW-106D	70.0	878.6*	60-69	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/19/2014	site-wide groundwater monitoring
	72.8 btoc				Pesticides		
					Nitrate and Sulfate		
MW-106D	70.0	878.6*	60-69	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2014	site-wide groundwater monitoring
	72.8 btoc				Pesticides		
					Nitrate and Sulfate		
MW-106D	70.0	878.6*	60-69	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/2/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	72.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-106D	70.0	878.6*	60-69	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	72.74 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-106D	70.0	878.6*	60-69	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/7/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	72.74 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-106D	70.0	878.60	60-69	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/9/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	72.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-107D	50.0	857.14	40.0-49.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/19/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
				Groundwater	Pesticides	12/5/2012	confirmation sampling of pesticides
MW-107D	50.0	857.14	40.0-49.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/22/2013	site-wide groundwater monitoring
	49.9 btoc				Pesticides		
					Nitrate and Sulfate		
MW-107D	50.0	857.14	40.0-49.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/18/2013	site-wide groundwater monitoring
	49.8 btoc				Pesticides		
					Nitrate and Sulfate		
MW-107D	50.0	857.14	40.0-49.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/21/2014	site-wide groundwater monitoring
	49.8 btoc				Pesticides		
					Nitrate and Sulfate		
MW-107D	50.0	857.14	40.0-49.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2014	site-wide groundwater monitoring
	49.8 btoc				Pesticides		
					Nitrate and Sulfate		
MW-107D	50.0	857.14	40.0-49.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/1/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	49.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-107D	50.0	857.14	40.0-49.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	49.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-107D	50.0	857.14	40.0-49.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/6/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	49.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-107D	50.0	857.14	40.0-49.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/9/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	49.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-108	34.0	901.91	24-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-108	34.0	901.91	24-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/23/2013	site-wide groundwater monitoring
	35.7 btoc				Pesticides		
					Nitrate and Sulfate		
MW-108	34.0	901.91	24-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2013	site-wide groundwater monitoring
	35.6 btoc				Pesticides		
					Nitrate and Sulfate		
MW-108	34.0	901.91	24-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/15/2014	site-wide groundwater monitoring
	35.7 btoc				Pesticides		
					Nitrate and Sulfate		
MW-108	34.0	901.91	24-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2014	site-wide groundwater monitoring
	35.7 btoc				Pesticides		
					Nitrate and Sulfate		
MW-108	34.0	901.91	24-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/28/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	35.7 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-108	34.0	901.91	24-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/11/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	36.08 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-108	34.0	901.91	24-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/2/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	36.08 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-108	34.0	901.91	24-33	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	36.3 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-109	31.5	895.90	21.5-30.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/16/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-109	31.5	895.90	21.5-30.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/23/2013	site-wide groundwater monitoring
	33.3 btoc				Pesticides		
					Nitrate and Sulfate		
MW-109	31.5	895.90	21.5-30.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/15/2013	site-wide groundwater monitoring
	33.3 btoc				Pesticides		
					Nitrate and Sulfate		
MW-109	31.5	895.90	21.5-30.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/15/2014	site-wide groundwater monitoring
	33.2 btoc				Pesticides		
					Nitrate and Sulfate		
MW-109	31.5	895.90	21.5-30.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/18/2014	site-wide groundwater monitoring
	33.3 btoc				Pesticides		
					Nitrate and Sulfate		
MW-109	31.5	895.90	21.5-30.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/3/2015	site-wide groundwater monitoring
	33.3 btoc				Pesticides		and M&J Solvents site plume impact on BFEL
					Nitrate and Sulfate		Sampled for treatability study of Metals in GW
					Site-Specific VOCs		Sampled for treatability study of Pesticides in GW
MW-109	31.5	895.90	21.5-30.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/16/2015	site-wide groundwater monitoring
	33.3 btoc				Pesticides		and M&J Solvents site plume impact on BFEL
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-109	31.5	895.90	21.5-30.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/8/2016	site-wide groundwater monitoring
	33.3 btoc				Pesticides		and M&J Solvents site plume impact on BFEL
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-109	31.5	895.90	21.5-30.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2016	site-wide groundwater monitoring
	33.5 btoc				Pesticides		and M&J Solvents site plume impact on BFEL
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-110	76.6	900.52	66.5-75.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-110	76.6	900.52	66.5-75.5	Groundwater	Total and Dissolved Fe and Mn	1/21/2013	Monitor parameters for EHC injection pilot study
					Chloride and Nitrite		Base line sampling prior to EHC injection
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
MW-110	76.6	900.52	66.5-75.5	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	4/16/2013	Monitor parameters for EHC injection pilot study
	78.9 btoc				Pesticides		1st quarter sampling after injection
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
MW-110	76.6	900.52	66.5-75.5	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	4/16/2013	Monitor parameters for EHC injection pilot study
	78.9 btoc				Pesticides		1st quarter sampling after injection
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-110	76.6	900.52	66.5-75.5	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	7/16/2013	Monitor parameters for EHC injection pilot study 2nd quarter sampling after injection
	78.9 btoc				Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
MW-110	76.6	900.52	66.5-75.5	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	10/9/2013	Monitor parameters for EHC injection pilot study 3rd quarter sampling after injection
	78.9 btoc				Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
MW-110	76.6	900.52	66.5-75.5	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	1/8/2014	Monitor parameters for EHC injection pilot study 4th quarter sampling after injection
	78.9 btoc				Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
MW-110	76.6	900.52	66.5-75.5	Groundwater	Total Alkalinity		
	78.9 btoc				Total and Dissolved As, Cu, Pb, and Zn	5/15/2014	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-110	76.6	900.52	66.5-75.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2014	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	78.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-110	76.6	900.52	66.5-75.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/29/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	78.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-110	76.6	900.52	66.5-75.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/11/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	79.6 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-110	76.6	900.52	66.5-75.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/3/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	79.6 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-110	76.6	900.52	66.5-75.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/9/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	78.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-111	43.2	900.10	33.2-42.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/16/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-111	43.2	900.10	33.2-42.2	Groundwater	Total and Dissolved Fe and Mn	1/21/2013	Monitor parameters for EHC injection pilot study Base line sampling prior to EHC injection
					Chloride and Nitrite		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
MW-111	43.2	900.10	33.2-42.2	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	4/17/2013	Monitor parameters for EHC injection pilot study 1st quarter sampling after injection
	46.3 btoc				Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
MW-111	43.2	900.10	33.2-42.2	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	7/16/2013	Monitor parameters for EHC injection pilot study 2nd quarter sampling after injection
	46.3 btoc				Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
MW-111	43.2	900.10	33.2-42.2	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	10/9/2013	Monitor parameters for EHC injection pilot study 3rd quarter sampling after injection
	46.3 btoc				Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
MW-111	43.2	900.10	33.2-42.2	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	1/8/2014	Monitor parameters for EHC injection pilot study 4th quarter sampling after injection
	46.3 btoc				Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
MW-111	43.2	900.10	33.2-42.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/19/2014	site-wide groundwater monitoring
	46.2 btoc				Pesticides		
					Nitrate and Sulfate		
MW-111	43.2	900.10	33.2-42.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/18/2014	site-wide groundwater monitoring
	46.2 btoc				Pesticides		
					Nitrate and Sulfate		
MW-111	43.2	900.10	33.2-42.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/3/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL Sampled for treatability study of Pesticides in GW
	46.2 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-111	43.2	900.10	33.2-42.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/16/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	46.2 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-111	43.2	900.10	33.2-42.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/8/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	46.2 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-111	43.2	900.10	33.2-42.2	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	46.4 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-112	22.0	904.90	12-21	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-112	22.0	904.90	12-21	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/22/2013	site-wide groundwater monitoring
	25.1 btoc				Pesticides		
					Nitrate and Sulfate		
MW-112	22.0	904.90	12-21	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2013	site-wide groundwater monitoring
	25.1 btoc				Pesticides		
					Nitrate and Sulfate		
MW-112	22.0	904.90	12-21	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/14/2014	site-wide groundwater monitoring
	25.2 btoc				Pesticides		
					Nitrate and Sulfate		
MW-112	22.0	904.90	12-21	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/11/2014	site-wide groundwater monitoring
	25.2 btoc				Pesticides		
					Nitrate and Sulfate		
MW-112	22.0	904.90	12-21	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/28/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	25.2 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-112	22.0	904.90	12-21	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	25.2 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-112	22.0	904.90	12-21	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/2/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	25.2 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-112	22.0	904.90	12-21	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/9/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	25.3 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-113	41.6	900.06	31.6-40.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/15/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-113	41.6	900.06	31.6-40.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/24/2013	site-wide groundwater monitoring
	43.7 btoc				Pesticides		
					Nitrate and Sulfate		
MW-113	41.6	900.06	31.6-40.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/15/2013	site-wide groundwater monitoring
	43.7 btoc				Pesticides		
					Nitrate and Sulfate		
MW-113	41.6	900.06	31.6-40.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/15/2014	site-wide groundwater monitoring
	43.7 btoc				Pesticides		
					Nitrate and Sulfate		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-113	41.6	900.06	31.6-40.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/17/2014	site-wide groundwater monitoring
	43.9 btoc				Pesticides		
					Nitrate and Sulfate		
MW-113	41.6	900.06	31.6-40.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/2/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL Sampled for treatability study of Metals in GW
	43.9 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-113	41.6	900.06	31.6-40.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/16/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	43.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-113	41.6	900.06	31.6-40.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/7/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	43.8 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-113	41.6	900.06	31.6-40.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	44.1 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-114	43.8	892.96	33.8-42.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/15/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-114	43.8	892.96	33.8-42.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/24/2013	site-wide groundwater monitoring
	46 btoc				Pesticides		
					Nitrate and Sulfate		
MW-114	43.8	892.96	33.8-42.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2013	site-wide groundwater monitoring
	45.8 btoc				Pesticides		
					Nitrate and Sulfate		
MW-114	43.8	892.96	33.8-42.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/15/2014	site-wide groundwater monitoring
	45.95 btoc				Pesticides		
					Nitrate and Sulfate		
MW-114	43.8	892.96	33.8-42.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/18/2014	site-wide groundwater monitoring
	45.95 btoc				Pesticides		
					Nitrate and Sulfate		
MW-114	43.8	892.96	33.8-42.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/2/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	45.95 btoc				Pesticides		
					Nitrate and Sulfate		
				Groundwater	Site-Specific VOCs		
MW-114	43.8	892.96	33.8-42.8		Total and Dissolved As, Cu, Pb, and Zn	11/16/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	45.93 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-114	43.8	892.96	33.8-42.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/7/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	45.93 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-114	43.8	892.96	33.8-42.8	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	46.1 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-115	20.5	893.40	10.5-19.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/15/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-115	20.5	893.40	10.5-19.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/24/2013	site-wide groundwater monitoring
	21.9 btoc				Pesticides		
					Nitrate and Sulfate		
MW-115	20.5	893.40	10.5-19.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2013	site-wide groundwater monitoring
	21.9 btoc				Pesticides		
					Nitrate and Sulfate		
MW-115	20.5	893.40	10.5-19.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/16/2014	site-wide groundwater monitoring
	21.9 btoc				Pesticides		
					Nitrate and Sulfate		
MW-115	20.5	893.40	10.5-19.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/14/2014	site-wide groundwater monitoring
	22.2 btoc				Pesticides		
					Nitrate and Sulfate		
MW-115	20.5	893.40	10.5-19.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/1/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	22.2 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-115	20.5	893.40	10.5-19.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/16/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	22 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-115	20.5	893.40	10.5-19.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/7/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	22 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-115	20.5	893.40	10.5-19.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	22.2 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-116	31.6	905.62	21.6-30.6			11/15/2012	
MW-116	31.6	905.62	21.6-30.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/23/2013	site-wide groundwater monitoring
	33.5 btoc				Pesticides		
					Nitrate and Sulfate		
MW-116	31.6	905.62	21.6-30.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2013	site-wide groundwater monitoring
	33.4 btoc				Pesticides		
					Nitrate and Sulfate		
MW-116	31.6	905.62	21.6-30.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/16/2014	site-wide groundwater monitoring
	33.4 btoc				Pesticides		
					Nitrate and Sulfate		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-116	31.6	905.62	21.6-30.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/12/2014	site-wide groundwater monitoring
	33.4 btoc				Pesticides		
					Nitrate and Sulfate		
MW-116	31.6	905.62	21.6-30.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/28/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	33.4 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-116	31.6	905.62	21.6-30.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/11/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	33.4 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-116	31.6	905.62	21.6-30.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/3/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	33.4 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-116	31.6	905.62	21.6-30.6	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	33.5 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-117	22.0	892.42	12-22	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/15/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-117	22.0	892.42	12-22	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/23/2013	site-wide groundwater monitoring
	24.9 btoc				Pesticides		
					Nitrate and Sulfate		
MW-117	22.0	892.42	12-22	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/15/2013	site-wide groundwater monitoring
	24.9 btoc				Pesticides		
					Nitrate and Sulfate		
MW-117	22.0	892.42	12-22	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/19/2014	site-wide groundwater monitoring
	24.9 btoc				Pesticides		
					Nitrate and Sulfate		
MW-117	22.0	892.42	12-22	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/17/2014	site-wide groundwater monitoring
	25.2 btoc				Pesticides		
					Nitrate and Sulfate		
MW-117	22.0	892.42	12-22	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/2/2015	site-wide groundwater monitoring
	25.2 btoc				Pesticides		
					Nitrate and Sulfate		
MW-117	22.0	892.42	12-22	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/16/2015	site-wide groundwater monitoring
	24.98 btoc				Pesticides		
					Nitrate and Sulfate		
MW-117	22.0	892.42	12-22	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/3/2016	site-wide groundwater monitoring
	24.98 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-117	22.0	892.42	12-22	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/10/2016	site-wide groundwater monitoring
	25.2 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-119	52.0	889.8/892.16	36.5-51.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	12/6/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-119	52.0	889.8/892.16	36.5-51.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/28/2013	site-wide groundwater monitoring
	54.4 btoc				Pesticides		
					Nitrate and Sulfate		
MW-119	52.0	889.8/892.16	36.5-51.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/18/2013	site-wide groundwater monitoring
	54.4 btoc				Pesticides		
					Nitrate and Sulfate		
MW-119	52.0	889.8/892.16	36.5-51.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/21/2014	site-wide groundwater monitoring
	54.6 btoc				Pesticides		
					Nitrate and Sulfate		
MW-119	52.0	889.8/892.16	36.5-51.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/18/2014	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	54.6 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-119	52.0	889.8/892.16	36.5-51.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/5/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	54.6 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-119	52.0	889.8/892.16	36.5-51.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/17/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	54.43 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-119	52.0	889.8/892.16	36.5-51.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/8/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	54.43 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-119	52.0	889.8/892.16	36.5-51.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/11/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	54.7 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-120	64.5	890.1/892.44	54-64	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	12/7/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-120	64.5	890.1/892.44	54-64	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/28/2013	site-wide groundwater monitoring
	65.8 btoc				Pesticides		
					Nitrate and Sulfate		
MW-120	64.5	890.1/892.44	54-64	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/18/2013	site-wide groundwater monitoring
	65.8 btoc				Pesticides		
					Nitrate and Sulfate		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-120	64.5	890.1/892.44	54-64	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/21/2014	site-wide groundwater monitoring
	65.6 btoc				Pesticides		
					Nitrate and Sulfate		
MW-120	64.5	890.1/892.44	54-64	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/18/2014	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	65.6 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-120	64.5	890.1/892.44	54-64	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/4/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL Sampled for treatability study of VOCs in GW
	65.6 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-120	64.5	890.1/892.44	54-64	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/17/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	65.5 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-120	64.5	890.1/892.44	54-64	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/8/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	65.5 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-120	64.5	890.1/892.44	54-64	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/11/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	65.5 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-121	35.0	876.9/879.45	22-32	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	12/6/2012	site-wide groundwater monitoring
					Pesticides		
					Nitrate and Sulfate		
MW-121	35.0	876.9/879.45	22-32	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/29/2013	site-wide groundwater monitoring
	35.4 btoc				Pesticides		
					Nitrate and Sulfate		
MW-121	35.0	876.9/879.45	22-32	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/18/2013	site-wide groundwater monitoring
	35.4 btoc				Pesticides		
					Nitrate and Sulfate		
MW-121	35.0	876.9/879.45	22-32	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/19/2014	site-wide groundwater monitoring
	35.4 btoc				Pesticides		
					Nitrate and Sulfate		
MW-121	35.0	876.9/879.45	22-32	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2014	site-wide groundwater monitoring
	35.4 btoc				Pesticides		
					Nitrate and Sulfate		
MW-121	35.0	876.9/879.45	22-32	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/5/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	35.4 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-121	35.0	876.9/879.45	22-32	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	11/13/2015	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	35.4 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
MW-121	35.0	876.9/879.45	22-32	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/7/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	35.4 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
MW-121	35.0	876.9/879.45	22-32		Total and Dissolved As, Cu, Pb, and Zn	11/11/2016	site-wide groundwater monitoring and M&J Solvents site plume impact on BFEL
	35.6 btoc				Pesticides		
					Nitrate and Sulfate		
					Site-Specific VOCs		
OW-1	40.5	898.7/901.13	20-40	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	1/20/2013	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study Base line sampling prior to EHC injection
					Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
OW-1	40.5	898.7/901.13	20-40	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	4/15/2013	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study 1st quarter sampling after EHC injection
	42.2 btoc				Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
OW-1	40.5	898.7/901.13	20-40	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	7/16/2013	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study 2nd quarter sampling after EHC injection
	42.2 btoc				Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
OW-1	40.5	898.7/901.13	20-40	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	10/9/2013	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study 3rd quarter sampling after EHC injection
	42.2 btoc				Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
OW-1	40.5	898.7/901.13	20-40	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn	1/8/2014	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study 4th quarter sampling after EHC injection
	42.2 btoc				Pesticides		
					Chloride, Nitrate, Nitrite, and Sulfate		
					Total and Dissolved Organic Cabon		
					Total Alkalinity		
OW-1	40.5	898.7/901.13	20-40	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	5/19/2014	site-wide monitoring
	42.2 btoc				Pesticides		
					Nitrate and Sulfate		
OW-1	40.5	898.7/901.13	20-40	Groundwater	Total and Dissolved As, Cu, Pb, and Zn	6/3/2015	site-wide monitoring
	42.2 btoc				Pesticides		
					Nitrate and Sulfate		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
OW-1	40.5 42.1 btoc	898.7/901.13	20-40	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	11/16/2015	site-wide monitoring
OW-1	40.5 42.1 btoc	898.7/901.13	20-40	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	6/8/2016	site-wide monitoring
OW-1	40.5 42.1 btoc	898.7/901.13	20-40	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	11/11/2016	site-wide monitoring
OW-2	40.5	898.5/901.14	20-40	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn Pesticides Chloride, Nitrate, Nitrite, and Sulfate Total and Dissolved Organic Cabon Total Alkalinity	1/20/2013	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study Base line sampling prior to EHC injection
OW-2	40.5 42.9 btoc	898.5/901.14	20-40	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn Pesticides Chloride, Nitrate, Nitrite, and Sulfate Total and Dissolved Organic Cabon Total Alkalinity	4/16/2013	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study 1st quarter sampling after EHC injection
OW-2	40.5 42.9 btoc	898.5/901.14	20-40	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn Pesticides Chloride, Nitrate, Nitrite, and Sulfate Total and Dissolved Organic Cabon Total Alkalinity	7/16/2013	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study 2nd quarter sampling after EHC injection
OW-2	40.5 42.9 btoc	898.5/901.14	20-40	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn Pesticides Chloride, Nitrate, Nitrite, and Sulfate Total and Dissolved Organic Cabon Total Alkalinity	1/8/2014	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study 4th quarter sampling after EHC injection
OW-2	40.5 42.9 btoc	898.5/901.14	20-40	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/20/2014	site-wide monitoring
OW-2	40.5 42.9 btoc	898.5/901.14	20-40	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	6/3/2015	site-wide monitoring
OW-2	40.5 42.61 btoc	898.5/901.14	20-40	Groundwater	Pesticides Chloride, Nitrate, Nitrite, and Sulfate Total and Dissolved Organic Cabon	11/13/2015	site-wide monitoring

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
OW-2	40.5 42.61 btoc	898.5/901.14	20-40	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	6/8/2016	site-wide monitoring
OW-2	40.5 42.5 btoc	898.5/901.14	20-40	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	11/14/2016	site-wide monitoring
OW-3	41.0	899.1/901.47	20.5-40.5	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn Pesticides Chloride, Nitrate, Nitrite, and Sulfate Total and Dissolved Organic Cabon Total Alkalinity	1/20/2013	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study Base line sampling prior to EHC injection
OW-3	41.0 42.9 btoc	899.1/901.47	20.5-40.5	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn Pesticides Chloride, Nitrate, Nitrite, and Sulfate Total and Dissolved Organic Cabon Total Alkalinity	4/16/2013	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study 1st quarter sampling after EHC injection
OW-3	41.0 42.9 btoc	899.1/901.47	20.5-40.5	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	7/16/2013	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study
OW-3	41.0 42.9 btoc	899.1/901.47	20.5-40.5	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn Pesticides Chloride, Nitrate, Nitrite, and Sulfate Total and Dissolved Organic Cabon Total Alkalinity	10/9/2013	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study 3rd quarter sampling after EHC injection
OW-3	41.0 42.9 btoc	899.1/901.47	20.5-40.5	Groundwater	Total and Dissolved As, Cu, Fe, Pb, Mn, and Zn Pesticides Chloride, Nitrate, Nitrite, and Sulfate Total and Dissolved Organic Cabon Total Alkalinity	1/8/2014	Observation well downgradient of injection points Monitor parameters for EHC injection pilot study 4th quarter sampling after EHC injection
OW-3	41.0 42.9 btoc	899.1/901.47	20.5-40.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	5/21/2014	site-wide monitoring
OW-3	41.0 42.9 btoc	899.1/901.47	20.5-40.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate	6/8/2015	site-wide monitoring
OW-3	41.0 43.64 btoc	899.1/901.47	20.5-40.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	11/13/2015	site-wide monitoring

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

WELL SAMPLED	TOTAL BORING AND WELL DEPTH (FT, BGS)	GROUND SURFACE ELEVATION/TOP OF CASING ELEVATION (FT, NGVD)	SCREENED INTERVAL (FT, BGS)	MEDIA	ANALYSES PER SAMPLE	SAMPLE DATE	PURPOSE
OW-3	41.0 43.64 btoc	899.1/901.47	20.5-40.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	6/8/2016	site-wide monitoring
OW-3	41.0 43.7 btoc	899.1/901.47	20.5-40.5	Groundwater	Total and Dissolved As, Cu, Pb, and Zn Pesticides Nitrate and Sulfate Site-Specific VOCs	11/14/2016	site-wide monitoring

Notes:

Arsenic, Lead, Copper, Iron, Manganese, and Zinc analyzed using USEPA Method 6020
Pesticides analyzed using USEPA Method 8081A
Nitrate and Sulfate, Chloride and Nitrite analyzed using USEPA Method 9056
As = arsenic, Cu = Copper, Fe = iron, Pb = lead, Mn = Managanese, Zn = zinc
bgs = below ground surface
na or N/A = not applicable
ft = feet

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

SURFACE WATER LOCATION	SURFACE WATER SAMPLE IDENTIFICATION	MEDIA	ANALYSES	SAMPLE DATE	PURPOSE
SW-2010-5	SW-2010-5	Surface Water	Total and Dissolved As, Cu, Pb, and Zn	11/16/2012	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-5	SW-2010-5		Dissolved As, Cu, Pb, and Zn	5/30/2013	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-5	SW-2010-5		Dissolved As, Cu, Pb, and Zn	11/19/2013	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-5	SW-2010-5		Dissolved As, Cu, Pb, and Zn	5/20/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-5	SW-2010-5		Dissolved As, Cu, Pb, and Zn	11/19/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-5	SW-2010-5		Dissolved As, Cu, Pb, and Zn	6/4/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-5	SW-2010-5		Dissolved As, Cu, Pb, and Zn	11/18/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-5	SW-2010-5		Dissolved As, Cu, Pb, and Zn	6/9/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-5	SW-2010-5		Dissolved As, Cu, Pb, and Zn	11/15/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-10	SW-2010-10	Surface Water	Total and Dissolved As, Cu, Pb, and Zn	11/16/2012	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-10	SW-2010-10		Dissolved As, Cu, Pb, and Zn	5/30/2013	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-10	SW-2010-10		Dissolved As, Cu, Pb, and Zn	11/19/2013	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-10	SW-2010-10		Dissolved As, Cu, Pb, and Zn	5/20/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-10	SW-2010-10		Dissolved As, Cu, Pb, and Zn	11/19/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-10	SW-2010-10		Dissolved As, Cu, Pb, and Zn	6/4/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-10	SW-2010-10		Dissolved As, Cu, Pb, and Zn	11/18/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

SURFACE WATER LOCATION	SURFACE WATER SAMPLE IDENTIFICATION	MEDIA	ANALYSES	SAMPLE DATE	PURPOSE
SW-2010-10	SW-2010-10	Surface Water	Dissolved As, Cu, Pb, and Zn	6/9/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-10	SW-2010-10		Dissolved As, Cu, Pb, and Zn	11/15/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
			Hardness		
SW-2010-11	SW-2010-11	Surface Water	Total and Dissolved As, Cu, Pb, and Zn	11/16/2012	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-11	SW-2010-11		Dissolved As, Cu, Pb, and Zn	5/30/2013	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-11	SW-2010-11	Surface Water	Dissolved As, Cu, Pb, and Zn	11/19/2013	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-11	SW-2010-11		Dissolved As, Cu, Pb, and Zn	5/20/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-11	SW-2010-11		Dissolved As, Cu, Pb, and Zn	11/19/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-11	SW-2010-11		Dissolved As, Cu, Pb, and Zn	6/4/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-11	SW-2010-11		Dissolved As, Cu, Pb, and Zn	11/18/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-11	SW-2010-11		Dissolved As, Cu, Pb, and Zn	6/9/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-11	SW-2010-11		Dissolved As, Cu, Pb, and Zn	11/15/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-14	SW-2010-14	Surface Water	Total and Dissolved As, Cu, Pb, and Zn	11/16/2012	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-14	SW-2010-14		Dissolved As, Cu, Pb, and Zn	5/30/2013	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-14	SW-2010-14		Dissolved As, Cu, Pb, and Zn	11/19/2013	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-14	SW-2010-14		Dissolved As, Cu, Pb, and Zn	5/20/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

SURFACE WATER LOCATION	SURFACE WATER SAMPLE IDENTIFICATION	MEDIA	ANALYSES	SAMPLE DATE	PURPOSE
SW-2010-14	SW-2010-14	Surface Water	Dissolved As, Cu, Pb, and Zn	11/19/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-14	SW-2010-14		Dissolved As, Cu, Pb, and Zn	6/4/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-14	SW-2010-14		Dissolved As, Cu, Pb, and Zn	11/18/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-14	SW-2010-14		Dissolved As, Cu, Pb, and Zn	6/9/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-14	SW-2010-14		Dissolved As, Cu, Pb, and Zn	11/15/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-15	SW-2010-15	Surface Water	Total and Dissolved As, Cu, Pb, and Zn	11/16/2012	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-15	SW-2010-15		Dissolved As, Cu, Pb, and Zn	5/30/2013	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-15	SW-2010-15		Dissolved As, Cu, Pb, and Zn	11/19/2013	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-15	SW-2010-15		Dissolved As, Cu, Pb, and Zn	5/20/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-15	SW-2010-15	Surface Water	Dissolved As, Cu, Pb, and Zn	11/19/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-15	SW-2010-15		Dissolved As, Cu, Pb, and Zn	6/4/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-15	SW-2010-15		Dissolved As, Cu, Pb, and Zn	11/18/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-15	SW-2010-15		Dissolved As, Cu, Pb, and Zn	6/9/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-15	SW-2010-15		Dissolved As, Cu, Pb, and Zn	11/15/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
			Hardness		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

SURFACE WATER LOCATION	SURFACE WATER SAMPLE IDENTIFICATION	MEDIA	ANALYSES	SAMPLE DATE	PURPOSE
SW-2010-17	SW-2010-17	Surface Water	Total and Dissolved As, Cu, Pb, and Zn	11/16/2012	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-17	SW-2010-17		Dissolved As, Cu, Pb, and Zn	5/30/2013	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-17	SW-2010-17		Dissolved As, Cu, Pb, and Zn	11/19/2013	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-17	SW-2010-17		Dissolved As, Cu, Pb, and Zn	5/20/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-17	SW-2010-17		Dissolved As, Cu, Pb, and Zn	11/19/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-17	SW-2010-17		Dissolved As, Cu, Pb, and Zn	6/4/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-17	SW-2010-17		Dissolved As, Cu, Pb, and Zn	11/18/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-17	SW-2010-17		Dissolved As, Cu, Pb, and Zn	6/9/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2010-17	SW-2010-17		Dissolved As, Cu, Pb, and Zn	11/15/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW2014-20	SW2014-20	Surface Water	Dissolved As, Cu, Pb, and Zn	5/20/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW2014-20	SW2014-20		Dissolved As, Cu, Pb, and Zn	11/19/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW2014-20	SW2014-20		Dissolved As, Cu, Pb, and Zn	6/4/2015	Surface water quality monitoring Sampled for treatability study of Metals and Pesticides in surface water
			Pesticides		
			Nitrate and Sulfate		
SW2014-20	SW2014-20		Dissolved As, Cu, Pb, and Zn	11/18/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW2014-20	SW2014-20		Dissolved As, Cu, Pb, and Zn	6/9/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW2014-20	SW2014-20		Dissolved As, Cu, Pb, and Zn	11/15/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
			Hardness		

TABLE 1: SUMMARY OF SOIL AND WATER COLLECTION DATA

SURFACE WATER LOCATION	SURFACE WATER SAMPLE IDENTIFICATION	MEDIA	ANALYSES	SAMPLE DATE	PURPOSE
SW2014-21	SW2014-21	Surface Water	Dissolved As, Cu, Pb, and Zn	5/20/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW2014-21	SW2014-21		Dissolved As, Cu, Pb, and Zn	11/19/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW2014-21	SW2014-21		Dissolved As, Cu, Pb, and Zn	6/4/2015	Surface water quality monitoring Sampled for treatability study of Metals and Pesticides in surface water
			Pesticides		
			Nitrate and Sulfate		
SW2014-21	SW2014-21		Dissolved As, Cu, Pb, and Zn	11/18/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2014-21	SW-2014-21		Dissolved As, Cu, Pb, and Zn	6/9/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
SW-2014-21	SW-2014-21		Dissolved As, Cu, Pb, and Zn	11/15/2016	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
INFLOW-1	INFLOW-1	Surface Water	Dissolved As, Cu, Pb, and Zn	3/31/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
INFLOW-1	INFLOW-1		Dissolved As, Cu, Pb, and Zn	11/19/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
INFLOW-1	INFLOW-1		Dissolved As, Cu, Pb, and Zn	6/4/2015	Surface water quality monitoring Sampled for treatability study of Metals and Pesticides in surface water
			Pesticides		
			Nitrate and Sulfate		
INFLOW-2	INFLOW-2	Surface Water	Dissolved As, Cu, Pb, and Zn	3/31/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
INFLOW-2	INFLOW-2		Dissolved As, Cu, Pb, and Zn	11/19/2014	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		
INFLOW-2	INFLOW-2		Dissolved As, Cu, Pb, and Zn	6/4/2015	Surface water quality monitoring
			Pesticides		
			Nitrate and Sulfate		

Notes:

Arsenic, Lead, Copper, Iron, Manganese, and Zinc analyzed using USEPA Method 6020
Pesticides analyzed using USEPA Method 8081A
Nitrate and Sulfate, Chloride and Nitrite analyzed using USEPA Method 9056
As = arsenic, Cu = Copper, Fe = iron, Pb = lead, Mn = Managanese, Zn = zinc
bgs = below ground surface
na or N/A = not applicable
ft = feet

Prepared by: NJM 12/28/2016
Checked by: RNQ 1/12/2017

TABLE 2: SUMMARY OF GROUNDWATER ELEVATIONS

Well Number	Screened Interval (ft NGVD)			Lithology Screened	Top of Casing Elevation (ft., NGVD)	Depth to Ground Water on 1/7/1998 (ft., btoc)	Ground-Water Elevation on 1/7/1998 (ft., NGVD)	Depth to Ground Water on 5/29/1998 (ft., btoc)	Ground-Water Elevation on 5/29/1998 (ft., NGVD)	Depth to Ground Water (ft., btoc) 1/21/2000	Ground-Water Elevation (ft., NGVD) 1/21/2000	Depth to Ground Water (ft., btoc) 11/26/2002	Ground-Water Elevation (ft., NGVD) 11/26/2002
MW-1B	893.5	-	884.5	fine sandy silt to silty fine sand	915.95					28.54	887.41	24.37	891.58
MW-21	885.9	-	875.9	clayey silt to silty clay	905.70	23.92	881.78	22.56	883.14	27.64	878.06	dry	
MW-22	875.3	-	865.3	silty clay and clayey silt	894.23	16.05	878.18	15.68	878.55	19.76	874.47	18.20	876.03
MW-24	874.8	-	864.8	silty clay to clayey silt	897.31	22.73	874.58	21.01	876.30	27.30	870.01	25.24	872.07
MW-25	875.1	-	865.1	silty clay to clayey silt	895.05	24.54	870.51	23.05	872.00	28.59	866.46	27.00	868.05
MW-26	893.5	-	883.5	clayey silt	904.99	7.63	897.36	7.34	897.65	13.08	891.91	8.90	896.09
DW-1B	843.8	-	833.8	bedrock	915.50			31.35	884.15	39.75	875.75	37.75	877.75
MW-101	895.6	-	885.6	silty fine sand	912.55	13.35	899.20	12.73	899.82	18.15	894.40	14.00	898.55
MW-102	892.4	-	883.4	silty fine sand and PWR	915.19	23.2	891.99	22.80	892.39	24.08	891.11	22.00	893.19
MW-104A	868.3		858.8	silty very fine sand	898.00								
MW-104D	829.9	-	819.9	bedrock	901.59	16.31	885.28	15.59	886.00	20.37	881.22	17.08	884.51
MW-105	887.7		878.7	silty fine to medium sand	904.55	12.18	892.37	11.63	892.92	15.11	889.44	12.15	892.40
MW-106D	816.1	-	807.1	bedrock	878.60	11.41	867.19	11.02	867.58	12.73	865.87	11.85	866.75
MW-107D	817.5		808.0	bedrock	857.14								
MW-108	875.8	-	866.8	silty fine sand	901.91			16.73	885.18	21.60	880.31	19.01	882.90
MW-109	872.1	-	863.1	silty fine sand with brick fragments (fill)	895.90			12.16	883.74	16.58	879.32	13.88	882.02
MW-110	831.9	-	822.9	bedrock	900.52	21.61	878.91	21.28	879.24	25.08	875.44	22.90	877.62
MW-111	864.3	-	855.3	silty sand and PWR	900.10			16.26	883.84	20.59	879.51	18.60	881.50
MW-112	890.7	-	881.7	silty very fine sand	904.90			11.64	893.26	17.44	887.46	13.00	891.90
MW-113	866.2	-	857.2	sandy clayey silt	900.06			25.75	874.31	30.03	870.03	28.15	871.91
MW-114	856.8	-	847.8	silty clayey fine sand to silty fine sand	892.96			22.90	870.06	26.83	866.13	25.00	867.96
MW-115	880.5	-	871.5	silty sand with concrete fragments (fill)	893.40			10.90	882.50	14.98	878.42	12.82	880.58
MW-116	881.8	-	872.8	fine sand	905.62			21.97	883.65	31.65	873.97	29.15	876.47
MW-117	878.1	-	868.1	very sandy silt to very silty fine sand	892.42							11.94	880.48
MW-119	853.3	-	838.3	PWR and bedrock	892.16	not installed							
MW-120	836.1	-	826.1	bedrock	892.44								
MW-121	854.9	-	844.9	bedrock	879.45								
TW-1	878.3	-	868.3	sandy silt	893.00								
TW-2	878.5	-	868.5	sandy silt	897.89								
TW-3	867.5	-	857.5	sandy silt	897.44								
TW-4	875.4	-	865.4	sandy silt	899.36								
TW-5	869.0	-	859.0	silty sand	891.90								
TW-6	878.1	-	868.1	silty sand to sandy silt	908.34								
TW-7	877.1	-	867.1	clay to silty fine sand	899.22								
TW-8	880.3	-	870.3	silty sand to sandy silt	900.36								
TW-9	876.3	-	866.3	silt to sandy silt	901.56								
TW-10	876.4	-	866.4	sandy silt	896.56								
TW-11	882.9	-	872.9	sandy silty with rock fragments	918.08								
TW-12	893.8	-	883.8	silty sand with quartz fragments	929.03								
OW-1	878.7	-	858.7	silt to partially weathered rock	901.13	not installed							
OW-2	878.5	-	858.5	silt with quartz veins to partially weathered rock	901.14								
OW-3	878.6	-	858.6	silt with quartz veins to partially weathered rock	901.47								

Surface Water Location	Screened Interval (ft NGVD)			Lithology Screened	Top of Staff Gauge Elevation (ft., NGVD)	Depth to Surface Water on 1/7/1998 (ft.)	Surface Water Elevation on 1/7/1998 (ft., NGVD)	Depth to Surface Water on 5/29/1998 (ft.)	Surface Water Elevation on 5/29/1998 (ft., NGVD)	Depth to Surface Water (ft.) 1/21/2000	Surface Water Elevation (ft., NGVD) 1/21/2000	Depth to Surface Water (ft.) 11/26/2002	Surface Water Elevation (ft., NGVD) 11/26/2002
Upstream Staff Gauge@ MW-106D/MW-121[(1)] [Staff Gauge #1]	NA			un-named stream on CSX	865.80	2.9	862.90	3.10	862.70	Dry at gauge		1.52	864.28
Downstream Staff Gauge at railroad culvert [(1)] [Staff Gauge #2]	NA				858.90	7.9	851.00	8.10	850.80	1.03	857.87	8.65	850.25
Downstream Staff Gauge at at well MW-119/MW-120[(1)] [Staff Gauge #3]	NA				841.55	not installed							
Downstream Staff Gauge at well MW-107D[(1)] [Staff Gauge #4]	NA				837.66								

TABLE 2: SUMMARY OF GROUNDWATER ELEVATIONS

Well Number	Screened Interval (ft NGVD)			Lithology Screened	Top of Casing Elevation (ft., NGVD)	Depth to Ground Water (ft., btoc) 8/20/2007	Ground-Water Elevation (ft., NGVD) 8/20/2007	Depth to Ground Water (ft., btoc) 9/20/2007	Ground-Water Elevation (ft., NGVD) 9/20/2007	Depth to Ground Water (ft., btoc) 7/29/2010	Ground-Water Elevation (ft., NGVD) 7/29/2010	Depth to Ground Water (ft., btoc) 9/14/2010	Ground-Water Elevation (ft., NGVD) 9/14/2010
MW-1B	893.5	-	884.5	fine sandy silt to silty fine sand	915.95	28.47	887.48	22.98	892.97	23.60	892.35	26.40	889.55
MW-21	885.9	-	875.9	clayey silt to silty clay	905.70	dry		dry		24.57	881.13	dry	
MW-22	875.3	-	865.3	silty clay and clayey silt	894.23	20.88	873.35			18.16	876.07	19.46	874.77
MW-24	874.8	-	864.8	silty clay to clayey silt	897.31	dry		dry		not measured		24.01	873.30
MW-25	875.1	-	865.1	silty clay to clayey silt	895.05	28.31	866.74	not measured				25.56	869.49
MW-26	893.5	-	883.5	clayey silt	904.99	13.57	891.42	not measured		10.04	894.95	11.75	893.24
DW-1B	843.8	-	833.8	bedrock	915.50	not measured		not measured		34.42	881.08	36.40	879.10
MW-101	895.6	-	885.6	silty fine sand	912.55	18.11	894.44	not measured		15.12	897.43	16.80	895.75
MW-102	892.4	-	883.4	silty fine sand and PWR	915.19	26.17	889.02	not measured		23.58	891.61	24.82	890.37
MW-104A	868.3		858.8	silty very fine sand	898.00	16.73	881.27	not measured		not measured		14.63	883.37
MW-104D	829.9	-	819.9	bedrock	901.59	21.80	879.79	20.77	880.82	not measured		16.77	884.82
MW-105	887.7		878.7	silty fine to medium sand	904.55	15.96	888.59	not measured		not measured		15.00	889.55
MW-106D	816.1	-	807.1	bedrock	878.60	32.90	845.70	33.08	845.52	not measured		25.78	852.82
MW-107D	817.5		808.0	bedrock	857.14	25.63	831.51	26.07	831.07	not measured		22.99	834.15
MW-108	875.8	-	866.8	silty fine sand	901.91	22.50	879.41	not measured		19.69	882.22	21.23	880.68
MW-109	872.1	-	863.1	silty fine sand with brick fragments (fill)	895.90	17.25	878.65	not measured		not measured		15.57	880.33
MW-110	831.9	-	822.9	bedrock	900.52	31.35	869.17	not measured		27.11	873.41	28.31	872.21
MW-111	864.3	-	855.3	silty sand and PWR	900.10	21.86	878.24	not measured		not measured		20.33	879.77
MW-112	890.7	-	881.7	silty very fine sand	904.90	18.13	886.77	not measured		14.31	890.59	16.35	888.55
MW-113	866.2	-	857.2	sandy clayey silt	900.06	30.85	869.21	not measured		not measured		29.21	870.85
MW-114	856.8	-	847.8	silty clayey fine sand to silty fine sand	892.96	26.91	866.05	not measured		not measured		25.14	867.82
MW-115	880.5	-	871.5	silty sand with concrete fragments (fill)	893.40	16.00	877.40	not measured		not measured		15.16	878.24
MW-116	881.8	-	872.8	fine sand	905.62	30.61	875.01	not measured		23.20	882.42	25.44	880.18
MW-117	878.1	-	868.1	very sandy silt to very silty fine sand	892.42	13.91	878.51	not measured		not measured		13.17	879.25
MW-119	853.3	-	838.3	PWR and bedrock	892.16	not installed							
MW-120	836.1	-	826.1	bedrock	892.44								
MW-121	854.9	-	844.9	bedrock	879.45								
TW-1	878.3	-	868.3	sandy silt	893.00								
TW-2	878.5	-	868.5	sandy silt	897.89								
TW-3	867.5	-	857.5	sandy silt	897.44								
TW-4	875.4	-	865.4	sandy silt	899.36								
TW-5	869.0	-	859.0	silty sand	891.90								
TW-6	878.1	-	868.1	silty sand to sandy silt	908.34								
TW-7	877.1	-	867.1	clay to silty fine sand	899.22								
TW-8	880.3	-	870.3	silty sand to sandy silt	900.36								
TW-9	876.3	-	866.3	silt to sandy silt	901.56								
TW-10	876.4	-	866.4	sandy silt	896.56								
TW-11	882.9	-	872.9	sandy silty with rock fragments	918.08								
TW-12	893.8	-	883.8	silty sand with quartz fragments	929.03								
OW-1	878.7	-	858.7	silt to partially weathered rock	901.13	not installed							
OW-2	878.5	-	858.5	silt with quartz veins to partially weathered rock	901.14								
OW-3	878.6	-	858.6	silt with quartz veins to partially weathered rock	901.47								

Surface Water Location	Screened Interval (ft NGVD)			Lithology Screened	Top of Staff Gauge Elevation (ft., NGVD)	Depth to Surface Water (ft., btoc) 8/20/2007	Surface Water Elevation (ft., NGVD) 8/20/2007	Depth to SurfaceWater (ft., btoc) 9/20/2007	Surface Water Elevation (ft., NGVD) 9/20/2007	Depth to Surface Water (ft., btoc) 7/29/2010	Surface Water Elevation (ft., NGVD) 7/29/2010	Depth to Surface Water (ft., btoc) 9/14/2010	Surface Water Elevation (ft., NGVD) 9/14/2010
Upstream Staff Gauge@ MW-106D/MW-121[(1)] [Staff Gauge #1]	NA			un-named stream on CSX	865.80	2.12	860.91	2.13	860.90	not measured		2.1	860.9
Downstream Staff Gauge at railroad culvert [(1)] [Staff Gauge #2]	NA				858.90	8.10	850.52	7.89	850.73	not measured		7.8	850.8
Downstream Staff Gauge at at well MW-119/MW-120[(1)] [Staff Gauge #3]	NA				841.55	not installed							
Downstream Staff Gauge at well MW-107D[(1)] [Staff Gauge #4]	NA				837.66								

TABLE 2: SUMMARY OF GROUNDWATER ELEVATIONS

Well Number	Screened Interval (ft NGVD)			Lithology Screened	Top of Casing Elevation (ft., NGVD)	Depth to Ground Water (ft., btoc) May 30-31, 2012	Ground-Water Elevation (ft., NGVD) June 2012	Depth to Ground Water (ft., btoc) 12/7/2012	Ground-Water Elevation (ft., NGVD) 12/7/2012	Depth to Ground Water (ft., btoc) 5/20/2013 & 5/30/2013[2]	Ground-Water Elevation (ft., NGVD) 5/20/2013 & 5/30/2013[2]	Depth to Ground Water (ft., btoc) 11/11-12/2013	Ground-Water Elevation (ft., NGVD) 11/11-12/2013
MW-1B	893.5	-	884.5	fine sandy silt to silty fine sand	915.95	not measured		29.65	886.30	23.93	892.02	24.97	890.98
MW-21	885.9	-	875.9	clayey silt to silty clay	905.70	not measured		dry		dry		dry	
MW-22	875.3	-	865.3	silty clay and clayey silt	894.23	not measured		22.52	871.71	18.35	875.88	19.71	874.52
MW-24	874.8	-	864.8	silty clay to clayey silt	897.31	not measured		damaged		damaged		damaged	
MW-25	875.1	-	865.1	silty clay to clayey silt	895.05	not measured		dry		27.87	867.18	29.20	865.85
MW-26	893.5	-	883.5	clayey silt	904.99	not measured		15.48	889.51	9.30	895.69	10.76	894.23
DW-1B	843.8	-	833.8	bedrock	915.50	not measured		not measured		39.85	875.65	not measured-could not locate	
MW-101	895.6	-	885.6	silty fine sand	912.55	not measured		20.21	892.34	14.68	897.87	15.95	896.60
MW-102	892.4	-	883.4	silty fine sand and PWR	915.19	not measured		26.46	888.73	22.59	892.60	23.95	891.24
MW-104A	868.3		858.8	silty very fine sand	898.00	not measured		17.35	880.65	12.82	885.18	13.53	884.47
MW-104D	829.9	-	819.9	bedrock	901.59	not measured		20.91	880.68	16.52	885.07	17.21	884.38
MW-105	887.7		878.7	silty fine to medium sand	904.55	not measured		17.11	887.44	12.15	892.40	14.65	889.90
MW-106D	816.1	-	807.1	bedrock	878.60	not measured		28.49	850.11	26.85	851.75	26.97	851.63
MW-107D	817.5		808.0	bedrock	857.14	not measured		24.23	832.91	20.49	836.65	21.54	835.60
MW-108	875.8	-	866.8	silty fine sand	901.91	not measured		25.24	876.67	18.91	883.00	20.85	881.06
MW-109	872.1	-	863.1	silty fine sand with brick fragments (fill)	895.90	not measured		20.41	875.49	13.63	882.27	15.76	880.14
MW-110	831.9	-	822.9	bedrock	900.52	not measured		31.63	868.89	26.74	873.78	27.59	872.93
MW-111	864.3	-	855.3	silty sand and PWR	900.10	not measured		24.53	875.57	18.74	881.36	20.29	879.81
MW-112	890.7	-	881.7	silty very fine sand	904.90	not measured		20.12	884.78	12.43	892.47	15.23	889.67
MW-113	866.2	-	857.2	sandy clayey silt	900.06	not measured		32.19	867.87	28.53	871.53	29.64	870.42
MW-114	856.8	-	847.8	silty clayey fine sand to silty fine sand	892.96	not measured		29.20	863.76	26.21	866.75	26.74	866.22
MW-115	880.5	-	871.5	silty sand with concrete fragments (fill)	893.40	not measured		18.46	874.94	13.22	880.18	14.85	878.55
MW-116	881.8	-	872.8	fine sand	905.62	not measured		32.83	872.79	29.25	876.37	29.41	876.21
MW-117	878.1	-	868.1	very sandy silt to very silty fine sand	892.42	not measured		15.54	876.88	12.40	880.02	13.16	879.26
MW-119	853.3	-	838.3	PWR and bedrock	892.16	not installed		42.28	849.88	42.19	849.97	41.51	850.65
MW-120	836.1	-	826.1	bedrock	892.44	not installed		45.47	846.97	45.19	847.25	44.75	847.69
MW-121	854.9	-	844.9	bedrock	879.45	not installed		17.66	861.79	16.35	863.10	16.69	862.76
TW-1	878.3	-	868.3	sandy silt	893.00	16.00	877.00	17.44	875.56	13.86	879.14	15.05	877.95
TW-2	878.5	-	868.5	sandy silt	897.89	22.44	875.45	24.90	872.99	20.48	877.41	21.71	876.18
TW-3	867.5	-	857.5	sandy silt	897.44	26.85	870.59	29.85	867.59	25.21	872.23	25.89	871.55
TW-4	875.4	-	865.4	sandy silt	899.36	27.70	871.66	30.65	868.71	27.14	872.22	26.95	872.41
TW-5	869.0	-	859.0	silty sand	891.90	22.57	869.33	25.28	866.62	21.61	870.29	21.71	870.19
TW-6	878.1	-	868.1	silty sand to sandy silt	908.34	25.71	882.63	29.19	879.15	23.11	885.23	24.17	884.17
TW-7	877.1	-	867.1	clay to silty fine sand	899.22	21.48	877.74	24.59	874.63	18.97	880.25	20.01	879.21
TW-8	880.3	-	870.3	silty sand to sandy silt	900.36	19.98	880.38	23.66	876.70	17.21	883.15	18.85	881.51
TW-9	876.3	-	866.3	silt to sandy silt	901.56	21.49	880.07	24.68	876.88	18.2	883.36	20.15	881.41
TW-10	876.4	-	866.4	sandy silt	896.56	18.35	878.21	21.42	875.14	15.36	881.20	17.45	879.11
TW-11	882.9	-	872.9	sandy silty with rock fragments	918.08	30.75	887.33	33.71	884.37	29.85	888.23	29.58	888.50
TW-12	893.8	-	883.8	silty sand with quartz fragments	929.03	34.80	894.23	37.52	891.51	33.51	895.52	32.99	896.04
OW-1	878.7	-	858.7	silt to partially weathered rock	901.13	not installed				19.97	881.16	19.80	881.33
OW-2	878.5	-	858.5	silt with quartz veins to partially weathered rock	901.14					20.47	880.67	20.37	880.77
OW-3	878.6	-	858.6	silt with quartz veins to partially weathered rock	901.47					20.83	880.64	20.7	880.77

Surface Water Location	Screened Interval (ft NGVD)			Lithology Screened	Top of Staff Gauge Elevation (ft., NGVD)	Depth to Surface Water (ft., btoc) May 30-31, 2012	Surface Water Elevation (ft., NGVD) June 2012	Depth to Surface Water (ft., btoc) 12/7/2012	Surface Water Elevation (ft., NGVD) 12/7/2012	Depth to Surface Water (ft., btoc) 5/30/2013	Surface Water Elevation (ft., NGVD) 5/30/2013	Depth to Surface Water (ft., btoc) 11/19/2013	Surface Water Elevation (ft., NGVD) 11/19/2013
Upstream Staff Gauge@ MW-106D/MW-121[1] [Staff Gauge #1]	NA			un-named stream on CSX	865.80	not measured		3.02	860.01	3.11	862.69	3.86	861.94
Downstream Staff Gauge at railroad culvert [1] [Staff Gauge #2]	NA				858.90	not measured		7.96	850.66	8.05	850.85	7.90	851.00
Downstream Staff Gauge at at well MW-119/MW-120[1] [Staff Gauge #3]	NA				841.55	not installed				2.5	839.05	2.21	839.34
Downstream Staff Gauge at well MW-107D[1] [Staff Gauge #4]	NA				837.66					1.64	836.02	1.15	836.51

TABLE 2: SUMMARY OF GROUNDWATER ELEVATIONS

Well Number	Screened Interval (ft NGVD)			Lithology Screened	Top of Casing Elevation (ft., NGVD)	Depth to Ground Water (ft., btoc) 5/12/2014	Ground-Water Elevation (ft., NGVD) 5/12/2014	Depth to Ground Water (ft., btoc) 11/10/2014	Ground-Water Elevation (ft., NGVD) 11/10/2014	Depth to Ground Water (ft., btoc) 5/26-5/27/2015	Ground-Water Elevation (ft., NGVD) 5/26-5/27/2015	Depth to Ground Water (ft., btoc) 11/9/2015	Ground-Water Elevation (ft., NGVD) 11/9/2015
MW-1B	893.5	-	884.5	fine sandy silt to silty fine sand	915.95	22.40	893.55	26.37	889.58	22.96	892.99	23.88	892.07
MW-21	885.9	-	875.9	clayey silt to silty clay	905.70	23.78	881.92	dry		26.01	879.69	dry	
MW-22	875.3	-	865.3	silty clay and clayey silt	894.23	17.40	876.83	20.40	873.83	19.10	875.13	18.33	875.90
MW-24	874.8	-	864.8	silty clay to clayey silt	897.31	damaged		damaged		damaged		destroyed	
MW-25	875.1	-	865.1	silty clay to clayey silt	895.05	could not locate-not measured		28.35	866.70	26.54	868.51	27.99	867.06
MW-26	893.5	-	883.5	clayey silt	904.99	8.13	896.86	12.42	892.57	9.94	895.05	9.69	895.30
DW-1B	843.8	-	833.8	bedrock	915.50	could not locate-not measured		40.04	875.46	38.16	877.34	39.35	876.15
MW-101	895.6	-	885.6	silty fine sand	912.55	13.75	898.80	17.42	895.13	15.23	897.32	14.78	897.77
MW-102	892.4	-	883.4	silty fine sand and PWR	915.19	22.03	893.16	25.08	890.11	23.23	891.96	23.63	891.56
MW-104A	868.3		858.8	silty very fine sand	898.00	12.08	885.92	14.85	883.15	13.24	884.76	13.31	884.69
MW-104D	829.9	-	819.9	bedrock	901.59	15.79	885.80	18.76	882.83	16.94	884.65	16.93	884.66
MW-105	887.7		878.7	silty fine to medium sand	904.55	11.63	892.92	15.38	889.17	12.81	891.74	13.53	891.02
MW-106D	816.1	-	807.1	bedrock	878.60	26.07	852.53	27.42	851.18	25.27	853.33	25.18	853.42
MW-107D	817.5		808.0	bedrock	857.14	19.74	837.40	22.48	834.66	21.62	835.52	21.73	835.41
MW-108	875.8	-	866.8	silty fine sand	901.91	18.03	883.88	22.09	879.82	19.30	882.61	20.49	881.42
MW-109	872.1	-	863.1	silty fine sand with brick fragments (fill)	895.90	12.88	883.02	17.11	878.79	14.25	881.65	14.70	881.20
MW-110	831.9	-	822.9	bedrock	900.52	25.32	875.20	28.76	871.76	26.84	873.68	27.58	872.94
MW-111	864.3	-	855.3	silty sand and PWR	900.10	17.52	882.58	21.46	878.64	18.86	881.24	20.58	879.52
MW-112	890.7	-	881.7	silty very fine sand	904.90	10.98	893.92	17.16	887.74	14.01	890.89	14.48	890.42
MW-113	866.2	-	857.2	sandy clayey silt	900.06	27.24	872.82	30.30	869.76	27.68	872.38	27.83	872.23
MW-114	856.8	-	847.8	silty clayey fine sand to silty fine sand	892.96	24.45	868.51	27.06	865.90	25.18	867.78	25.75	867.21
MW-115	880.5	-	871.5	silty sand with concrete fragments (fill)	893.40	12.11	881.29	15.91	877.49	13.30	880.10	14.14	879.26
MW-116	881.8	-	872.8	fine sand	905.62	25.33	880.29	29.95	875.67	29.05	876.57	30.84	874.78
MW-117	878.1	-	868.1	very sandy silt to very silty fine sand	892.42	10.91	881.51	13.81	878.61	12.08	880.34	13.09	879.33
MW-119	853.3	-	838.3	PWR and bedrock	892.16	41.21	850.95	42.68	849.48	42.31	849.85	41.60	850.56
MW-120	836.1	-	826.1	bedrock	892.44	44.45	847.99	45.12	847.32	44.62	847.82	44.08	848.36
MW-121	854.9	-	844.9	bedrock	879.45	16.31	863.14	17.19	862.26	16.38	863.07	14.41	865.04
TW-1	878.3	-	868.3	sandy silt	893.00	13.05	879.95	15.69	877.31	14.93	878.07	14.13	878.87
TW-2	878.5	-	868.5	sandy silt	897.89	18.93	878.96	22.48	875.41	21.10	876.79	21.30	876.59
TW-3	867.5	-	857.5	sandy silt	897.44	22.52	874.92	26.51	870.93	24.61	872.83	25.45	871.99
TW-4	875.4	-	865.4	sandy silt	899.36	23.61	875.75	27.05	872.31	26.25	873.11	27.42	871.94
TW-5	869.0	-	859.0	silty sand	891.90	18.06	873.84	21.91	869.99	22.03	869.87	21.89	870.01
TW-6	878.1	-	868.1	silty sand to sandy silt	908.34	20.50	887.84	25.53	882.81	22.79	885.55	24.91	883.43
TW-7	877.1	-	867.1	clay to silty fine sand	899.22	16.63	882.59	21.15	878.07	18.66	880.56	20.51	878.71
TW-8	880.3	-	870.3	silty sand to sandy silt	900.36	15.68	884.68	20.03	880.33	17.42	882.94	19.37	880.99
TW-9	876.3	-	866.3	silt to sandy silt	901.56	16.94	884.62	21.39	880.17	18.66	882.90	20.33	881.23
TW-10	876.4	-	866.4	sandy silt	896.56	14.19	882.37	18.62	877.94	16.79	879.77	17.40	879.16
TW-11	882.9	-	872.9	sandy silty with rock fragments	918.08	26.93	891.15	30.41	887.67	29.77	888.31	30.84	887.24
TW-12	893.8	-	883.8	silty sand with quartz fragments	929.03	30.75	898.28	34.25	894.78	33.65	895.38	34.13	894.90
OW-1	878.7	-	858.7	silt to partially weathered rock	901.13	16.98	884.15	21.20	879.93	18.66	882.47	20.45	880.68
OW-2	878.5	-	858.5	silt with quartz veins to partially weathered rock	901.14	17.52	883.62	21.70	879.44	19.10	882.04	20.80	880.34
OW-3	878.6	-	858.6	silt with quartz veins to partially weathered rock	901.47	17.74	883.73	22.00	879.47	19.39	882.08	21.32	880.15

Surface Water Location	Screened Interval (ft NGVD)	Lithology Screened	Top of Staff Gauge Elevation (ft., NGVD)	Depth to Surface Water (ft., btoc) 5/20/2014	Surface Water Elevation (ft., NGVD) 5/20/2014	Depth to Surface Water (ft., btoc) 11/19/2014	Surface Water Elevation (ft., NGVD) 11/19/2014	Depth to Surface Water (ft., btoc) 5/29/2015	Surface Water Elevation (ft., NGVD) 5/29/2015	Depth to Surface Water (ft., btoc) 11/9/2015	Surface Water Elevation (ft., NGVD) 11/9/2015
Upstream Staff Gauge@ MW-106D/MW-121[(1)] [Staff Gauge #1]	NA	un-named stream on CSX	865.80	3.06	862.74	3.14	862.66	3.05	862.75	3.06	862.74
Downstream Staff Gauge at railroad culvert [(1)] [Staff Gauge #2]	NA		858.90	8.03	850.87	8.02	850.88	8.07	850.83	7.59	851.31
Downstream Staff Gauge at at well MW-119/MW-120[(1)] [Staff Gauge #3]	NA		841.55	2.35	839.20	2.65	838.90	1.78	839.77	1.41	840.14
Downstream Staff Gauge at well MW-107D[(1)] [Staff Gauge #4]	NA		837.66	1.25	836.41	1.52	836.14	1.44	836.22	1.31	836.35

Notes:

ft. = feet
NGVD = National Geodetic Vertical Datum
Monitoring wells MW-1, MW-1A, MW-2 through MW-15, MW-18, MW-19, MW-20, MW-23, MW-27, DW-1A, DW-2A, DW-2B, MW-103A, MW-103D, MW-104, and MW-118 have been abandoned.
Monitoring wells MW-7, MW-103, MW-106 and MW-107 were not installed.
Monitoring wells MW-5, MW-10, MW-16 and MW-17 could not be located and assumed to have been destroyed.
(1) new staff gauges installed and surveyed on 5/24/2013
(2) Monitoring wells MW-106D, MW-107D, MW-119, MW-120, and MW-121 were remeasured on 5/30/2013 when new staff gauges were surveyed and measured.
2013 Groundwater levels in OW-1, OW-2, and OW-3 were measured on 4/15/2013 and 10/19/2013 as part of the quarterly EHC-M pilot test study (shown under 5/20/2013 and 11/11-12/2013, respectively)

Prepared by: NJM 12/28/2016
Checked by: RNQ 1/6/2017

TABLE 2: SUMMARY OF GROUNDWATER ELEVATIONS

Well Number	Screened Interval (ft NGVD)			Lithology Screened	Top of Casing Elevation (ft., NGVD)	Depth to Ground Water (ft., btoc) 5/31/2016	Ground-Water Elevation (ft., NGVD) 5/31/2016	Depth to Ground Water (ft., btoc) 11/7/2016	Ground-Water Elevation (ft., NGVD) 11/7/2016
MW-1B	893.5	-	884.5	fine sandy silt to silty fine sand	915.95	22.55	893.40	26.62	889.33
MW-21	885.9	-	875.9	clayey silt to silty clay	905.70	23.61	882.09	dry	
MW-22	875.3	-	865.3	silty clay and clayey silt	894.23	17.39	876.84	21.23	873.00
MW-24	874.8	-	864.8	silty clay to clayey silt	897.31	destroyed		destroyed	
MW-25	875.1	-	865.1	silty clay to clayey silt	895.05	24.60	870.45	28.53	866.52
MW-26	893.5	-	883.5	clayey silt	904.99	8.84	896.15	13.57	891.42
DW-1B	843.8	-	833.8	bedrock	915.50	34.80	880.70	40.47	875.03
MW-101	895.6	-	885.6	silty fine sand	912.55	14.31	898.24	18.21	894.34
MW-102	892.4	-	883.4	silty fine sand and PWR	915.19	22.69	892.50	26.06	889.13
MW-104A	868.3		858.8	silty very fine sand	898.00	12.63	885.37	16.00	882.00
MW-104D	829.9	-	819.9	bedrock	901.59	16.53	885.06	19.67	881.92
MW-105	887.7		878.7	silty fine to medium sand	904.55	12.45	892.10	15.75	888.80
MW-106D	816.1	-	807.1	bedrock	878.60	25.60	853.00	27.16	851.44
MW-107D	817.5		808.0	bedrock	857.14	20.34	836.80	23.35	833.79
MW-108	875.8	-	866.8	silty fine sand	901.91	18.58	883.33	22.13	879.78
MW-109	872.1	-	863.1	silty fine sand with brick fragments (fill)	895.90	13.32	882.58	17.75	878.15
MW-110	831.9	-	822.9	bedrock	900.52	25.80	874.72	29.49	871.03
MW-111	864.3	-	855.3	silty sand and PWR	900.10	17.85	882.25	22.08	878.02
MW-112	890.7	-	881.7	silty very fine sand	904.90	12.52	892.38	18.36	886.54
MW-113	866.2	-	857.2	sandy clayey silt	900.06	27.34	872.72	30.80	869.26
MW-114	856.8	-	847.8	silty clayey fine sand to silty fine sand	892.96	23.96	869.00	27.05	865.91
MW-115	880.5	-	871.5	silty sand with concrete fragments (fill)	893.40	12.66	880.74	16.58	876.82
MW-116	881.8	-	872.8	fine sand	905.62	23.57	882.05	30.16	875.46
MW-117	878.1	-	868.1	very sandy silt to very silty fine sand	892.42	10.98	881.44	14.42	878.00
MW-119	853.3	-	838.3	PWR and bedrock	892.16	41.13	851.03	42.78	849.38
MW-120	836.1	-	826.1	bedrock	892.44	44.20	848.24	45.30	847.14
MW-121	854.9	-	844.9	bedrock	879.45	16.80	862.65	17.90	861.55
TW-1	878.3	-	868.3	sandy silt	893.00	13.23	879.77	16.51	876.49
TW-2	878.5	-	868.5	sandy silt	897.89	18.94	878.95	23.35	874.54
TW-3	867.5	-	857.5	sandy silt	897.44	22.01	875.43	27.12	870.32
TW-4	875.4	-	865.4	sandy silt	899.36	21.96	877.40	27.28	872.08
TW-5	869.0	-	859.0	silty sand	891.90	20.11	871.79	22.00	869.90
TW-6	878.1	-	868.1	silty sand to sandy silt	908.34	20.63	887.71	26.33	882.01
TW-7	877.1	-	867.1	clay to silty fine sand	899.22	16.63	882.59	21.89	877.33
TW-8	880.3	-	870.3	silty sand to sandy silt	900.36	16.09	884.27	20.85	879.51
TW-9	876.3	-	866.3	silt to sandy silt	901.56	17.63	883.93	22.20	879.36
TW-10	876.4	-	866.4	sandy silt	896.56	15.02	881.54	19.34	877.22
TW-11	882.9	-	872.9	sandy silty with rock fragments	918.08	26.02	892.06	31.12	886.96
TW-12	893.8	-	883.8	silty sand with quartz fragments	929.03	29.52	899.51	35.00	894.03
OW-1	878.7	-	858.7	silt to partially weathered rock	901.13	17.41	883.72	21.97	879.16
OW-2	878.5	-	858.5	silt with quartz veins to partially weathered rock	901.14	17.88	883.26	22.45	878.69
OW-3	878.6	-	858.6	silt with quartz veins to partially weathered rock	901.47	18.12	883.35	22.81	878.66

Surface Water Location	Screened Interval (ft NGVD)	Lithology Screened	Top of Staff Gauge Elevation (ft., NGVD)	Depth to Surface Water (ft., btoc) 6/1/2016	Surface Water Elevation (ft., NGVD) 6/1/2016	Depth to Surface Water (ft., btoc) 6/1/2016	Surface Water Elevation (ft., NGVD) 6/1/2016
Upstream Staff Gauge@ MW-106D/MW-121[(1)] [Staff Gauge #1]	NA	un-named stream on CSX	865.80	3.08	862.72	3.06	862.74
Downstream Staff Gauge at railroad culvert [(1)] [Staff Gauge #2]	NA		858.90	8.02	850.88	7.80	851.10
Downstream Staff Gauge at at well MW-119/MW-120[(1)] [Staff Gauge #3]	NA		841.55	1.88	839.67	1.75	839.80
Downstream Staff Gauge at well MW-107D[(1)] [Staff Gauge #4]	NA		837.66	1.43	836.23	1.31	836.35

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**TW-1**	**TW-1**	**TW-1**	**TW-1**	**TW-1**	**TW-1**	**TW-1**	**TW-1**	**TW-1**
Sample Date	*Concentrations*	**11/9/2016**	**6/2/2016**	**11/11/2015**	**5/28/2015**	**11/12/2014**	**5/14/2014**	**11/13/2013**	**05/29/2013**	**05/30/2012**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**0.00259**	<0.002	**0.00499**	**0.00288**	**0.00495**	**0.00312**	**0.00247**	**0.0132**	<0.002
Total Lead	0.015	<0.001	<0.001	**0.00302**	**0.00193**	**0.00102**	**0.00119**	<0.001	**0.0118**	<0.001
Total Zinc	2	**0.303**	**0.34**	**0.119**	**0.224**	**0.319**	**0.300**	**0.361**	**0.373**	**0.178**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	<0.002	<0.002	<0.002	<0.002	**0.0027**	<0.002	<0.002	<0.002	<0.002
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**0.282**	**0.265**	**0.105**	**0.202**	**0.283**	**0.270**	**0.318**	**0.333**	**0.180**
Total of Total Metals Concentrations		0.30559	0.34	0.12701	0.22881	0.32497	0.30431	0.36347	0.398	0.1781
Total of Dissolved Metals Concentrations		0.282	0.265	0.105	0.202	0.2857	0.27	0.318	0.333	0.1802
Inorganics mg/L										
Nitrate	10 (NR)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**0.29**	<0.25
Sulfate	250 (NR)	**57**	**62**	**31**	**60**	**46**	**63**	**54**	**61**	**60**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	**0.0007**	**0.0012**	**0.0014**	**0.002**	**0.00087**	**0.00054**	**0.00040**	**0.00059**	**0.00042**
4,4´-DDE	0.0001	**0.0008**	**0.00072**	**0.0014**	**0.0019**	**0.0031**	**0.0019**	**0.0013**	**0.0047**	**0.00050**
4,4´-DDT	0.0001	**0.00042**	**0.00015**	**0.0017**	**0.0017**	**0.0052**	**0.0043**	**0.0025**	**0.0037**	**0.00049**
alpha-BHC	0.00005(DL)	<0.0005	**0.00033**	**0.0015**	**0.00053**	**0.0002**	**0.0015**	**0.00041**	**0.00043**	**0.0037**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.00033**	**0.0042**	**0.033**	**0.0061**	**0.0041**	**0.018**	**0.0081**	**0.0200**	**0.0087**
delta-BHC	0.00005(DL)	**0.000061**	**0.00031**	**0.0014**	**0.00056**	**0.00023**	**0.0016**	**0.00056**	**0.0013**	**0.00047**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	**0.00016**	<0.0001	<0.0001	<0.0001	**0.0017**	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005	**0.0003**	**0.00074**	**0.00033**	**0.00016**	**0.00076**	**0.00025**	**0.00026**	**0.00030**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.003	<0.003	<0.005	<0.005	<0.005	**0.0056**	<0.005	<0.005	<0.005
Total Pesticides		0.00231	0.00721	0.04130	0.01312	0.01386	0.03420	0.01522	0.03098	0.01452
pH (std units)		6.0	5.96	6.41	6.01	5.81	5.73	5.92	5.6	6.19
Specific Conductance (mS/cm)		0.361	0.247	0.451	0.283	0.449	0.416	0.445	0.383	0.36
Turbidity (NTUs)		21.4	9.5	>100	9.79	10.7	2	9.81	48.1	0.75
DO (mg/L)		1.06	0.0	1.03	0.3	0.95	1.84	1.09	10.15	
ORP (mV)		138	68	-5	59	-33	114	77	170	

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**TW-2**	**TW-2**	**TW-2**	**TW-2**	**TW-2**	**TW-2**	**TW-2**	**TW-2**	**TW-2**
Sample Date	*Concentrations*	**11/9/2016**	**6/2/2016**	**11/12/2015**	**5/28/2015**	**11/12/2014**	**5/14/2014**	**11/14/2013**	**05/29/2013**	**05/30/2012**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	**0.0137**	<0.002
Total Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.00445**	<0.001
Total Zinc	2	<0.01	**0.0428**	<0.01	<0.01	<0.010	<0.010	**0.0102**	**0.0273**	**0.0109**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01	<0.01	<0.01	<0.01
Total of Total Metals Concentrations		BDL	0.0428	BDL	BDL	BDL	BDL	0.0102	0.04545	0.01091
Total of Dissolved Metals Concentrations		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Inorganics mg/L										
Nitrate	10 (NR)	**5.5**	**4.6**	**4.8**	**4.3**	**3.5**	**4.1**	**5.6**	**4.6**	**4.3**
Sulfate	250 (NR)	**69**	**76**	**80**	**84**	**66**	**81**	**93**	**88**	**68**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	**0.0001**	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	**0.000070**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	**0.00014**
delta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	**0.000057**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	**0.00044**	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides		BDL	BDL	BDL	BDL	BDL	BDL	0.00054	BDL	0.00026
pH (std units)		5.63	5.31	5.16	5.08	5.51	5.71	5.56	5.43	6.03
Specific Conductance (mS/cm)		0.342	0.249	0.415	0.27	0.412	0.356	0.405	0.386	0.38
Turbidity (NTUs)		2.8	1.4	0.3	0	1.5	8.5	9.89	9.8	2.27
DO (mg/L)		1.1	0.0	1.3	0.18	0.93	1.43	1.89	5.86	
ORP (mV)		179	213	182	193	-40	135	139	246	

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**TW-3**	**TW-3**	**TW-3**	**TW-3**	**TW-3**	**TW-3**	**TW-3**	**TW-3**	**TW-3**
Sample Date	*Concentrations*	**11/10/2016**	**6/3/2016**	**11/12/2015**	**6/5/2015**	**11/13/2014**	**5/15/2014**	**11/14/2013**	**05/30/2013**	**05/31/2012**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**0.893**	**1.03**	**0.624**	**0.884**	**0.820**	**0.695**	**0.933**	**1.12**	**1.09**
Total Lead	0.015	**0.0026**	**0.00297**	**0.00281**	**0.00544**	**0.00301**	**0.00407**	**0.00499**	**0.00466**	**0.00266**
Total Zinc	2	**2.19**	**2.02**	**1.65**	**2.16**	**2.120**	**1.95**	**2.55**	**2.92**	**2.14**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**0.68**	**0.611**	**0.646**	**0.724**	**0.842**	**0.672**	**0.845**	**1.05**	**1.01**
Dissolved Lead	0.015	**0.00204**	**0.00216**	**0.00238**	**0.00309**	**0.00308**	**0.00336**	**0.00334**	**0.00346**	**0.00175**
Dissolved Zinc	2	**1.94**	**1.39**	**1.67**	**2.08**	**2.19**	**1.9**	**2.04**	**2.74**	**2.00**
Total of Total Metals Concentrations		3.0856	3.05297	2.27681	3.04944	2.94301	2.64907	3.48799	4.04466	3.231657
Total of Dissolved Metals Concentrations		2.62204	2.00316	2.31838	2.80709	3.03508	2.57536	2.88834	3.79346	3.005752
Inorganics mg/L										
Nitrate	10 (NR)	**2.9**	<5	<12	**38**	**6.2**	**7.4**	**11**	**12**	**9.5**
Sulfate	250 (NR)	**610**	**520**	**600**	**530**	**600**	**600**	**640**	**600**	**550**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.0014**	**0.0032**	**0.0016**	**0.001200**	**0.000870**	**0.00095**	**0.00055**	**0.00049**	**0.00063**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.0015**	**0.0026**	**0.0015**	**0.00110**	**0.0011**	**0.0012**	**0.00072**	**0.00077**	**0.0010**
delta-BHC	0.00005(DL)	**0.00043**	**0.00095**	**0.00051**	**0.000410**	**0.000360**	**0.00040**	**0.00019**	**0.00017**	**0.00027**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.00056**	**0.0013**	**0.00071**	**0.00051**	0.00035	**0.00042**	**0.00022**	**0.00021**	**0.00026**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.00389	0.00805	0.00432	0.00322	0.00268	0.00297	0.00168	0.00164	0.00219
pH (std units)		3.87	3.78	3.6	2.49	3.69	4.03	3.75	3.9	4.33
Specific Conductance (mS/cm)		1.05	0.692	1.34	0.958	1.44	1.27	1.49	1.51	1.43
Turbidity (NTUs)		1.4	8.7	6	4.2	7.7	1.8	9.56	35.5	8.82
DO (mg/L)		1.3	0.0	0.84	0.54	1.88	2.17	0.63	1.38	
ORP (mV)		288	455	367	383	428	227	441	486	

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**TW-4**	**TW-4**	**TW-4**	**TW-4**	**TW-4**	**TW-4**	**TW-4**	**TW-4**	**TW-4**
Sample Date	*Concentrations*	**11/9/2016**	**6/3/2016**	**11/12/2015**	**5/29/2015**	**11/13/2014**	**5/15/2014**	**11/15/2013**	**05/30/2013**	**05/31/2012**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**0.166**	**0.167**	**0.134**	**0.149**	**0.166**	**0.166**	**0.234**	**0.127**	**0.139**
Total Lead	0.015	<0.001	<0.001	**0.00274**	**0.00349**	<0.001	<0.001	<0.001	**0.0116**	<0.001
Total Zinc	2	**0.804**	**0.896**	**0.626**	**0.793**	**0.884**	**0.968**	**1.27**	**0.847**	**0.902**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**0.15**	**0.142**	**0.126**	**0.145**	**0.151**	**0.161**	**0.216**	**0.113**	**0.128**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**0.739**	**0.801**	**0.622**	**0.752**	**0.836**	**0.944**	**1.14**	**0.879**	**0.847**
Total of Total Metals Concentrations		0.97	1.063	0.76274	0.94549	1.05	1.134	1.504	0.9856	1.0416
Total of Dissolved Metals Concentrations		0.889	0.943	0.748	0.897	0.987	1.105	1.356	0.992	0.9745
Inorganics mg/L										
Nitrate	10 (NR)	**1.1**	**1.0**	**0.85**	**0.82**	**1.8**	**3.0**	**2.8**	**1.4**	<1.2
Sulfate	250 (NR)	**150**	**160**	**130**	**140**	**160**	**190**	**220**	**190**	**160**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	**0.000093**	**0.00012**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.0059**	**0.0067**	**0.0086**	**0.0094**	**0.00062**	**0.0077**	**0.0091**	**0.0094**	**0.014**
delta-BHC	0.00005(DL)	<0.00005	<0.00005	**0.000085**	**0.00021**	**0.000083**	**0.00021**	**0.00026**	**0.00044**	**0.00092**
Dieldrin	0.0001(DL)	<0.0001	**0.00019**	**0.00015**	**0.00013**	**0.00011**	**0.00017**	**0.00015**	**0.00026**	**0.00021**
gamma-BHC	0.0002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	**0.00013**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.00590	0.00689	0.00884	0.00974	0.00081	0.00808	0.00951	0.01019	0.01545
pH (std units)		4.3	4.33	4.18	4	4.07	4.24	4.34	4.84	4.62
Specific Conductance (mS/cm)		0.332	0.264	0.37	0.268	0.45	0.481	0.564	0.48	0.45
Turbidity (NTUs)		8.0	4.4	0.5	0	0.0	0.7	8.9	56.6	1.73
DO (mg/L)		1.6	0.0	1.41	1.17	2.79	4.01	2.24	6.03	
ORP (mV)		303	395	327	365	300	219	399	360	

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**TW-5**	**TW-5**	**TW-5**	**TW-5**	**TW-5**	**TW-5**	**TW-5**	**TW-5**	**TW-5**
Sample Date	*Concentrations*	**11/10/2016**	**6/3/2016**	**11/13/2015**	**6/1/2015**	**11/13/2014**	**05/21/2014**	**11/15/2013**	**05/29/2013**	**05/30/2012**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.0125**	**0.0087**	<0.005
Total Copper	1.3	**1.8**	**0.903**	**1.05**	**1.5**	**1.400**	**1.48**	**1.71**	**1.58**	**0.865**
Total Lead	0.015	**0.00228**	<0.001	**0.0017**	**0.00149**	0.0025	**0.00198**	**0.0716**	**0.0257**	**0.0029**
Total Zinc	2	**16.7**	**7.41**	**8.49**	**33.6**	**17.4**	**14.5**	**18.9**	**11.6**	**13.7**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**1.21**	**0.749**	**1.04**	**1.32**	**1.29**	**1.66**	**1.080**	**1.57**	**0.751**
Dissolved Lead	0.015	**0.00196**	<0.001	**0.00118**	**0.00106**	0.00169	**0.00228**	**0.00687**	**0.00276**	<0.001
Dissolved Zinc	2	**14.7**	**6.52**	**8.55**	**12.8**	**19.6**	**15.8**	**15.1**	**11.0**	**8.6**
Total of Total Metals Concentrations		18.50228	8.313	9.5417	35.10149	18.8025	15.98198	20.6941	13.2144	14.5678
Total of Dissolved Metals Concentrations		15.91196	7.269	9.5912	14.1211	20.8917	17.46228	16.18687	12.57276	9.351
Inorganics mg/L										
Nitrate	10 (NR)	**23**	**19**	**23**	**28**	**29**	**37**	**26**	**31**	**30**
Sulfate	250 (NR)	**750**	**560**	**620**	**620**	**810**	**480**	**600**	**500**	**430**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	**0.0001**	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	**0.00021**	<0.0001	**0.00026**	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.000059**	**0.000086**	**0.00019**	**0.00020**	**0.00012**	**0.00011**	**0.000053**	**0.00011**	**0.00021**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.00081**	**0.0011**	**0.00082**	**0.001**	**0.001**	**0.00066**	**0.00049**	**0.00051**	**0.00042**
delta-BHC	0.00005(DL)	<0.00005	**0.000064**	**0.00024**	**0.00017**	**0.000063**	**0.000083**	<0.00005	<0.00005	**0.00026**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.000077**	**0.00011**	**0.00024**	**0.00027**	**0.00013**	**0.00011**	**0.00007**	**0.000098**	**0.00023**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.00095	0.00136	0.00149	0.00137	0.00172	0.00096	0.00087	0.00072	0.00112
pH (std units)		4.02	3.88	4.23	4.78	3.92	4.13	4.12	4.36	5.35
Specific Conductance (mS/cm)		1.26	0.803	1.43	1.2	1.61	1.36	1.51	1.54	1.31
Turbidity (NTUs)		2.5	9.2	7.9	9.7	10.3	17.5	43	10.1	7.76
DO (mg/L)		1.2	0.0	0.88	0.2	2.02	3.84	0.69	1.73	
ORP (mV)		342	426	2.37	360	389	191	363	348	

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**TW-6**	**TW-6**	**TW-6**	**TW-6**	**TW-6**	**TW-6**	**TW-6**	**TW-6**	**TW-6**
Sample Date	*Concentrations*	**11/11/2016**	**6/6/2016**	**11/16/2015**	**6/1/2015**	**11/14/2014**	**5/21/2014**	**11/18/2013**	**05/29/2013**	**05/30/2012**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	**0.00587**	**0.00731**	<0.005	<0.005	<0.005	**0.00821**	<0.005
Total Copper	1.3	**0.0917**	**0.0811**	**0.643**	**1.08**	**0.0656**	**0.380**	**0.111**	**0.917**	**0.195**
Total Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.00158**	**0.00115**	<0.001
Total Zinc	2	**0.316**	**0.587**	**35.7**	**125.0**	**0.375**	**14.9**	**0.55**	**40.6**	**0.790**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	**0.00612**	<0.005	<0.005	<0.005	**0.00799**	<0.005
Dissolved Copper	1.3	**0.0786**	**0.0751**	**0.556**	**0.941**	**0.079**	**0.401**	**0.0907**	**0.987**	**0.163**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**0.307**	**0.581**	**29.3**	**37.3**	**0.456**	**15.6**	**0.460**	**40.90**	**0.788**
Total of Total Metals Concentrations		0.4077	0.6681	36.34887	126.08731	0.4406	15.28	0.66258	41.52636	0.9853
Total of Dissolved Metals Concentrations		0.3856	0.6561	29.856	38.24712	0.535	16.001	0.5507	41.89499	0.9504
Inorganics mg/L										
Nitrate	10 (NR)	**30**	**14**	**19**	**28**	**8.5**	**27**	**17**	**25**	**74**
Sulfate	250 (NR)	**210**	**240**	**1900**	**670**	**230**	**460**	**260**	**960**	**440**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	<0.00005	<0.00005	**0.0021**	**0.0018**	<0.00005	**0.00059**	<0.00005	**0.0029**	**0.00013**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.00088**	**0.0011**	**0.0015**	**0.0019**	**0.0013**	**0.00012**	**0.00098**	**0.0021**	**0.0011**
delta-BHC	0.00005(DL)	<0.00005	<0.00005	**0.00041**	**0.00057**	<0.00005	**0.00019**	<0.00005	**0.00054**	<0.00005
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005	<0.00005	**0.00091**	**0.00087**	<0.00005	**0.00024**	<0.00005	**0.0012**	**0.000066**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.00088	0.00110	0.00492	0.00514	0.00130	0.00114	0.00098	0.00674	0.00126
pH (std units)		4.48	4.42	5.13	5.12	4.09	4.6	4.22	4.83	4.51
Specific Conductance (mS/cm)		0.96	0.586	1.89	1.68	0.986	1.32	1.08	2.27	2.04
Turbidity (NTUs)		0.0	0.0	0.2	0.3	10.7	8.3	9.56	0	3.58
DO (mg/L)		1.3	0.0	1.06	0.2	2.53	3.63	3.06	1.87	
ORP (mV)		328	405	228	299	370	173	3.77	301	

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**TW-7**	**TW-7**	**TW-7**	**TW-7**	**TW-7**	**TW-7**	**TW-7**	**TW-7**	**TW-7**
Sample Date	*Concentrations*	**11/11/2016**	**6/6/2016**	**11/17/2015**	**6/5/2015**	**11/18/2014**	**5/22/2014**	**11/19/2013**	**05/28/2013**	**06/01/2012**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	**0.0317**	<0.005	**0.0152**	**0.0126**	**0.0136**	**0.0139**	<0.05
Total Copper	1.3	**132**	**142**	**131**	**134**	**124**	**153**	**256**	**170**	**95.0**
Total Lead	0.015	**0.0264**	**0.0238**	**0.0212**	**0.0364**	**0.0286**	<0.001	**0.0941**	**0.0117**	**0.0391**
Total Zinc	2	**327**	**314**	**260**	**286**	**204**	**322**	**515**	**310**	**226**
Dissolved Arsenic	0.01	<0.005	<0.005	**0.0399**	<0.005	**0.0147**	**0.011**	<0.005	**0.0127**	<0.100
Dissolved Copper	1.3	**140**	**89.8**	**122**	**174**	**99.2**	**125**	**191**	**175**	**88.4**
Dissolved Lead	0.015	**0.0326**	**0.019**	**0.0231**	**0.0342**	**0.0275**	**0.0353**	**0.0750**	**0.00829**	**0.0404**
Dissolved Zinc	2	**311**	**173**	**254**	**347**	**228**	**258**	**370**	**323**	**237**
Total of Total Metals Concentrations		459.0264	456.0238	391.0529	420.0364	328.0438	475.0126	771.1077	480.0256	320.68909
Total of Dissolved Metals Concentrations		451.0326	262.819	376.063	521.0342	327.2422	383.0463	561.075	498.02099	325.7004
Inorganics mg/L										
Nitrate	10 (NR)	**110**	**110**	**110**	**2**	**77**	**110**	**73**	**60**	**140**
Sulfate	250 (NR)	**3400**	**1800**	**3600**	**270**	**5000**	**3900**	**5700**	**5000**	**2900**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.00029**	**0.00042**	**0.00054**	**0.00039**	**0.00045**	**0.00031**	**0.00040**	**0.00021**	**0.00029**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.0019**	**0.0024**	**0.0018**	**0.0015**	**0.0014**	**0.0013**	**0.00040**	**0.00039**	**0.0013**
delta-BHC	0.00005(DL)	**0.000087**	**0.00013**	**0.00014**	**0.000086**	**0.00011**	**0.000058**	<0.000050	**0.000074**	**0.00017**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.00027**	**0.00037**	**0.00035**	**0.00028**	**0.00032**	**0.00025**	**0.00018**	**0.00015**	**0.00029**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.00255	0.00332	0.00283	0.00226	0.00228	0.00192	0.00098	0.00082	0.00201
pH (std units)		4.09	4.1	3.8	3.64	3.88	3.72	3.39	3.73	4.02
Specific Conductance (mS/cm)		4.52	4.48	5.41	5.3	5.73	5.2	8.14	5.62	6.15
Turbidity (NTUs)		10	222	2.9	15.7	8.38	0	9.80	16.8	3.48
DO (mg/L)		0.8	0.0	1.5	0	5.45	2.53	2.20	1.87	
ORP (mV)		225	257	249	230	275	315	286	309	

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**TW-8**	**TW-8**	**TW-8**	**TW-8**	**TW-8**	**TW-8**	**TW-8**	**TW-8**	**TW-8**
Sample Date	*Concentrations*	**11/14/2016**	**6/6/2016**	**11/13/2015**	**6/2/2015**	**11/14/2014**	**5/19/2014**	**1/8/2014**	**10/9/2013**	**7/16/2013**
Metals mg/L										
Total Arsenic	0.01	**0.108**	**0.102**	**0.0878**	**0.0979**	**0.121**	**0.104**	**0.128**	**0.101**	**0.135**
Total Copper	1.3	**0.0233**	**0.055**	**0.0135**	**0.0199**	**0.0106**	**0.00847**	**0.013**	**0.0110**	**0.0085**
Total Lead	0.015	<0.001	<0.001	**0.00127**	**0.00237**	<0.001	<0.001	**0.00134**	**0.00211**	<0.001
Total Zinc	2	**4.79**	**2.09**	**1.68**	**2.02**	**3.590**	**2.54**	**2.60**	**1.52**	**1.72**
Dissolved Arsenic	0.01	**0.0784**	**0.0846**	**0.0541**	**0.0369**	**0.0146**	**0.0738**	**0.121**	**0.0831**	**0.0857**
Dissolved Copper	1.3	**0.0178**	**0.0082**	**0.00271**	**0.00244**	**0.0035**	<0.002	<0.002	<0.002	<0.002
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**4.23**	**1.75**	**1.31**	**1.37**	**2.980**	**2.07**	**1.47**	**1.12**	**1.08**
Total of Total Metals Concentrations		4.9213	2.247	1.783	2.140	3.722	2.652	2.742	1.634	1.863
Total of Dissolved Metals Concentrations		4.3262	1.8428	1.3668	1.4093	2.9981	2.1438	1.5910	1.2031	1.1657
Inorganics mg/L										
Nitrate	10 (NR)	<2.5	<2.5	<2.5	<2.5	<12	<0.25	<2.5	<12	<12
Sulfate	250 (NR)	**670**	**720**	**890**	**650**	**630**	**600**	**980**	**890**	**990**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.002	**0.0018**	**0.0046**	**0.0039**	**0.019**	<0.0001	**0.007**	**0.0057**	**0.0051**
4,4´-DDE	0.0001	<0.002	<0.0001	<0.0001	<0.0001	<0.01	<0.0001	**0.0013**	**0.00049**	<0.001
4,4´-DDT	0.0001	<0.002	**0.0015**	**0.0036**	**0.015**	**0.350**	<0.0001	**0.15**	**0.0500**	**0.0085**
alpha-BHC	0.00005(DL)	**0.26**	**0.59**	**0.58**	**0.45**	**0.340**	**0.007**	**0.760**	**0.310**	**0.740**
alpha-Chlordane	0.002	<0.001	<0.00005	**0.00021**	<0.00005	<0.005	<0.00005	**0.00031**	**0.00015**	<0.0005
beta-BHC	0.00005(DL)	**0.034**	**0.067**	**0.087**	**0.054**	**0.140**	**0.0022**	**0.22**	**0.092**	**0.11**
delta-BHC	0.00005(DL)	**0.076**	**0.74**	**1.2**	**1.2**	**0.160**	**0.008**	**2.40**	**2.40**	**2.20**
Dieldrin	0.0001(DL)	<0.002	**0.0014**	**0.0041**	**0.0036**	<0.01	<0.0001	**0.0074**	**0.0074**	**0.0062**
gamma-BHC	0.0002	**0.086**	**0.72**	**1.0**	**0.97**	**0.230**	**0.0034**	**2.0**	**1.2**	**1.8**
gamma-Chlordane	0.002	<0.001	**0.00034**	**0.00096**	**0.001**	<0.005	<0.00005	**0.0018**	**0.0011**	**0.0011**
Heptachlor	0.0004	<0.001	**0.013**	<0.00005	<0.00005	<0.005	<0.00005	<0.00005	<0.0005	<0.0005
Methoxychlor	0.04	<0.01	<0.0005	<0.0005	<0.0005	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.003	<0.003	<0.005	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.45600	2.13504	2.88047	2.69750	1.23900	0.02060	5.54781	4.06684	4.871
pH (std units)		5.99	6.55	6.35	4.32	5.81	6.18	6.35	6.19	6.34
Specific Conductance (mS/cm)		1.45	1.33	2.76	1.97	1.97	1.76	2.503	2.893	2.689
Turbidity (NTUs)		0.0	0.0	0.7	0	67.0	0	4.05	14.5	1.2
DO (mg/L)		1.2	0.0	0.84	0.17	2.35	2.4	1.35	1.57	0.58
ORP (mV)		91	-70	-65	66	-41	20	-109.6	-87.5	-87.4

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	HSRA Type 1 RRS	TW-8	TW-8	TW-8	TW-9	TW-9	TW-9	TW-9	TW-9	TW-9
Sample Date	*Concentrations*	**4/15/2013**	**1/21/2013**	**05/31/2012**	**11/14/2016**	**6/7/2016**	**11/17/2015**	**6/8/2015**	**11/17/2014**	**5/22/2014**
Metals mg/L										
Total Arsenic	0.01	**0.164**	**0.155**	**0.101**	**0.02370**	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**0.0903**	**0.0159**	**0.0668**	**0.191**	**0.158**	**0.0998**	**0.105**	**0.110**	**0.0599**
Total Lead	0.015	<0.001	**0.0088**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Zinc	2	**4.05**	**3.27**	**4.43**	**4.04**	**3.48**	**3.6**	**7.89**	**4.51**	**3.09**
Dissolved Arsenic	0.01	**0.0457**	**0.156**	**0.0174**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**0.0234**	<0.002	**0.0278**	**0.182**	**0.128**	**0.0841**	**0.0964**	**0.0921**	**0.04850**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**3.04**	**2.84**	**4.16**	**4.01**	**3.47**	**3.79**	**4.84**	**4.54**	**3.01**
Total of Total Metals Concentrations		4.3043	**3.450**	4.59973	4.2547	3.63800	3.700	7.995	4.620	3.150
Total of Dissolved Metals Concentrations		3.1091	**2.996**	4.20515	4.192	3.598	3.8741	4.9364	4.6321	3.0585
Inorganics mg/L										
Nitrate	10 (NR)	<2.5	<2.5	<2.5	<2.5	<2.5	**3.1**	<0.25	<0.25	<2.5
Sulfate	250 (NR)	**1100**	**390**	**750**	**230**	**240**	**450**	**610**	**340**	**250**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	**0.0019**	<1.0	<0.01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.1	<0.01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	**0.0013**	**3.2**	<0.01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.410**	**10.0**	**0.64**	**0.0067**	**0.0077**	**0.017**	**0.0085**	**0.0088**	**0.014**
alpha-Chlordane	0.002	<0.0025	<0.050	<0.005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.05**	**1.50**	**0.11**	**0.003**	**0.0045**	**0.012**	**0.0059**	**0.0044**	**0.0014**
delta-BHC	0.00005(DL)	**1.30**	**9.3**	**1.6**	**0.0037**	**0.0049**	**0.0088**	**0.0065**	**0.0077**	**0.0066**
Dieldrin	0.0001(DL)	**0.0027**	<0.1	<0.01	<0.0001	<0.0001	**0.00016**	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**1.2**	**6.2**	**1.3**	**0.00088**	**0.00077**	**0.0015**	**0.0017**	**0.0011**	**0.00035**
gamma-Chlordane	0.002	<0.0025	<0.05	<0.005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.0025	**0.260**	**0.041**	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.50	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<5.0	<0.5	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005
Total Pesticides		2.966	30.46	3.6385	0.01428	0.01787	0.039460	0.022600	0.022000	0.0224
pH (std units)		6.36	5.90	6.18	5.6	5.58	5.34	1.93	5.26	5.53
Specific Conductance (mS/cm)		2.749	1.117	1.91	0.573	0.434	0.91	0.835	0.918	0.637
Turbidity (NTUs)		4.8	328	2.01	0.0	0.0	1.7	0.5	2.21	1.66
DO (mg/L)		0.79	1.63		1.0	0.0	0.96	1.53	2.12	0.7
ORP (mV)		-41.2	-9.7		124	210	180	469	231	199

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**TW-9**	**TW-9**	**TW-9**	**TW-10**	**TW-10**	**TW-10**	**TW-10**	**TW-10**	**TW-10**
Sample Date	*Concentrations*	**11/18/2013**	**05/28/2013**	**05/31/2012**	**11/14/2016**	**6/7/2016**	**11/17/2015**	**6/8/2015**	**11/17/2014**	**5/22/2014**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	**0.00521**	<0.005	<0.005	<0.005
Total Copper	1.3	**0.0701**	**0.0407**	**0.0168**	**20**	**7.6**	**12.6**	**14.2**	**16.90**	**17.10**
Total Lead	0.015	**0.00161**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.0143**
Total Zinc	2	**2.42**	**2.20**	**1.26**	**20**	**18.6**	**11.2**	**16.80**	**18.20**	**21.9**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	**0.00604**	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**0.00950**	**0.0343**	**0.0158**	**10.3**	**7.57**	**14.5**	**19.2**	**19.2**	**15.4**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**2.26**	**1.92**	**1.18**	**17.9**	**15.7**	**12.9**	**22.20**	**21.2**	**18.9**
Total of Total Metals Concentrations		2.492	2.2407	1.27475	40	26.2	23.80521	31	35.1	39.0143
Total of Dissolved Metals Concentrations		2.2695	1.9543	1.19178	28.2	23.27	27.4	41.4	40.40	34.30000
Inorganics mg/L										
Nitrate	10 (NR)	<1.2	<1.2	**0.49**	<2.5	<2.5	<5	**2.50**	**1.8**	<2.5
Sulfate	250 (NR)	**170**	**170**	**170**	**830**	**830**	**770**	**730**	**600**	**900**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.0015**	**0.0009**	**0.0074**	**0.000099**	<0.00005	**0.00056**	<0.00005	<0.00005	<0.00005
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.00056**	**0.00091**	**0.0054**	<0.00005	**0.000092**	**0.00042**	<0.00005	<0.00005	<0.00005
delta-BHC	0.00005(DL)	**0.00073**	**0.00048**	**0.0043**	<0.00005	<0.00005	**0.00029**	<0.00005	<0.00005	<0.00005
Dieldrin	0.0001(DL)	**0.00041**	<0.00010	**0.00010**	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.000094**	**0.000069**	**0.0011**	<0.00005	<0.00005	**0.000058**	<0.00005	<0.00005	<0.00005
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.0033	0.00236	0.01826	0.000099	0.000092	0.00133	BDL	BDL	BDL
pH (std units)		5.33	5.4	5.78	3.77	3.51	3.6	1.93	3.46	3.67
Specific Conductance (mS/cm)		0.565	0.878	0.61	1.12	0.798	1.154	0.835	1.27	1.12
Turbidity (NTUs)		0.0	7.83	0.47	0.0	0.0	3.78	0.5	9.89	3.42
DO (mg/L)		0.77	3.8		1.8	0.0	0.96	1.53	2.74	2.17
ORP (mV)		157	230		213	352	395.6	469	430	445

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**TW-10**	**TW-10**	**TW-10**	**TW-11**	**TW-11**	**TW-11**	**TW-11**	**TW-11**	**TW-11**
Sample Date	*Concentrations*	**11/18/2013**	**05/24/2013**	**05/31/2012**	**11/8/2016**	**6/1/2016**	**11/11/2015**	**5/27/2015**	**11/11/2014**	**5/13/2014**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**9.66**	**11.4**	**6.98**	**0.203**	**0.137**	**0.11**	**0.142**	**0.130**	**0.147**
Total Lead	0.015	**0.00161**	**0.00182**	**0.00271**	**0.00159**	**0.00111**	<0.001	**0.00147**	**0.00104**	**0.00148**
Total Zinc	2	**16.2**	**13.6**	**9.24**	**0.847**	**0.495**	**0.386**	**0.504**	**0.514**	**0.591**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**11.5**	**10.5**	**6.43**	**0.180**	**0.129**	**0.117**	**0.126**	**0.135**	**0.134**
Dissolved Lead	0.015	<0.001	**0.00113**	**0.00228**	**0.00116**	<0.001	<0.001	<0.001	<0.001	**0.00144**
Dissolved Zinc	2	**14.4**	**12.5**	**8.66**	**0.736**	**0.476**	**0.396**	**0.461**	**0.501**	**0.514**
Total of Total Metals Concentrations		25.86161	25.00182	16.221709	1.05159	0.63311	0.496	0.64747	0.64504	0.73948
Total of Dissolved Metals Concentrations		25.90000	23.00113	15.09528	0.91716	0.605	0.513	0.587	0.636	0.64944
Inorganics mg/L										
Nitrate	10 (NR)	<2.5	**3.6**	**2.9**	<12	**5**	**5.7**	**5.1**	**2.8**	**4.4**
Sulfate	250 (NR)	**530**	**620**	**490**	**280**	**170**	**160**	**160**	**150**	**170**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	<0.00005	<0.00005	**0.000091**	<0.00005	<0.00005	**0.004**	<0.00005	<0.00005	<0.00005
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	**0.0049**	<0.00005	<0.00005	<0.00005
delta-BHC	0.00005(DL)	<0.00005	<0.00005	**0.00023**	<0.00005	<0.00005	**0.0034**	<0.00005	<0.00005	<0.00005
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	**0.00012**	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005	<0.00005	**0.00012**	<0.00005	<0.00005	**0.0011**	<0.00005	<0.00005	<0.00005
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005
Total Pesticides		BDL	BDL	0.00045	BDL	BDL	0.01352	BDL	BDL	BDL
pH (std units)		3.69	3.87	4.1	4.31	3.89	4.36	4.4	4.10	4.24
Specific Conductance (mS/cm)		1.06	1.28	0.92	0.613	0.494	0.481	0.345	0.519	0.476
Turbidity (NTUs)		0.00	9.57	6.43	0.0	3.3	0.6	9.71	9.53	1.9
DO (mg/L)		2.50	6.23		4.15	2.51	2.67	1.57	3.83	3.35
ORP (mV)		412	454		312	400	250	404	-30	232

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**TW-11**	**TW-11**	**TW-11**	**TW-12**	**TW-12**	**TW-12**	**TW-12**	**TW-12**	**TW-12**
Sample Date	*Concentrations*	**11/13/2013**	**05/23/2013**	**05/31/2012**	**11/8/2016**	**6/1/2016**	**11/10/2015**	**5/27/2015**	**11/11/2014**	**5/13/2014**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**0.146**	**0.145**	**0.132**	**0.00448**	**0.0171**	**0.00305**	**0.00831**	**0.0041**	**0.00258**
Total Lead	0.015	**0.00195**	**0.00233**	**0.00252**	<0.001	**0.00140**	<0.001	<0.001	<0.001	<0.001
Total Zinc	2	**0.513**	**0.566**	**0.738**	**0.212**	**0.0809**	**0.197**	**0.214**	**0.204**	**0.134**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**0.144**	**0.126**	**0.121**	**0.00297**	**0.00901**	<0.002	**0.00927**	<0.002	<0.002
Dissolved Lead	0.015	**0.00154**	**0.00209**	**0.00212**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**0.47**	**0.495**	**0.688**	**0.186**	**0.0665**	**0.197**	**0.207**	**0.191**	**0.178**
Total of Total Metals Concentrations		0.66095	0.71333	0.872222	0.21648	0.0994	0.20005	0.22231	0.2081	0.13658
Total of Dissolved Metals Concentrations		0.61554	0.62309	0.811023	0.18897	0.07551	0.197	0.21627	0.191	0.178
Inorganics mg/L										
Nitrate	10 (NR)	**3.7**	**3.5**	**3.7**	**1.5**	<0.25	**2.6**	**2.2**	<1.2	**1.7**
Sulfate	250 (NR)	**180**	**160**	**170**	**70**	<5	**65**	**72**	**60**	**69**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
delta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005
Total Pesticides		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
pH (std units)		4.27	4.37	4.78	5.22	4.59	5.18	4.86	4.5	4.83
Specific Conductance (mS/cm)		0.464	0.7	0.51	0.222	0.224	0.313	0.203	0.292	0.215
Turbidity (NTUs)		6.16	9.81	0.81	5.7	8.9	2.4	2.7	4.1	3.6
DO (mg/L)		3.6	3.48		4.7	2.19	3.61	2.47	6.48	6.43
ORP (mV)		357	350		261	318	246	361	266	334

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**TW-12**	**TW-12**	**TW-12**	**MW-1B**	**MW-1B**	**MW-1B**	**MW-1B**	**MW-1B**	**MW-1B**
Sample Date	*Concentrations*	**11/12/2013**	**05/23/2013**	**05/31/2012**	**11/8/2016**	**6/1/2016**	**11/10/2015**	**5/27/2015**	**11/11/2014**	**5/13/2014**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	<0.002	<0.002	**0.00291**	**0.00323**	**0.00655**	**0.00226**	**0.00838**	**0.00585**	**0.0209**
Total Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	**0.00491**
Total Zinc	2	**0.182**	**0.263**	**0.0715**	**0.0206**	**0.0471**	**0.01**	**0.0310**	**0.019**	**0.0876**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	<0.002	<0.002	<0.002	<0.002	**0.00299**	<0.002	**0.00413**	**0.00305**	<0.002
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**0.195**	**0.231**	**0.0529**	<0.01	**0.0274**	<0.01	**0.0238**	**0.0174**	**0.0349**
Total of Total Metals Concentrations		0.182	0.263	0.074373	0.02383	0.05365	0.01226	0.03938	0.02485	0.11341
Total of Dissolved Metals Concentrations		0.195	0.231	0.05291	BDL	0.03039	BDL	0.02793	0.02045	0.0349
Inorganics mg/L										
Nitrate	10 (NR)	**3.0**	**3.2**	**2.7**	**5.9**	**5**	**5.4**	**4.9**	**6.2**	**3.5**
Sulfate	250 (NR)	**75**	**68**	**67**	**38**	**31**	**37**	**33**	**37**	**38**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
delta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005
Total Pesticides		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
pH (std units)		5.19	5.47	6.15	5.48	5.94	7.05	6.44	5.14	5.81
Specific Conductance (mS/cm)		0.238	0.493	0.36	0.457	0.343	0.403	0.338	0.474	0.401
Turbidity (NTUs)		9.89	8.7	15.2	1.1	8.4	1	0.5	0.0	2.3
DO (mg/L)		4.41	5.2		1.59	1.36	23.9	3.57	2.10	5.73
ORP (mV)		165	220		221	219	176	67	205	197

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	MW-1B	MW-1B	MW-1B	MW-1B	MW-22	MW-22	MW-22	MW-22	MW-22
Sample Date	*Concentrations*	**11/12/2013**	**05/21/2013**	**11/13/2012**	**7/29/2010 & 9/13/2010**	**11/8/2016**	**6/6/2016**	**11/12/2015**	**5/29/2015**	**11/12/2014**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.0025	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**0.0167**	**0.0124**	**0.0232**	<0.005	**1.64**	**1.61**	**1.58**	**1.56**	**2.30**
Total Lead	0.015	**0.00408**	**0.00348**	**0.00113**	<0.0015	**0.00413**	**0.00375**	**0.0032**	**0.00235**	**0.00306**
Total Zinc	2	**0.0403**	**0.0547**	**0.0679**	<0.02	**3.13**	**2.91**	**2.81**	**4.15**	**4.290**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	na	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**0.00266**	<0.002	**0.0258**	na	**1.51**	**1.46**	**1.81**	**1.46**	**2.16**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	na	**0.00349**	**0.00308**	**0.00273**	**0.0019**	**0.00342**
Dissolved Zinc	2	<0.01	<0.01	**0.0767**	na	**3.04**	**2.68**	**2.96**	**3.92**	**3.74**
Total of Total Metals Concentrations		0.06108	0.07058	0.09223	BDL	4.77413	4.52375	4.3932	5.71235	6.59306
Total of Dissolved Metals Concentrations		0.00266	BDL	0.1025		4.55349	4.14308	4.77273	5.3819	5.90342
Inorganics mg/L										
Nitrate	10 (NR)	**7.0**	**3.0**	**3.6**	**4.5**	<12	<2.5	**2.8**	**2.1**	**1.7**
Sulfate	250 (NR)	**34**	**35**	**32**	**35**	**430**	**420**	**360**	**390**	**310**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.000048	**0.00028**	**0.00031**	**0.00017**	**0.00014**	**0.00019**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00048	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.000048	**0.00039**	**0.0004**	**0.00041**	**0.00055**	**0.00054**
delta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.000048	**0.000075**	**0.00011**	**0.000052**	**0.000057**	**0.000091**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005	<0.00005	<0.00005	<0.000048	**0.00025**	**0.00027**	**0.00016**	**0.00013**	**0.00016**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	na	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.000048	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.000095	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.0048	<0.003	<0.003	<0.005	<0.005	<0.005
Total Pesticides		BDL	BDL	BDL	BDL	0.00100	0.00109	0.00079	0.00088	0.00098
pH (std units)		6.13	6.16	6.25	5.92/5.17	3.99	3.59	4.21	4.34	3.81
Specific Conductance (mS/cm)		0.418	0.57	0.983	0.36/0.35	0.820	0.737	0.603	0.606	0.760
Turbidity (NTUs)		0.99	8.03	6.35	6.4/2.76	4.9	7.6	2.2	0	2.2
DO (mg/L)		4.35	4.78	3.5		1.55	1.23	29.2	0	2.1
ORP (mV)		202	137	163		409	364	320	312	437

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-22**	**MW-22**	**MW-22**	**MW-22**	**MW-22**	**MW-25**	**MW-25**	**MW-25**	**MW-25**
Sample Date	*Concentrations*	**5/19/2014**	**11/13/2013**	**5/22/2013**	**11/14/2012**	**7/28/2010 & 9/13/2010**	**11/10/2016**	**6/7/2016**	**11/13/2015**	**6/2/2015**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	**0.0038**	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**2.23**	**2.93**	**0.354**	**2.01**	**4.0**	**0.266**	**0.318**	**0.28**	**0.269**
Total Lead	0.015	**0.00518**	**0.00446**	<0.001	**0.00553**	**0.004**	**0.0326**	**0.0176**	**0.0233**	**0.0153**
Total Zinc	2	**3.73**	**4.90**	**1.48**	**4.23**	**8.3**	**3.18**	**2.96**	**2.83**	**3.31**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	na	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**2.02**	**1.90**	**0.308**	**1.68**	na	**0.217**	**0.312**	**0.276**	**0.291**
Dissolved Lead	0.015	**0.00294**	**0.00446**	<0.001	**0.0049**	na	**0.0324**	**0.0161**	**0.0225**	**0.0138**
Dissolved Zinc	2	**4.33**	**3.05**	**1.44**	**2.97**	na	**3**	**2.92**	**2.67**	**3.5**
Total of Total Metals Concentrations		5.96518	7.83446	1.834	6.24553	12.3078	3.4786	3.2956	3.1333	3.5943
Total of Dissolved Metals Concentrations		6.35294	4.95446	1.748	4.6549		3.2494	3.2481	2.9685	3.8048
Inorganics mg/L										
Nitrate	10 (NR)	**1.6**	<2.5	**3.7**	<2.5	**1.5**	**1.5**	<2.5	**2.1**	**1.2**
Sulfate	250 (NR)	**400**	**380**	**470**	**380**	**750**	**270**	**260**	**270**	**260**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000097	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000097	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000097	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.00027**	**0.00019**	**0.00018**	**0.00022**	**0.00079**	<0.00005	**0.00014**	**0.00016**	**0.00014**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00049	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.00079**	**0.00043**	**0.001**	**0.00052**	**0.00096**	**0.0047**	**0.0054**	**0.0049**	**0.0035**
delta-BHC	0.00005(DL)	**0.00013**	<0.00005	**0.00016**	**0.00013**	**0.00026**	**0.000099**	**0.00013**	**0.00019**	**0.00011**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.000097	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.00023**	**0.00016**	**0.00015**	**0.00021**	**0.00047**	<0.00005	**0.000054**	**0.000066**	<0.00005
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	na	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.000049	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.000097	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.005	<0.0049	<0.003	<0.003	<0.005	<0.005
Total Pesticides		0.00142	0.00078	0.00149	0.00108	0.00248	0.00480	0.00572	0.00532	0.00375
pH (std units)		4.52	4.12	5.77	3.98	3.97/4.01	4.64	4.05	4.42	4.18
Specific Conductance (mS/cm)		0.806	0.662	1.03	0.682	0.76/1.03	0.558	0.373	0.659	0.439
Turbidity (NTUs)		10.7	1.23	0.27	0.9	6.8/1.98	0.0	0.0	1.5	8.7
DO (mg/L)		1.85	0.71	1.25	1.09		2.4	0.0	2.12	0.98
ORP (mV)		2.86	241	167	319		206	328	307	375

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	HSRA Type 1 RRS	MW-25	MW-25	MW-25	MW-25	MW-25	MW-25	MW-26	MW-26	MW-26
Sample Date	*Concentrations*	**11/18/2014**	**5/1/2014**	**11/18/2013**	**5/24/2013**	**2012**	**9/14/2010**	**11/9/2016**	**6/2/2016**	**11/11/2015**
Metals mg/L										
Total Arsenic	0.01	<0.005	Well could	Well was	**0.0327**	Well was	**0.0027**	<0.005	<0.005	<0.005
Total Copper	1.3	**0.204**	not be located	dry and	**0.363**	dry and	**0.32**	**0.0117**	**0.00841**	**0.011**
Total Lead	0.015	**0.025**	and was not	was not	**0.314**	was not	**0.02**	<0.001	<0.001	**0.00109**
Total Zinc	2	**2.88**	sampled	sampled	**3.26**	sampled	**2.9**	**0.155**	**0.138**	**0.14**
Dissolved Arsenic	0.01	<0.005			<0.005		na	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**0.195**			**0.317**		na	**0.0103**	**0.00752**	**0.00754**
Dissolved Lead	0.015	**0.0181**			**0.0283**		na	<0.001	<0.001	<0.001
Dissolved Zinc	2	**2.86**			**3.43**		na	**0.124**	**0.105**	**0.126**
Total of Total Metals Concentrations		3.109			3.9697		3.2427	0.1667	0.14641	0.1521
Total of Dissolved Metals Concentrations		3.0731			3.7753			0.1343	0.11252	0.13354
Inorganics mg/L										
Nitrate	10 (NR)	**0.33**			**1.9**		**4.7**	**3**	**3.5**	**1.4**
Sulfate	250 (NR)	**190**			**240**		**200**	**310**	**210**	**270**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001			<0.0001		<0.000095	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001			<0.0001		<0.000095	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001			<0.0001		<0.000095	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.00014**			**0.00026**		**0.00019**	<0.00005	**0.000077**	<0.00005
alpha-Chlordane	0.002	<0.00005			<0.00005		<0.00048	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.0074**			**0.0021**		**0.00095**	**0.00036**	**0.00078**	**0.00036**
delta-BHC	0.00005(DL)	**0.00010**			**0.000075**		**0.00013**	**0.000055**	**0.0001**	**0.000064**
Dieldrin	0.0001(DL)	<0.0001			<0.0001		<0.000095	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005			**0.00008**		**0.00012**	<0.00005	**0.000052**	0.021
gamma-Chlordane	0.002	<0.00005			<0.00005		na	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005			<0.00005		<0.000048	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005			<0.0005		<0.000095	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005			<0.005		<0.0048	<0.003	<0.003	<0.005
Total Pesticides		0.00764			0.002515		0.00139	0.00042	0.00101	0.021424
pH (std units)		4.49	DRY	DRY	4.46	DRY	4.07	4.99	4.47	5.11
Specific Conductance (mS/cm)		0.578			0.776		0.49	0.642	0.528	0.583
Turbidity (NTUs)		0.0			354		9.7	1.6	2.6	6.3
DO (mg/L)		4.51			7.99			0.0	0.55	1.88
ORP (mV)		150			282			311	336	300

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-26**	**MW-26**	**MW-26**	**MW-26**	**MW-26**	**MW-26**	**MW-26**	**MW-101**	**MW-101**
Sample Date	*Concentrations*	**5/28/2015**	**11/12/2014**	**5/14/2014**	**11/13/2013**	**5/22/2013**	**11/14/2012**	**7/28/2010 & 9/13/2010**	**11/8/2016**	**6/1/2016**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0025	<0.005	<0.005
Total Copper	1.3	**0.0102**	**0.0126**	**0.0193**	**0.144**	**0.0146**	**0.0204**	**0.01**	**0.00963**	**0.0113**
Total Lead	0.015	<0.001	**0.00139**	**0.00247**	**0.00122**	**0.00136**	**0.00799**	<0.0015	**0.00163**	**0.00332**
Total Zinc	2	**0.142**	**0.168**	**0.166**	**0.164**	**0.209**	**0.228**	**0.16**	**0.194**	**0.751**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	na	<0.005	<0.005
Dissolved Copper	1.3	**0.0097**	**0.0109**	**0.0137**	**0.00811**	**0.00873**	**0.00814**	na	**0.0075**	**0.00863**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	**0.00100**	<0.001	<0.001	na	**0.00112**	**0.00175**
Dissolved Zinc	2	**0.136**	**0.179**	**0.149**	**0.16**	**0.175**	**0.219**	na	**0.174**	**0.741**
Total of Total Metals Concentrations		0.1522	0.18199	0.18777	0.30922	0.22496	0.25639	0.17	0.20526	0.76562
Total of Dissolved Metals Concentrations		0.1457	0.1899	0.1627	0.16911	0.18373	0.22714		0.18262	0.75138
Inorganics mg/L										
Nitrate	10 (NR)	**1.3**	**1.0**	**0.73**	<1.2	**3.0**	**6.4**	**4.8**	**4.7**	**13**
Sulfate	250 (NR)	**230**	**190**	**230**	**190**	**170**	**85**	**210**	**75**	**63**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.000061**	**0.000071**	**0.00009**	**0.000056**	**0.000081**	<0.00005	**0.00011**	<0.00005	<0.00005
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00048	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.00043**	**0.00051**	**0.00052**	**0.00039**	**0.00036**	**0.000096**	**0.00054**	<0.00005	<0.00005
delta-BHC	0.00005(DL)	**0.000074**	<.000050	**0.00009**	**0.000074**	**0.000067**	<0.00005	**0.00014**	<0.00005	<0.00005
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	**0.00007**	<0.00005	<0.00005
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	na	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000048	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.000095	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0048	<0.003	<0.003
Total Pesticides		0.000565	0.0006	0.0007	0.000520	0.000508	0.000096	0.00086	BDL	BDL
pH (std units)		4.94	3.95	4.84	5.03	5.02	5.54	4.47/4.99	4.4	4.47
Specific Conductance (mS/cm)		0.499	0.573	0.517	0.460	0.657	0.339	0.51/0.42	0.307	0.239
Turbidity (NTUs)		0	3.9	9.51	2.46	60.3	101	7.1/5.14	0.2	9.8
DO (mg/L)		0	0.25	1.77	0.49	1.35	1.02		0.86	0.0
ORP (mV)		303	306	295	230	231	205		330	331

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-101**	**MW-101**	**MW-101**	**MW-101**	**MW-101**	**MW-101**	**MW-101**	**MW-101**	**MW-102**
Sample Date	*Concentrations*	**11/10/2015**	**5/27/2015**	**11/11/2014**	**5/13/2014**	**11/12/2013**	**5/21/2013**	**11/12/2012**	**7/28/2010 & 9/13/2010**	**11/8/2016**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0025	<0.005
Total Copper	1.3	**0.00827**	**0.0175**	**0.00850**	**0.0156**	**0.0112**	**0.00866**	**0.0331**	**0.022**	**0.0259**
Total Lead	0.015	**0.00351**	**0.00292**	**0.00161**	**0.00679**	**0.00308**	**0.00251**	**0.00252**	**0.0035**	<0.001
Total Zinc	2	**1.1**	**0.925**	**0.263**	**0.977**	**0.909**	**0.937**	**0.158**	**0.66**	**0.0702**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	na	<0.005
Dissolved Copper	1.3	<0.002	**0.00839**	**0.00791**	**0.00427**	**0.00404**	**0.00585**	**0.0328**	na	**0.00337**
Dissolved Lead	0.015	**0.00125**	**0.00139**	<0.001	<0.001	**0.00210**	<0.001	**0.00201**	na	<0.001
Dissolved Zinc	2	**1.05**	**0.8**	**0.275**	**0.788**	**0.977**	**0.928**	**0.151**	na	**0.0337**
Total of Total Metals Concentrations		1.11178	0.94542	0.27311	0.99939	0.92328	0.94817	0.19362	0.6855	0.0961
Total of Dissolved Metals Concentrations		1.05125	0.80978	0.28291	0.79227	0.98314	0.93385	0.18581		0.03707
Inorganics mg/L										
Nitrate	10 (NR)	**11**	**6.5**	**5.5**	**9.7**	**10**	**9.9**	**1.5**	**11**	<12
Sulfate	250 (NR)	**72**	**72**	**66**	**74**	**76**	**70**	**46**	**84**	**210**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000097	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000097	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000097	<0.0001
alpha-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000049	<0.00005
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00049	<0.00005
beta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000049	<0.00005
delta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000049	<0.00005
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000097	<0.0001
gamma-BHC	0.0002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000049	<0.00005
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	na	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000049	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.000097	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0049	<0.003
Total Pesticides		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
pH (std units)		4.86	4.65	3.84	4.43	4.65	4.71	4.62	4.32/4.5	5.32
Specific Conductance (mS/cm)		0.339	0.218	0.254	0.295	0.275	0.402	0.161	0.22/0.26	0.593
Turbidity (NTUs)		9.1	3.8	1.1	0.7	7.2	10.2	7.73	2.44/0.89	0.3
DO (mg/L)		0.01	0	0.96	2.39	0.97	2.08	0.49		2.8
ORP (mV)		76	311	330	223	3	272	289		279

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-102**	**MW-102**	**MW-102**	**MW-102**	**MW-102**	**MW-102**	**MW-102**	**MW-102**	**MW-102**
Sample Date	*Concentrations*	**6/2/2016**	**11/10/2015**	**5/27/2015**	**11/11/2014**	**5/13/2014**	**11/12/2013**	**5/21/2013**	**11/13/2012**	**7/29/2010 & 9/14/2010**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0025
Total Copper	1.3	**0.0139**	**0.00303**	**0.00977**	**0.00626**	**0.0152**	**0.0115**	**0.00836**	**0.00934**	<0.005
Total Lead	0.015	**0.00125**	<0.001	**0.00115**	<0.001	<0.001	<0.001	<0.001	<0.001	**0.0025**
Total Zinc	2	**0.214**	**0.0205**	**0.129**	**0.0276**	**0.377**	**0.0342**	**0.0407**	**0.0245**	<0.02
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	na
Dissolved Copper	1.3	**0.0181**	<0.002	**0.00726**	**0.00433**	**0.00565**	<0.002	<0.002	**0.0089**	na
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na
Dissolved Zinc	2	**0.225**	<0.01	**0.107**	**0.0277**	**0.293**	**0.0257**	**0.0227**	**0.0247**	na
Total of Total Metals Concentrations		0.22915	0.02353	0.13992	0.03386	0.3922	0.0457	0.04906	0.03384	0.0025
Total of Dissolved Metals Concentrations		0.2431	0	0.11426	0.03203	0.29865	0.0257	0.0227	0.0336	
Inorganics mg/L										
Nitrate	10 (NR)	**1.7**	**2.2**	**2.7**	<2.5	**2.5**	**3.0**	**4.0**	**2.3**	**5.1**
Sulfate	250 (NR)	**260**	**46**	**200**	**190**	**270**	**280**	**58**	**45**	**160**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000097
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000097
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000097
alpha-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000049
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00049
beta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000049
delta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000049
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000097
gamma-BHC	0.0002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000049
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	na
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000049
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.000097
Toxaphene	0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0049
Total Pesticides		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
pH (std units)		5.06	5.88	5.5	5.01	4.82	4.38	5.37	5.62	4.84/5.54
Specific Conductance (mS/cm)		0.484	0.23	0.461	0.366	0.713	0.923	0.251	0.227	0.41/0.37
Turbidity (NTUs)		7.5	1.6	7.9	0.3	499	215	6.9	0	1.11/0.03
DO (mg/L)		0.53	4.58	1.58	0.0	3.46	3.43	4.39	3.07	
ORP (mV)		281	196	286	222	312	205	228	202	

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-104A**	**MW-104A**	**MW-104A**	**MW-104A**	**MW-104A**	**MW-104A**	**MW-104A**	**MW-104A**	**MW-104A**
Sample Date	*Concentrations*	**11/8/2016**	**6/3/2016**	**11/11/2015**	**6/1/2015**	**11/12/2014**	**5/14/2014**	**11/14/2013**	**5/28/2013**	**11/14/2012**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	<0.002	**0.00219**	<0.002	<0.002	<0.002	**0.0244**	**0.00411**	**0.00427**	<0.002
Total Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	**0.00548**	**0.00158**	<0.001	<0.001
Total Zinc	2	<0.01	<0.01	<0.010	**0.0109**	<0.010	**0.0503**	**0.0126**	**0.0112**	<0.01
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total of Total Metals Concentrations		BDL	0.00219	BDL	BDL	BDL	0.08018	0.01829	0.01547	BDL
Total of Dissolved Metals Concentrations		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Inorganics mg/L										
Nitrate	10 (NR)	<12	<2.5	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Sulfate	250 (NR)	**98**	**100**	**98**	**85**	**84**	**89**	**93**	**87**	**73**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
delta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
pH (std units)		6.48	6.83	6.51	6.72	5.79	6.45	6.41	6.41	6.48
Specific Conductance (mS/cm)		0.923	0.704	0.911	0.766	0.870	0.874	0.797	0.859	0.876
Turbidity (NTUs)		0.2	0.0	9.8	0	3.6	15.7	9.13	0	0
DO (mg/L)		0.82	0.7	0	0	0.18	0.32	0.35	1.03	2
ORP (mV)		-60	-85	-60	-112	-95	-92	-128	-111	-98

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-104A**	**MW-104D**	**MW-104D**	**MW-104D**	**MW-104D**	**MW-104D**	**MW-104D**	**MW-104D**	**MW-104D**
Sample Date	*Concentrations*	**9/15/2010**	**11/9/2016**	**6/6/2016**	**11/12/2015**	**6/3/2015**	**11/13/2014**	**5/15/2014**	**11/15/2013**	**5/28/2013**
Metals mg/L										
Total Arsenic	0.01	<0.0025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	<0.005	**0.0507**	**0.00701**	**0.0035**	**0.00553**	**0.00367**	**0.00560**	<0.002	**0.0107**
Total Lead	0.015	<0.0015	**0.00829**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Zinc	2	<0.02	**0.0693**	**0.0128**	**0.0103**	<0.010	<0.010	**0.0152**	**0.0327**	**0.0181**
Dissolved Arsenic	0.01	na	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	na	<002	**0.00589**	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Lead	0.015	na	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	na	<0.01	**0.0106**	<0.01	**0.025**	<0.01	<0.01	<0.01	<0.01
Total of Total Metals Concentrations		BDL	0.12829	0.01981	0.0138	0.00553	0.00367	0.0208	0.0327	0.0288
Total of Dissolved Metals Concentrations			BDL	0.01649	BDL	0.025	BDL	BDL	BDL	BDL
Inorganics mg/L										
Nitrate	10 (NR)	<0.25	<5.0	<2.5	<5	**0.34**	<2.5	<1.2	<0.25	<1.2
Sulfate	250 (NR)	**93**	**21**	**16**	<20	<1.0	<10	<5.0	<1	<5
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
alpha-Chlordane	0.002	<0.00047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
delta-BHC	0.00005(DL)	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Dieldrin	0.0001(DL)	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	**0.000069**	<0.00005
gamma-Chlordane	0.002	na	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.000094	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.0047	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides		BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.000069	BDL
pH (std units)		6.24	6.24	6.91	6.46	6.58	6.06	6.41	6.25	6.38
Specific Conductance (mS/cm)		0.74	2.95	2.8	3.18	3.1	3.19	2.77	3.1	2.61
Turbidity (NTUs)		1.49	42.5	58.4	52.6	49.7	20.2	429	8.2	21.2
DO (mg/L)			0.9	0.0	0	0	0.0	0.24	0.41	1.59
ORP (mV)			-2	-37	-30	-130	-67	-54	-69	-71

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-104D**	**MW-104D**	**MW-105**	**MW-105**	**MW-105**	**MW-105**	**MW-105**	**MW-105**	**MW-105**
Sample Date	*Concentrations*	**11/14/2012**	**9/15/2010**	**11/8/2016**	**6/6/2016**	**11/12/2015**	**6/1/2015**	**11/14/2014**	**5/13/2014**	**11/14/2013**
Metals mg/L										
Total Arsenic	0.01	<0.005	**0.0042**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.00552**
Total Copper	1.3	**0.00816**	<0.005	**0.00754**	**0.00654**	**0.00455**	**0.00906**	**0.00404**	**0.0134**	**0.0112**
Total Lead	0.015	**0.00114**	<0.0015	**0.00103**	**0.00148**	<0.001	**0.003**	**0.00154**	**0.00131**	**0.00487**
Total Zinc	2	**0.0164**	<0.02	**0.0244**	**0.0183**	**0.0132**	**0.0305**	**0.0109**	**0.0443**	**0.0217**
Dissolved Arsenic	0.01	<0.005	na	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	<0.002	na	**0.00645**	**0.00338**	**0.00343**	**0.005**	<0.002	**0.00676**	<0.002
Dissolved Lead	0.015	<0.001	na	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	<0.01	na	**0.0284**	<0.01	**0.0107**	**0.0188**	<0.01	**0.0381**	<0.01
Total of Total Metals Concentrations		0.0257	BDL	0.03297	0.02632	0.01775	0.04256	0.01648	0.05901	0.04329
Total of Dissolved Metals Concentrations		BDL		0.03485	0.00338	0.01413	0.0238	BDL	0.04486	BDL
Inorganics mg/L										
Nitrate	10 (NR)	<2.5	<0.25	<12	<2.5	**0.37**	<0.25	<0.25	<0.25	<0.25
Sulfate	250 (NR)	<10	<5	**140**	**360**	**110**	**310**	**97**	**220**	**160**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	<0.00005	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
alpha-Chlordane	0.002	<0.00005	<0.00047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	<0.00005	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
delta-BHC	0.00005(DL)	<0.00005	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005	**0.000075**	<0.00005	<0.00005
Dieldrin	0.0001(DL)	<0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
gamma-Chlordane	0.002	<0.00005	na	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.000094	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.0047	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides		BDL	BDL	BDL	BDL	BDL	BDL	0.000075	BDL	BDL
pH (std units)		6.44	6.51	6.06	5.19	5.98	5.76	5.13	5.22	5.31
Specific Conductance (mS/cm)		2.93	3.13	0.595	0.761	0.531	0.523	0.514	0.570	0.442
Turbidity (NTUs)		27.7	18	21.8	4.9	29.2	42.1	188	23.6	13.2
DO (mg/L)		2.27		2.13	0.38	0.01	0.17	1.1	2.36	1.48
ORP (mV)		-67		119	144	174	195	131	129	127

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-105**	**MW-105**	**MW-105**	**MW-105**	**MW-106D**	**MW-106D**	**MW-106D**	**MW-106D**	**MW-106D**
Sample Date	*Concentrations*	**5/21/2013**	**12/5/2012**	**11/15/2012**	**9/15/2010**	**11/9/2016**	**6/7/2016**	**11/13/2015**	**6/2/2015**	**11/13/2014**
Metals mg/L										
Total Arsenic	0.01	<0.005	na	<0.005	<0.0025	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**0.00564**	na	**0.0114**	**0.0057**	**0.00363**	**0.00681**	**0.00382**	**0.00529**	**0.00298**
Total Lead	0.015	<0.001	na	<0.001	<0.0015	<0.001	<0.001	<0.001	<0.001	<0.001
Total Zinc	2	**0.0265**	na	**0.0475**	**0.024**	**0.202**	**0.295**	**0.277**	**0.273**	**0.182**
Dissolved Arsenic	0.01	<0.005	na	<0.005	na	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	<0.002	na	**0.00851**	na	**0.00313**	**0.00514**	**0.00269**	**0.00357**	<0.002
Dissolved Lead	0.015	<0.001	na	<0.001	na	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**0.0216**	na	**0.0108**	na	**0.196**	**0.267**	**0.241**	**0.28**	**0.172**
Total of Total Metals Concentrations		0.03214		0.0589	0.0297	0.20563	0.30181	0.28082	0.27829	0.18498
Total of Dissolved Metals Concentrations		0.0216		0.01931		0.19913	0.27214	0.24369	0.28357	0.172
Inorganics mg/L										
Nitrate	10 (NR)	**0.28**	na	<0.25	<0.25	<2.5	<2.5	<2.5	**0.61**	**0.47**
Sulfate	250 (NR)	**230**	na	**71**	**97**	**400**	**390**	**380**	**380**	**440**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	<0.00005	<0.00005	**0.00014**	<0.000047	**0.0071**	**0.0082**	**0.0079**	**0.0066**	**0.0063**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.000047	**0.0021**	**0.0024**	**0.0024**	**0.0022**	**0.0024**
delta-BHC	0.00005(DL)	<0.00005	<0.00005	**0.0002**	<0.000047	**0.0083**	**0.0098**	**0.01**	**0.0079**	<0.000050
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005	<0.00005	<0.00005	<0.000047	**0.004**	**0.0045**	**0.0041**	**0.0038**	**0.0035**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	na	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.000094	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.0047	<0.003	<0.003	<0.005	<0.005	<0.005
Total Pesticides		BDL	BDL	0.00034	BDL	0.02150	0.02490	0.0244	0.0205	0.0122
pH (std units)		5.69	6	6.13	5.57	6.17	6.53	6.09	6.46	5.84
Specific Conductance (mS/cm)		0.619	0.514	0.477	0.36	1.08	0.784	1.02	0.963	1.29
Turbidity (NTUs)		9.61	15.1	9.91	9.7	0.0	0.0	0	0	0.0
DO (mg/L)		0.95	2.98	4.37		1.7	0.0	0.11	0	7.88
ORP (mV)		107	63.3	75		160	1.62	186	172	-73

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-106D**	**MW-106D**	**MW-106D**	**MW-106D**	**MW-106D**	**MW-107D**	**MW-107D**	**MW-107D**	**MW-107D**
Sample Date	*Concentrations*	**5/19/2014**	**11/15/2013**	**5/29/2013**	**11/15/2012**	**9/15/2010**	**11/9/2016**	**6/6/2016**	**11/12/2015**	**6/1/2015**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.0025	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**0.00456**	**0.00897**	**0.00481**	**0.00471**	<0.005	**0.00439**	**0.0118**	**0.00359**	**0.00511**
Total Lead	0.015	<0.001	**0.00146**	**0.00124**	<0.001	<0.0015	<0.001	<0.001	<0.001	<0.001
Total Zinc	2	**0.167**	**0.239**	**0.183**	**0.16**	**0.11**	**0.0114**	**0.0261**	**0.0117**	<0.01
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	na	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**0.00347**	**0.00492**	**0.00427**	**0.00233**	na	**0.00436**	**0.00948**	**0.00207**	**0.00328**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**0.178**	**0.168**	**0.162**	**0.149**	na	<0.01	<0.01	<0.01	<0.01
Total of Total Metals Concentrations		0.17156	0.24943	0.18905	0.16471	0.11	0.01579	0.0379	0.01529	0.00511
Total of Dissolved Metals Concentrations		0.18147	0.17292	0.16627	0.15133		0.00436	0.00948	0.00207	0.00328
Inorganics mg/L										
Nitrate	10 (NR)	**0.37**	<2.5	<1.2	**1.4**	**1.4**	**2.3**	**2.4**	**3.2**	**3.5**
Sulfate	250 (NR)	**340**	**390**	**400**	**380**	**430**	**140**	**140**	**160**	**170**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.0066**	**0.0059**	**0.0076**	**0.0068**	**0.0082**	<0.00005	<0.00005	<0.00005	<0.00005
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00047	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.0022**	**0.0022**	**0.0021**	**0.0019**	**0.0019**	<0.00005	<0.00005	<0.00005	<0.00005
delta-BHC	0.00005(DL)	**0.008**	**0.0079**	**0.0075**	**0.0082**	**0.01**	<0.00005	**0.000089**	<0.00005	<0.00005
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.0033**	**0.0031**	**0.0042**	**0.0043**	**0.0051**	<0.00005	<0.00005	<0.00005	<0.00005
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	na	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.000094	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.005	<0.0047	<0.003	<0.003	<0.005	<0.005
Total Pesticides		0.0201	0.0191	0.0214	0.0212	0.0252	BDL	0.000089	BDL	BDL
pH (std units)		6.1	6.05	6.09	6.2	6.28	5.78	5.96	6.46	6.41
Specific Conductance (mS/cm)		1.04	1.15	1.25	1.27	1.25	0.465	0.361	0.455	0.443
Turbidity (NTUs)		0	0	0	0.9	0	4.1	0.3	0	1.6
DO (mg/L)		1.43	3.54	2.25	0.49		4.34	0.54	27.7	6.92
ORP (mV)		206	111	129	-53		180	167	190	235

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-107D**	**MW-107D**	**MW-107D**	**MW-107D**	**MW-107D**	**MW-107D**	**MW-107D**	**MW-108**	**MW-108**
Sample Date	*Concentrations*	**11/13/2014**	**5/21/2014**	**11/18/2013**	**5/22/2013**	**12/5/2012**	**11/19/2012**	**9/15/2010**	**11/10/2016**	**6/2/2016**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	na	<0.005	<0.0025	<0.005	<0.005
Total Copper	1.3	**0.00407**	**0.00754**	**0.0101**	**0.00257**	na	**0.00614**	<0.005	**0.443**	**0.2**
Total Lead	0.015	<0.001	<0.001	**0.00203**	<0.001	na	<0.001	<0.0015	**0.00396**	<0.001
Total Zinc	2	**0.0235**	**0.0231**	**0.0176**	**0.0155**	na	**0.0151**	<0.02	**3.540**	**2.420**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	na	<0.005	na	<0.005	<0.005
Dissolved Copper	1.3	<0.002	**0.00458**	**0.012**	**0.00295**	na	**0.00574**	na	**0.242**	**0.238**
Dissolved Lead	0.015	<0.001	<0.001	**0.00213**	<0.001	na	<0.001	na	<0.001	<0.001
Dissolved Zinc	2	**0.0197**	**0.0141**	**0.0179**	<0.01	na	**0.0151**	na	**3.26**	**2.69**
Total of Total Metals Concentrations		0.02757	0.03064	0.02973	0.01807		0.02124	BDL	3.98696	2.62
Total of Dissolved Metals Concentrations		0.0197	0.01868	0.03203	0.00295		0.02084		3.502	2.928
Inorganics mg/L										
Nitrate	10 (NR)	**4.2**	**5.2**	**4.5**	**6.0**	na	**5.0**	**4.7**	**0.29**	<0.25
Sulfate	250 (NR)	**200**	**180**	**210**	**230**	na	**200**	**190**	**330**	**340**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001	**0.0001**
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000048	**0.0052**	**0.0073**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00048	<0.00005	<0.00005
beta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000048	**0.0014**	**0.0016**
delta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	**0.000056**	<0.000048	**0.0016**	**0.0018**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095	**0.00012**	**0.00017**
gamma-BHC	0.0002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000048	**0.00031**	**0.00028**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	na	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000048	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.000095	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0048	<0.003	<0.003
Total Pesticides		BDL	BDL	BDL	BDL	BDL	0.000056	BDL	0.00863	0.01125
pH (std units)		5.21	5.6	5.60	5.68	5.53	5.76	5.52	4.82	5.57
Specific Conductance (mS/cm)		0.641	0.678	0.678	0.699	0.646	0.643	0.58	0.757	0.633
Turbidity (NTUs)		0.2	4	0	0	0	0.02	0	5.8	7.6
DO (mg/L)		2.28	2.35	1.67	1.65	0.95	0.06		1.0	0.0
ORP (mV)		216	208	223	200	213.8	202		311	249

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	HSRA Type 1 RRS	MW-108	MW-108	MW-108	MW-108	MW-108	MW-108	MW-108	MW-108	MW-109
Sample Date	*Concentrations*	**11/11/2015**	**5/28/2015**	**11/12/2014**	**5/15/2014**	**11/13/2013**	**5/23/2013**	**11/13/2012**	**7/29/2010 &9/14/2010**	**11/10/2016**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0025	**0.0296**
Total Copper	1.3	**0.17**	**0.151**	**0.174**	**0.155**	**0.241**	**0.225**	**0.242**	**0.3**	**0.164**
Total Lead	0.015	<0.001	<0.001	<0.001	<0.001	**0.00253**	<0.001	<0.001	<0.0015	**0.636**
Total Zinc	2	**1.96**	**2.02**	**2.470**	**2.24**	**2.86**	**2.75**	**2.81**	**3.6**	**27**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	na	**0.0159**
Dissolved Copper	1.3	**0.182**	**0.161**	**0.138**	**0.158**	**0.208**	**0.2**	**0.239**	na	**0.158**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	**0.00222**	<0.001	<0.001	na	**0.162**
Dissolved Zinc	2	**2.22**	**2.24**	**2.3**	**2.33**	**2.33**	**2.44**	**2.58**	na	**25.8**
Total of Total Metals Concentrations		2.13	2.171	2.644	2.395	3.10353	2.975	3.052	3.9	27.8296
Total of Dissolved Metals Concentrations		2.402	2.401	2.438	2.488	2.54022	2.64	2.819		26.1359
Inorganics mg/L										
Nitrate	10 (NR)	<0.25	<0.25	**<0.25**	**0.35**	<1.2	<1.2	**0.66**	**0.42**	**7.4**
Sulfate	250 (NR)	**300**	**260**	**200**	**260**	**93**	**220**	**210**	**320**	**1400**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	**0.00011**	**0.0001**	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095	<0.0001
alpha-BHC	0.00005(DL)	**0.0055**	**0.0063**	**0.0029**	**0.0048**	**0.0021**	**0.0028**	**0.0009**	**0.0058**	**0.038**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00048	<0.00005
beta-BHC	0.00005(DL)	**0.0012**	**0.0012**	**0.0011**	**0.0018**	**0.00081**	**0.00077**	**0.00051**	**0.0024**	**0.0047**
delta-BHC	0.00005(DL)	**0.0033**	**0.0037**	**0.0072**	**0.0059**	**0.0006**	**0.00044**	**0.00033**	**0.0018**	**0.0054**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	**0.00035**	<0.0001	<0.0001	**0.000098 P**	<0.0001
gamma-BHC	0.0002	**0.00043**	**0.00046**	**0.00018**	**0.00025**	**0.00017**	**0.00022**	**0.000085**	**0.0002 P**	**0.022**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	na	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000048	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.000095	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0048	<0.003
Total Pesticides		0.01054	0.01176	0.01138	0.01275	0.00403	0.00423	0.001825	0.0103	0.07010
pH (std units)		5.81	5.63	5.15	5.27	4.55	4.71	4.74	4.3/5.14	4.64
Specific Conductance (mS/cm)		0.603	0.498	0.334	0.684	0.566	0.566	0.533	0.72/0.68	2.38
Turbidity (NTUs)		9.2	7.2	8.7	10.1	4.64	0	9	2.15/0.8	0.0
DO (mg/L)		0	0.01	0	1.92	0.46	0.84	0.98		1.44
ORP (mV)		245	296	333	257	238	299	251		177

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-109**	**MW-109**	**MW-109**	**MW-109**	**MW-109**	**MW-109**	**MW-109**	**MW-109**	**MW-109**
Sample Date	*Concentrations*	**6/8/2016**	**11/16/2015**	**6/3/2015**	**11/18/2014**	**5/15/2014**	**11/15/2013**	**5/23/2013**	**11/16/2012**	**9/14/2010**
Metals mg/L										
Total Arsenic	0.01	**0.278**	**0.116**	**0.181**	**0.0342**	**0.292**	**0.0533**	**0.253**	**0.211**	**0.061**
Total Copper	1.3	**0.0351**	**0.0822**	**0.0782**	**0.178**	**0.0817**	**0.0737**	**0.00569**	**0.0735**	**0.079**
Total Lead	0.015	**0.707**	**0.901**	**1.02**	**0.932**	**3.83**	**0.738**	**0.358**	**1.53**	**0.61**
Total Zinc	2	**18.6**	**23.4**	**25.7**	**25.3**	**21.2**	**35.5**	**14.3**	**18.7**	**25**
Dissolved Arsenic	0.01	**0.243**	**0.112**	**0.158**	**0.0258**	**0.208**	**0.0382**	**0.22**	**0.16**	na
Dissolved Copper	1.3	**0.0348**	**0.0656**	**0.0732**	**0.241**	**0.0103**	**0.0693**	**0.00505**	**0.0218**	na
Dissolved Lead	0.015	**0.00826**	**0.71**	**0.565**	**0.480**	**0.224**	**0.285**	**0.0175**	**0.436**	na
Dissolved Zinc	2	**17.8**	**19**	**29.2**	**25.1**	**22.2**	**25.6**	**12.4**	**17.6**	na
Total of Total Metals Concentrations		19.6201	24.4992	26.9792	26.4442	25.4037	36.365	14.91669	20.5145	25.75
Total of Dissolved Metals Concentrations		18.08606	19.8876	29.9962	25.8468	22.6423	25.9925	12.64255	18.2178	
Inorganics mg/L										
Nitrate	10 (NR)	<2.5	<25	<2.5	<12	<1.2	**9.6**	<12	<0.25	**0.38**
Sulfate	250 (NR)	**1400**	**1400**	**1400**	**1200**	**1500**	**1500**	**1300**	**1100**	**1300**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095
alpha-BHC	0.00005(DL)	**0.032**	**0.034**	**0.029**	**0.033**	**0.033**	**0.024**	**0.03**	**0.03**	**0.0028**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00048
beta-BHC	0.00005(DL)	**0.0028**	**0.0035**	**0.0033**	**0.0046**	**0.0033**	**0.0038**	**0.0035**	**0.0037**	<0.00048
delta-BHC	0.00005(DL)	**0.003**	**0.0038**	**0.0032**	**0.0058**	**0.0039**	**0.004**	**0.0037**	**0.0049**	<0.00048
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000095
gamma-BHC	0.0002	**0.018**	**0.02**	**0.018**	**0.022**	**0.019**	**0.015**	**0.017**	**0.024**	**0.0019**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	na
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000048
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.000095
Toxaphene	0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0048
Total Pesticides		0.05580	0.0613	0.0535	0.0654	0.0592	0.0468	0.0542	0.0626	0.0047
pH (std units)		4.16	4.56	4.5	4.31	4.19	4.8	4.65	4.74	4.56
Specific Conductance (mS/cm)		2.85	2.7	2.42	2.86	2.86	2.94	2.72	2.81	2.71
Turbidity (NTUs)		0.0	0	3.2	0	4.8	0	3.95	0	0.1
DO (mg/L)		0.5	0	0	2.08	0.88	0.72	0.7	0.58	
ORP (mV)		136	160	206	229	179	190	73	130	

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-110**	**MW-110**	**MW-110**	**MW-110**	**MW-110**	**MW-110**	**MW-110**	**MW-110**	**MW-110**
Sample Date	*Concentrations*	**11/10/2016**	**6/3/2016**	**11/11/2015**	**5/29/2015**	**11/12/2014**	**5/15/2014**	**1/8/2014**	**10/9/2013**	**7/16/2013**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**0.862**	**0.311**	**0.284**	**0.357**	**0.352**	**0.323**	**0.395**	**0.376**	**0.396**
Total Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Zinc	2	**6.58**	**3.87**	**3.74**	**5.09**	**5.1**	**5.29**	**6.29**	**5.05**	**5.69**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**0.3**	**0.285**	**0.293**	**0.35**	**0.291**	**0.31**	**0.405**	**0.323**	**0.381**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**3.61**	**3.61**	**3.96**	**4.81**	**4.89**	**4.54**	**5.28**	**4.47**	**5.19**
Total of Total Metals Concentrations		7	4	4.024	5.447	5.452	5.613	6.685	5.426	6.086
Total of Dissolved Metals Concentrations		3.91	3.895	4.253	5.16	5.181	4.85	5.685	4.793	5.571
Inorganics mg/L										
Nitrate	10 (NR)	**4**	**4.7**	**4.0**	**3.9**	**3.5**	**4**	**4.1**	**2.9**	**4.0**
Sulfate	250 (NR)	**320**	**270**	**310**	**320**	**250**	**300**	**330**	**270**	**310**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.00052**	**0.00041**	**0.0009**	**0.00076**	**0.0005**	**0.00043**	**0.00088**	**0.00045**	**0.0006**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.00035**	**0.00025**	**0.00032**	**0.00032**	**0.00033**	**0.00031**	**0.00035**	**0.00027**	**0.0004**
delta-BHC	0.00005(DL)	**0.0013**	**0.00071**	**0.0018**	**0.0015**	**0.0014**	**0.0011**	**0.0017**	**0.00089**	**0.0014**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.00046**	**0.00044**	**0.001**	**0.00086**	**0.0006**	**0.00057**	**0.0012**	**0.00054**	**0.0008**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.00263	0.00181	0.0040	0.0034	0.0028	0.0024	0.0041	0.0022	0.0032
pH (std units)		5.02	5.01	5.68	5.62	5.27	5.19	5.16	4.85	5.13
Specific Conductance (mS/cm)		0.757	0.787	0.703	0.631	0.498	0.844	0.697	0.731	0.765
Turbidity (NTUs)		8.0	0.0	0	2.7	4.1	0	0.92	0.22	10.7
DO (mg/L)		0.0	0.28	26.7	0	0	1.07	0.58	0.58	0.44
ORP (mV)		169	212	172	268	310	149	177.7	208	219.4

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-110**	**MW-110**	**MW-110**	**MW-111**	**MW-111**	**MW-111**	**MW-111**	**MW-111**	**MW-111**
Sample Date	*Concentrations*	**4/16/2013**	**11/14/2012**	**7/29/2010 & 9/14/2010**	**11/10/2016**	**6/8/2016**	**11/16/2015**	**6/3/2015**	**11/18/2014**	**5/19/2014**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.0025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**0.4**	**0.372**	**0.39**	**0.0225**	**0.024**	**0.0241**	**0.0283**	**0.0351**	**0.0357**
Total Lead	0.015	<0.001	<0.001	**0.0015**	**0.00221**	<0.001	<0.001	<0.001	<0.001	**0.0011**
Total Zinc	2	**6.92**	**5.9**	**5.7**	**4.78**	**4.24**	**5.45**	**5.4**	**4.96**	**7.17**
Dissolved Arsenic	0.01	<0.005	<0.005	na	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**0.38**	**0.375**	na	**0.0217**	**0.0228**	**0.032**	**0.0503**	**0.0336**	**0.0299**
Dissolved Lead	0.015	<0.001	<0.001	na	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**6.25**	**4.81**	na	**4.48**	**3.99**	**4.36**	**5.65**	**4.55**	**5.47**
Total of Total Metals Concentrations		7.32	6.272	6.0915	4.80471	4.264	5.4741	5.4283	4.9951	7.2068
Total of Dissolved Metals Concentrations		6.63	5.185		4.5017	4.0128	4.392	5.7003	4.5836	5.4999
Inorganics mg/L										
Nitrate	10 (NR)	**4.4**	**4.8**	**9.8**	<2.5	<2.5	<5.0	<0.25	<5.0	**0.3**
Sulfate	250 (NR)	**340**	**300**	**310**	**450**	**430**	**500**	**560**	**450**	**500**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.000095	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.000095	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.000095	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.0012**	**0.00069**	**0.00047**	**0.017**	**0.0053**	**0.019**	**0.01**	**0.030**	**0.039**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00048	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.00036**	**0.00044**	**0.00043**	**0.0059**	**0.0052**	**0.0066**	**0.0043**	**0.0069**	**0.0058**
delta-BHC	0.00005(DL)	**0.0022**	**0.0013**	**0.00088**	**0.046**	**0.014**	**0.059**	**0.034**	**0.11**	**0.1**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.000095	**0.00015**	**0.00012**	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.0013**	**0.00067**	**0.00055**	**0.018**	**0.0079**	**0.03**	**0.017**	**0.06**	**0.078**
gamma-Chlordane	0.002	<0.00005	<0.00005	na	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.000048	<0.00005	<0.0025	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.000095	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.0048	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.00506	0.0031	0.00233	0.08705	0.03252	0.1146	0.0653	0.2069	0.2228
pH (std units)		5.19	5.30	5.03/5.04	5.61	5.63	6.11	5.96	5.34	5.76
Specific Conductance (mS/cm)		0.84	1.02	0/0.94	1.01	1.18	1.27	1.18	1.43	1.39
Turbidity (NTUs)		1.2	0	0.22/0.6	0.0	0.0	0.7	0	0.7	0
DO (mg/L)		0.51	0.41		1.78	0.56	0.7	0	0.0	1.21
ORP (mV)		235.3	143		83	108	98	107	104	107

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-111**	**MW-111**	**MW-111**	**MW-111**	**MW-111**	**MW-111**	**MW-112**	**MW-112**	**MW-112**
Sample Date	*Concentrations*	**1/8/2014**	**10/9/2013**	**7/16/2013**	**4/17/2013**	**11/16/2012**	**7/29/2010 & 9/14/2010**	**11/9/2016**	**6/2/2016**	**11/10/2015**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0025	**0.0116**	**0.00849**	**0.00937**
Total Copper	1.3	**0.0242**	**0.0197**	**0.0231**	**0.0276**	**0.0255**	**0.039**	**0.0436**	**0.0421**	**0.0311**
Total Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0015	<0.001	<0.001	<0.001
Total Zinc	2	**7.3**	**4.75**	**5.42**	**6.44**	**5.1**	**4.4**	**0.965**	**1.50**	**1.12**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.01	na	**0.011**	**0.00906**	**0.0101**
Dissolved Copper	1.3	**0.0237**	**0.0153**	**0.0218**	**0.0271**	**0.0206**	na	**0.0383**	**0.0439**	**0.0324**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.002	na	<0.001	<0.001	<0.001
Dissolved Zinc	2	**5.40**	**4.31**	**4.96**	**6.0**	**4.83**	na	**0.927**	**1.570**	**1.21**
Total of Total Metals Concentrations		7.3242	4.7697	5.4431	6.4676	5.1255	4.439	1.0202	1.55059	1.1605
Total of Dissolved Metals Concentrations		5.4237	4.3253	4.9818	6.0271	4.8506		0.9763	1.62296	1.2525
Inorganics mg/L										
Nitrate	10 (NR)	<1.2	<2.5	<1.2	<1.2	**0.4**	<0.25	**0.63**	<0.25	<2.5
Sulfate	250 (NR)	**510**	**440**	**440**	**480**	**440**	**240**	**150**	**330**	**250**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.014**	**0.015**	**0.02**	**0.012**	**0.012**	**0.014**	**0.00049**	**0.0017**	**0.0031**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.0005	<0.00005	<0.00005	<0.0005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.0069**	**0.0048**	**0.0051**	**0.0045**	**0.0051**	<0.01	**0.00099**	**0.044**	**0.003**
delta-BHC	0.00005(DL)	**0.052**	**0.065**	**0.049**	**0.021**	**0.021**	**0.03**	**0.00011**	**0.0019**	**0.0026**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.001	<0.0001	<0.0001	**0.00014**	<0.0001	**0.00028**	<0.0001
gamma-BHC	0.0002	**0.029**	**0.028**	**0.035**	**0.014**	**0.0082**	<0.01	**0.000068**	**0.00077**	**0.00095**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.0005	<0.00005	<0.00005	na	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.0005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.005	<0.0005	<0.0005	<0.0001	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.003	<0.003	<0.005
Total Pesticides		0.10190	0.11280	0.10910	0.0515	0.0463	0.04414	0.00166	0.04865	0.00965
pH (std units)		5.74	5.55	5.74	5.81	5.88	5.79	5.98	5.54	6.52
Specific Conductance (mS/cm)		1.052	1.079	1.113	1.207	1.32	1.22	0.529	0.835	0.673
Turbidity (NTUs)		0.12	0.26	3.7	1.2	0	0.81	2.4	3.9	2.9
DO (mg/L)		0.73	0.94	0.65	0.6	0.46		0.5	3.02	0
ORP (mV)		129.1	167.9	180.1	151.6	69		184	224	167

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-112**	**MW-112**	**MW-112**	**MW-112**	**MW-112**	**MW-112**	**MW-112**	**MW-113**	**MW-113**
Sample Date	*Concentrations*	**5/28/2015**	**11/11/2014**	**5/14/2014**	**11/13/2013**	**5/22/2013**	**11/13/2012**	**7/28/2010 & 9/13/2010**	**11/10/2016**	**6/7/2016**
Metals mg/L										
Total Arsenic	0.01	**0.00783**	**0.0117**	**0.00684**	**0.013**	**0.0115**	**0.0144**	**0.015**	<0.005	<0.005
Total Copper	1.3	**0.0504**	**0.0462**	**0.0536**	**0.0775**	**0.0794**	**0.0546**	**0.054**	**16.8**	**18.9**
Total Lead	0.015	<0.001	<0.001	**0.00109**	**0.00132**	**0.0026**	**0.0011**	<0.0015	**0.00328**	**0.00538**
Total Zinc	2	**2.13**	**1.10**	**1.62**	**1.61**	**2.45**	**0.563**	**1**	**94.1**	**92.2**
Dissolved Arsenic	0.01	**0.00969**	**0.0121**	**0.00651**	**0.0106**	**0.00747**	**0.0134**	na	<0.005	<0.005
Dissolved Copper	1.3	**0.0455**	**0.0415**	**0.0521**	**0.0655**	**0.0499**	**0.0441**	na	**14.7**	**21.1**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	**0.00303**	**0.00424**
Dissolved Zinc	2	**2.09**	**1.130**	**1.65**	**1.26**	**2.35**	**0.559**	na	**93.3**	**122**
Total of Total Metals Concentrations		2.1882	1.1579	1.6815	1.7018	2.5435	0.6331	1.069	110.90328	111.10538
Total of Dissolved Metals Concentrations		2.14519	1.1836	1.70861	1.3361	2.40737	0.6165		108.00303	143.10424
Inorganics mg/L										
Nitrate	10 (NR)	**1.5**	<2.5	**0.43**	<2.5	**1.8**	**1.5**	**0.89**	<5.0	<2.5
Sulfate	250 (NR)	**370**	**170**	**620**	**480**	**580**	**100**	**220**	**1800**	**1600**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.00078**	**0.00091**	**0.0021**	**0.00034**	**0.013**	**0.000076**	<0.0025	**0.00045**	**0.00075**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.0005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.0068**	**0.0021**	**0.022**	**0.0063**	**0.016**	**0.00039**	**0.031**	**0.00096**	**0.0012**
delta-BHC	0.00005(DL)	**0.00064**	**0.00021**	**0.0026**	**0.0002**	**0.015**	<0.00005	<0.0025	**0.00051**	**0.00062**
Dieldrin	0.0001(DL)	<0.0001	<0.00010	**0.00026**	<0.0001	**0.0005**	<0.0001	**0.00012**	<0.0001	<0.0001
gamma-BHC	0.0002	**0.00014**	**0.00013**	**0.0007**	**0.000093**	**0.0056**	<0.00005	**0.00059**	**0.00039**	**0.00068**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	na	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0001	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.100	<0.100	<0.005	<0.005	<0.005	<0.005	<0.003	<0.003
Total Pesticides		0.00836	0.00335	0.02766	0.006933	0.0501	0.000466	0.03171	0.00231	0.00325
pH (std units)		6.08	5.87	5.53	5.50	5.51	5.49	5.52/5.51	3.59	3.22
Specific Conductance (mS/cm)		0.849	0.354	1.23	1.18	1.6	0.731	0.55/0.57	2.64	2.62
Turbidity (NTUs)		0	3.0	3	5.81	9.9	9.89	5.1/4.04	0.7	0.0
DO (mg/L)		0	0.0	2.07	0.47	1.58	0.78		1.1	1.07
ORP (mV)		174	189	177	185	149	143		387	371

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-113**	**MW-113**	**MW-113**	**MW-113**	**MW-113**	**MW-113**	**MW-113**	**MW-113**	**MW-114**
Sample Date	*Concentrations*	**11/16/2015**	**6/2/2015**	**11/17/2014**	**5/15/2014**	**11/15/2013**	**5/24/2013**	**11/15/2012**	**9/15/2010**	**11/10/2016**
Metals mg/L										
Total Arsenic	0.01	**0.0431**	**0.0177**	**0.039**	<0.005	**0.0135**	**0.0235**	<0.005	**0.023**	<0.005
Total Copper	1.3	**11.4**	**13.2**	**19.5**	**26.7**	**19.4**	**20.3**	**12.9**	**15**	**1.67**
Total Lead	0.015	<0.001	**0.0185**	**0.00931**	**0.0111**	**0.0166**	**0.0052**	**0.00812**	**0.0019**	**0.00124**
Total Zinc	2	**65.6**	**4.1**	**124**	**134**	**99.9**	**114**	**69.5**	**95**	**7.82**
Dissolved Arsenic	0.01	<0.005	**0.0189**	**0.05**	<0.005	<0.005	**0.0234**	<0.025	na	<0.005
Dissolved Copper	1.3	**11.9**	**12.4**	**25.2**	**26.4**	**12.9**	**21.8**	**11.9**	na	**1.55**
Dissolved Lead	0.015	**0.00325**	**0.00545**	**0.0116**	**0.0104**	**0.0104**	**0.00387**	**0.00785**	na	<0.001
Dissolved Zinc	2	**70**	**72.2**	**146**	**132**	**92.3**	**124**	**71.4**	na	**7.3**
Total of Total Metals Concentrations		77.0431	17.3362	143.54831	160.7111	119.3301	134.3287	82.40812	110.0249	9.49124
Total of Dissolved Metals Concentrations		81.90325	84.62435	171.2616	158.4104	105.2104	145.82727	83.30785		8.85
Inorganics mg/L										
Nitrate	10 (NR)	<25	<2.5	**1.2**	<1.2	<2.5	<25	**1.8**	**1.6**	**16**
Sulfate	250 (NR)	**1400**	**810**	**2000**	**2600**	**2500**	**2100**	**1700**	**2100**	**520**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000094	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000094	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000094	<0.0001
alpha-BHC	0.00005(DL)	**0.0002**	**0.00025**	**0.00032**	**0.00048**	**0.00029**	**0.00042**	**0.0004**	**0.0014**	**0.000072**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00047	<0.00005
beta-BHC	0.00005(DL)	**0.00069**	**0.00076**	**0.00093**	**0.0010**	**0.00067**	**0.00087**	**0.00078**	**0.0018**	**0.0033**
delta-BHC	0.00005(DL)	**0.00018**	**0.00017**	**0.00026**	**0.00029**	**0.00018**	**0.00018**	**0.00027**	**0.0016**	<0.00005
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.000094	<0.0001
gamma-BHC	0.0002	**0.00024**	**0.00026**	**0.00033**	**0.00045**	**0.00029**	**0.00041**	**0.00037**	**0.0012**	**0.000087**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	na	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000047	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.000094	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0047	<0.003
Total Pesticides		0.00131	0.00144	0.00184	0.00222	0.00143	0.00188	0.00182	0.006	0.00346
pH (std units)		3.64	3.68	3.45	3.31	3.56	3.65	3.7	3.69	3.83
Specific Conductance (mS/cm)		2.156	1.89	3.37	3.47	3.36	3.0	2.69	2.58	1.23
Turbidity (NTUs)		0.8	9.2	3.3	16.1	15.1	110	26.5	5.21	3.5
DO (mg/L)		0.17	0.09	0.0	0.47	0.42	2.95	0.48		0.7
ORP (mV)		421.6	366	378	404	349	201	226		373

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-114**	**MW-114**	**MW-114**	**MW-114**	**MW-114**	**MW-114**	**MW-114**	**MW-114**	**MW-114**
Sample Date	*Concentrations*	**6/7/2016**	**11/16/2015**	**6/2/2015**	**11/18/2014**	**5/15/2014**	**11/14/2013**	**5/24/2013**	**11/15/2012**	**9/14/2010**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0025
Total Copper	1.3	**1.22**	**1.57**	**1.48**	**1.55**	**1.28**	**1.80**	**1.93**	**1.6**	**2.2**
Total Lead	0.015	**0.00142**	**0.00295**	**0.00159**	**0.00200**	**0.00388**	**0.00325**	<0.001	**0.00299**	**0.004**
Total Zinc	2	**4.78**	**7.53**	**7.93**	**6.26**	**8.12**	**9.04**	**9.74**	**8.66**	**8.7**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	na
Dissolved Copper	1.3	**1.16**	**1.32**	**1.51**	**1.53**	**1.15**	**1.51**	**1.82**	**1.55**	na
Dissolved Lead	0.015	<0.001	**0.00247**	<0.001	**0.00200**	**0.00252**	**0.00223**	<0.001	**0.00281**	na
Dissolved Zinc	2	**4.58**	**5.63**	**7.18**	**6.00**	**6.00**	**6.25**	**9.17**	**7.96**	na
Total of Total Metals Concentrations		6.00142	9.10295	9.41159	7.812	9.40388	10.84325	11.67	10.26299	10.904
Total of Dissolved Metals Concentrations		5.74	6.95247	8.69	7.532	7.15252	7.76223	10.99	9.51281	
Inorganics mg/L										
Nitrate	10 (NR)	**21**	**27**	**29**	**16**	**29**	**69**	**35**	**31**	**19**
Sulfate	250 (NR)	**700**	**500**	**480**	**380**	**440**	**850**	**450**	**460**	**290**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.00017**	**0.00018**	**0.00015**	**0.0001**	**0.00022**	**0.00023**	**0.00024**	**0.00018**	**0.00024**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.0005
beta-BHC	0.00005(DL)	**0.002**	**0.0022**	**0.0018**	**0.0022**	**0.0022**	**0.0011**	**0.00064**	**0.00074**	**0.0046**
delta-BHC	0.00005(DL)	**0.000088**	**0.000082**	**0.000066**	**0.00013**	**0.00011**	**0.000095**	<0.00005	**0.000077**	**0.00011 P**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.000089**	**0.00014**	**0.00012**	**0.000091**	**0.00011**	**0.00012**	**0.00012**	**0.00012**	**0.00027**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	na
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0001
Toxaphene	0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.00235	0.003	0.002	0.003	0.003	0.002	0.001	0.001117	0.00522
pH (std units)		3.54	4.09	4.03	3.43	3.62	3.92	4.04	4.08	4.05
Specific Conductance (mS/cm)		1.12	1.09	0.944	1.23	1.28	1.31	1.36	1.38	1.13
Turbidity (NTUs)		7.6	0	7.4	4.2	5.6	3.72	1.72	5.3	4.97
DO (mg/L)		0.85	0	0	0.0	0.54	0.43	0.87	0.65	
ORP (mV)		396	226	367	325	298	269	352	244	

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-115**	**MW-115**	**MW-115**	**MW-115**	**MW-115**	**MW-115**	**MW-115**	**MW-115**	**MW-115**
Sample Date	*Concentrations*	**11/10/2016**	**6/7/2016**	**11/16/2015**	**6/1/2015**	**11/14/2014**	**5/16/2014**	**11/13/2013**	**5/24/2013**	**11/15/2012**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**5.3**	**4.17**	**3.51**	**5.11**	**4.3**	**6.07**	**3.91**	**3.45**	**4.04**
Total Lead	0.015	**0.0012**	**0.00393**	**0.00168**	**0.00205**	**0.00632**	**0.00116**	**0.0132**	**0.00124**	**0.00292**
Total Zinc	2	**14**	**14.4**	**8.47**	**11.4**	**18.6**	**15.1**	**12.3**	**9.56**	**9.96**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Dissolved Copper	1.3	**4.79**	**3.76**	**3.48**	**4.16**	**4.210**	**4.22**	**2.78**	**3.37**	**3.57**
Dissolved Lead	0.015	<0.001	**0.00139**	**0.0013**	**0.00145**	**0.00862**	<0.001	**0.0126**	**0.0011**	**0.00601**
Dissolved Zinc	2	**13.4**	**9.98**	**7.6**	**11.2**	**18.20**	**16.4**	**7.66**	**10.7**	**9.76**
Total of Total Metals Concentrations		19.3012	18.57393	11.98168	16.51205	22.90632	21.17116	16.2232	13.01124	14.00292
Total of Dissolved Metals Concentrations		18.19	13.74139	11.0813	15.36145	22.41862	20.62	10.4526	14.0711	13.33601
Inorganics mg/L										
Nitrate	10 (NR)	<5.0	**3**	<12	**1.3**	**1.7**	<5.0	<2.5	<2.5	**2.2**
Sulfate	250 (NR)	**720**	**860**	**690**	**780**	**650**	**880**	**720**	**580**	**730**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.00026**	**0.00015**	**0.00033**	**0.00028**	**0.00026**	**0.00027**	**0.00016**	**0.00016**	**0.00028**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.00027**	**0.00014**	**0.00037**	**0.00033**	**0.00026**	**0.00019**	**0.00018**	**0.00026**	**0.00026**
delta-BHC	0.00005(DL)	**0.000051**	<0.00005	<0.00005	**0.000058**	**0.000073**	<0.00005	<0.00005	<0.00005	**0.000074**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.000067**	<0.00005	**0.000076**	**0.000079**	**0.000076**	**0.000078**	<0.00005	<0.00005	**0.000065**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.00065	0.00029	0.00078	0.00075	0.00067	0.00054	0.00034	0.00042	0.00068
pH (std units)		3.69	3.47	3.68	3.69	3.30	3.7	3.63	3.75	3.71
Specific Conductance (mS/cm)		1.26	1.34	1.22	1.07	1.51	1.39	1.20	1.13	1.32
Turbidity (NTUs)		0.0	0.0	0.11	0	0.1	8.5	8.9	0	0
DO (mg/L)		0.6	2.13	3.59	0	0.0	1.72	0.58	1.06	0.38
ORP (mV)		431	411	4.5	412	422	236	290	409	389

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	HSRA Type 1 RRS	MW-115	MW-116	MW-116	MW-116	MW-116	MW-116	MW-116	MW-116	MW-116
Sample Date	*Concentrations*	**9/14/2010**	**11/10/2016**	**6/3/2016**	**11/12/2015**	**5/28/2015**	**11/12/2014**	**5/16/2014**	**11/13/2013**	**5/23/2013**
Metals mg/L										
Total Arsenic	0.01	<0.0025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**6.7**	**3.44**	**3.07**	**1.65**	**1.85**	**2.54**	**2.45**	**3.25**	**1.91**
Total Lead	0.015	<0.0015	**0.00109**	**0.00195**	**0.00273**	**0.00187**	**0.00112**	**0.00386**	**0.00533**	**0.00162**
Total Zinc	2	**20**	**8.79**	**7.68**	**3.86**	**5.06**	**7.06**	**8.90**	**8.66**	**4.62**
Dissolved Arsenic	0.01	na	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	na	**3.22**	**2.94**	**1.68**	**1.88**	**3.25**	**2.15**	**2.65**	**1.47**
Dissolved Lead	0.015	na	<0.001	**0.00154**	**0.00255**	**0.00109**	**0.00102**	**0.00359**	**0.00409**	<0.001
Dissolved Zinc	2	na	**8.26**	**7.65**	**4.04**	**5.14**	**8.85**	**6.53**	**6.25**	**3.56**
Total of Total Metals Concentrations		26.7	12.23109	10.75195	5.51273	6.91187	9.60112	11.35386	11.91533	6.53162
Total of Dissolved Metals Concentrations			11.48	10.59154	5.72255	7.02109	12.10102	8.68359	8.90409	5.03
Inorganics mg/L										
Nitrate	10 (NR)	**3.2**	**65**	**48**	**37**	**14**	**28**	**18**	**72**	**16**
Sulfate	250 (NR)	**430**	**510**	**700**	**430**	**500**	**430**	**660**	**570**	**400**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.00024**	**0.00015**	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
alpha-Chlordane	0.002	<0.00047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.00013**	**0.00046**	**0.00038**	**0.00029**	**0.00031**	**0.00055**	**0.00019**	**0.00025**	**0.00026**
delta-BHC	0.00005(DL)	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Dieldrin	0.0001(DL)	<0.000094	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.000073**	**0.00012**	**0.000054**	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
gamma-Chlordane	0.002	na	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.000047	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.000094	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.0047	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.00044	0.00073	0.00043	0.00029	0.00031	0.00055	0.00019	0.00025	0.00026
pH (std units)		3.76	4.04	3.82	4.43	4.25	4.05	4.06	3.55	4.24
Specific Conductance (mS/cm)		1.18	1.79	1.82	1.27	0.836	0.999	1.48	0.652	1.17
Turbidity (NTUs)		0.21	4.1	0.0	140	3.1	7.1	2.1	148	9.16
DO (mg/L)			1.16	1.24	64.5	1.38	0	3.87	1.42	6.1
ORP (mV)			356	324	220	347	393	300	332	249

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-116**	**MW-116**	**MW-117**	**MW-117**	**MW-117**	**MW-117**	**MW-117**	**MW-117**	**MW-117**
Sample Date	*Concentrations*	**2012**	**7/28/2010 & 9/13/2010**	**11/10/2016**	**6/3/2016**	**11/16/2015**	**6/2/2015**	**11/17/2014**	**5/19/2014**	**11/15/2013**
Metals mg/L										
Total Arsenic	0.01	Well was	<0.0025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	dry and	**4.1**	**0.0426**	**0.036**	**0.0321**	**0.0295**	**0.0678**	**0.0362**	**0.0438**
Total Lead	0.015	was not	**0.0073**	**0.00131**	**0.00133**	**0.00175**	**0.00117**	**0.00282**	**0.00109**	**0.00172**
Total Zinc	2	sampled	**12**	**0.711**	**1.02**	**0.867**	**0.802**	**1.01**	**0.809**	**1.01**
Dissolved Arsenic	0.01		na	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3		na	**0.0337**	**0.0335**	**0.0272**	**0.0321**	**0.0761**	**0.0378**	**0.033**
Dissolved Lead	0.015		na	<0.001	<0.001	**0.00112**	<0.001	**0.00178**	<0.001	<0.001
Dissolved Zinc	2		na	**0.663**	**1.01**	**0.682**	**0.865**	**0.991**	**0.95**	**0.878**
Total of Total Metals Concentrations			16.1073	0.75491	1.05733	0.90085	0.83267	1.08062	0.84629	1.05552
Total of Dissolved Metals Concentrations				0.6967	1.0435	0.71032	0.8971	1.06888	0.9878	0.911
Inorganics mg/L										
Nitrate	10 (NR)		**91**	**4.1**	**2.7**	**4.0**	**3.4**	**3.1**	**3.3**	**3.9**
Sulfate	250 (NR)		**710**	**140**	**180**	**140**	**150**	**130**	**140**	**140**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001		<0.000095	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001		<0.000095	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001		<0.000095	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)		**0.00019**	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
alpha-Chlordane	0.002		<0.00048	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)		**0.00063**	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
delta-BHC	0.00005(DL)		<0.000048	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Dieldrin	0.0001(DL)		<0.000095	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002		**0.00027**	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
gamma-Chlordane	0.002		na	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004		<0.000048	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04		<0.000095	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003		<0.0048	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005
Total Pesticides			0.00109	BDL	BDL	BDL	BDL	BDL	BDL	BDL
pH (std units)		DRY	3.92/3.94	4.1	3.44	4.27	4.41	3.52	4.21	4.17
Specific Conductance (mS/cm)			2.06/2.3	0.401	0.372	0.364	0.305	0.414	0.408	0.416
Turbidity (NTUs)			3.75/4.95	84.3	9.2	6.5	8.1	1.3	7.2	8.78
DO (mg/L)				1.38	0.50	3.39	1.2	1.40	2.95	1.43
ORP (mV)				421	310	436	382	421	382	353

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-117**	**MW-117**	**MW-117**	**MW-119**	**MW-119**	**MW-119**	**MW-119**	**MW-119**	**MW-119**
Sample Date	*Concentrations*	**5/23/2013**	**11/15/2012**	**9/14/2010**	**11/11/2016**	**6/8/2016**	**11/17/2015**	**6/5/2015**	**11/18/2014**	**5/21/2014**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.0025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**0.0318**	**0.0453**	**0.038**	**0.0737**	**0.018**	**0.00727**	**0.0106**	**0.00514**	**0.00386**
Total Lead	0.015	**0.00107**	**0.00193**	<0.0015	<0.001	**0.0045**	<0.001	<0.001	<0.001	**0.00183**
Total Zinc	2	**1.05**	**0.794**	**1.6**	**1.45**	**2.3**	**1.05**	**0.76**	**0.677**	**1.38**
Dissolved Arsenic	0.01	<0.005	<0.005	na	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**0.0272**	**0.0410**	na	<0.002	**0.00895**	**0.0225**	<0.002	**0.00369**	<0.002
Dissolved Lead	0.015	<0.001	**0.00115**	na	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**0.879**	**0.775**	na	**1.27**	**2.02**	**1.09**	**0.69**	**0.689**	**1.36**
Total of Total Metals Concentrations		1.08287	0.84123	1.638	1.5237	2.3225	1.05727	0.7706	0.68214	1.38569
Total of Dissolved Metals Concentrations		0.9062	0.81715		1.27	2.02895	1.1125	0.69	0.69269	1.36
Inorganics mg/L										
Nitrate	10 (NR)	**4.0**	**3.8**	**2.5**	**0.33**	<2.5	<2.5	<0.25	<0.25	<0.25
Sulfate	250 (NR)	**140**	**130**	**260**	**140**	**150**	**140**	**92**	**170**	**120**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	**0.0012**	**0.0015**	**0.0012**	**0.00049**	**0.00064**	**0.00140**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.0005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	<0.00005	<0.00005	<0.00005	**0.0009**	**0.0011**	**0.0011**	**0.00052**	**0.00062**	**0.0011**
delta-BHC	0.00005(DL)	<0.00005	**0.000056**	<0.00005	**0.001**	**0.0014**	**0.0011**	**0.00053**	**0.001**	**0.0016**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005	<0.00005	<0.00005	**0.00017**	**0.00086**	**0.00023**	**0.000085**	**0.00013**	**0.00025**
gamma-Chlordane	0.002	<0.00005	<0.00005	na	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005
Total Pesticides		BDL	0.000056	BDL	0.00327	0.00486	0.00363	0.001625	0.002390	0.004350
pH (std units)		4.23	4.18	4.24	6.91	6.29	6.92	7.01	5.64	5.44
Specific Conductance (mS/cm)		0.419	0.396	0.51	1.690	0.513	0.547	0.474	0.740	0.719
Turbidity (NTUs)		9.79	10.41	8.19	0.0	7.4	8.6	5.3	6.8	6.1
DO (mg/L)		1.42	6.8		0.65	0.13	0	0	7.45	0.52
ORP (mV)		364	398		19	39	14	3	-21	44

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	HSRA Type 1 RRS	MW-119	MW-119	MW-119	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120
Sample Date	*Concentrations*	**11/18/2013**	**5/28/2013**	**12/6/2012**	**11/11/2016**	**6/8/2016**	**11/17/2015**	**6/4/2015**	**11/19/2014**	**5/21/2014**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.00117 J**	<0.005
Total Copper	1.3	**0.00391**	**0.0158**	<0.005	**0.0222**	**0.00986**	**0.0422**	**0.0063**	**0.0108**	**0.0584**
Total Lead	0.015	**0.00276**	**0.0059**	**0.0012**	**0.00124**	**0.00247**	**0.00541**	<0.001	**0.00197**	**0.04600**
Total Zinc	2	**0.778**	**1.18**	**0.656**	**0.813**	**0.813**	**1.33**	**0.533**	**0.690**	**1.41**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.000536	<0.005
Dissolved Copper	1.3	**0.00530**	**0.00697**	<0.002	**0.00577**	**0.00594**	**0.101**	**0.00268**	**0.0042**	**0.0029**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0000990	<0.001
Dissolved Zinc	2	**0.677**	**0.877**	**0.532**	**0.804**	**0.74**	**1.31**	**0.458**	**0.667**	**1.18**
Total of Total Metals Concentrations		0.78467	1.2017	0.6572	0.83644	0.82533	1.37761	0.5393	0.70277	1.5144
Total of Dissolved Metals Concentrations		0.6823	0.88397	0.532	0.80977	0.74594	1.411	0.46068	0.6712	1.1829
Inorganics mg/L										
Nitrate	10 (NR)	<0.25	<1.2	<0.25	<2.5	<2.5	<2.5	<0.25	<0.14	<0.25
Sulfate	250 (NR)	**94**	**110**	**150**	**210**	**190**	**330**	**170**	**170**	**150**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	**0.00018**	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.00050**	**0.00060**	**0.00087**	**0.0013**	**0.0014**	**0.0017**	**0.0012**	**0.00096**	**0.00095**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.00042**	**0.00051**	**0.00066**	**0.0012**	**0.0013**	**0.0019**	**0.0013**	**0.0011**	**0.00099**
delta-BHC	0.00005(DL)	**0.00051**	**0.00053**	**0.00073**	**0.0011**	**0.0012**	**0.0015**	**0.0011**	**0.001**	**0.0014**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.0001**	**0.00012**	**0.00013**	**0.000065**	**0.00015**	**0.00017**	<0.00005	<0.00005	**0.000084**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.001530	0.00176	0.00257	0.00367	0.00405	0.00527	0.00360	0.00306	0.00342
pH (std units)		6.25	5.75	5.99	6.79	6.06	5.92	6.57	5.59	5.61
Specific Conductance (mS/cm)		0.731	0.647	0.646	1.78	0.512	0.723	0.563	0.85	0.693
Turbidity (NTUs)		7.4	107	3.1	3.6	3.4	84.6	763	82	279
DO (mg/L)		0.43	4.78	0.6	1.1	0.0	0	0.31	6.05	0.53
ORP (mV)		-59	49	40.4	113	98	97	146	82	93

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-120**	**MW-120**	**MW-120**	**MW-121**	**MW-121**	**MW-121**	**MW-121**	**MW-121**	**MW-121**
Sample Date	*Concentrations*	**11/18/2013**	**5/28/2013**	**12/7/2012**	**11/11/2016**	**6/7/2016**	**11/13/2015**	**6/5/2015**	**11/13/2014**	**5/19/2014**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**0.0124**	**0.0129**	**0.0289**	**0.0491**	**0.0105**	**0.0052**	**0.0309**	**0.0113**	**0.00695**
Total Lead	0.015	**0.0018**	**0.00418**	**0.0295**	**0.00346**	**0.00117**	<0.001	<0.001	<0.001	**0.00136**
Total Zinc	2	**1.23**	**0.894**	**1.88**	**1.14**	**0.0373**	**0.0187**	**0.0204**	**0.0434**	**0.0194**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**0.00554**	**0.0067**	**0.00223**	**0.0278**	**0.00693**	**0.00345**	**0.0066**	**0.00286**	**0.00223**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**1.07**	**0.737**	**1.74**	**1.08**	**0.0178**	<0.01	**0.0163**	**0.0196**	**0.0125**
Total of Total Metals Concentrations		1.2442	0.91108	1.9384	1.19256	0.04897	0.0239	0.0513	0.0547	0.02771
Total of Dissolved Metals Concentrations		1.07554	0.7437	1.74223	1.1078	0.02473	0.00345	0.0229	0.02246	0.01473
Inorganics mg/L										
Nitrate	10 (NR)	<1.2	<1.2	<0.25	**0.46**	**2.8**	**5.0**	<0.25	**0.43**	**0.4**
Sulfate	250 (NR)	**150**	**160**	**410**	**260**	**46**	**21**	**12**	**50**	**42**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.00090**	**0.00063**	**0.0035**	**0.005**	**0.00011**	<0.00005	<0.00005	**0.000054**	**0.00012**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.00089**	**0.00075**	**0.0042**	**0.0019**	**0.000059**	<0.00005	**0.000054**	**0.0001**	**0.00012**
delta-BHC	0.00005(DL)	**0.00071**	**0.00046**	**0.0031**	**0.0063**	**0.000071**	<0.00005	**0.000071**	<0.000050	**0.00011**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	<0.00005	<0.00005	**0.0011**	**0.0029**	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.00250	0.0018	0.0119	0.01610	0.00024	BDL	0.0001	0.0002	0.0004
pH (std units)		5.57	5.38	6.3	5.72	6.36	6.24	6.35	6.36	6.03
Specific Conductance (mS/cm)		0.640	0.645	0.95	0.827	0.271	0.286	0.292	0.251	0.369
Turbidity (NTUs)		8.3	78.9	76.1	0.0	7.5	0.1	0	1.8	0
DO (mg/L)		8.93	3.06	6.42	3.34	0.61	2.95	0	0	0.71
ORP (mV)		85	175	58.6	172	142	157	149	43	167

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**MW-121**	**MW-121**	**MW-121**	**OW-1**	**OW-1**	**OW-1**	**OW-1**	**OW-1**	**OW-1**
Sample Date	*Concentrations*	**11/18/2013**	**5/29/2013**	**12/6/2012**	**11/11/2016**	**6/8/2016**	**11/16/2015**	**6/3/2015**	**5/19/2014**	**1/8/2014**
Metals mg/L										
Total Arsenic	0.01	<0.005	<0.005	<0.005	**0.0952**	**0.187**	**0.0644**	**0.0801**	**0.102**	**0.0493**
Total Copper	1.3	**0.00330**	**0.00429**	**0.0295**	**0.486**	**0.164**	**0.483**	**0.25**	**0.181**	**0.471**
Total Lead	0.015	<0.001	<0.001	**0.0012**	**0.00103**	<0.001	**0.00101**	<0.001	<0.001	<0.001
Total Zinc	2	**0.0112**	**0.0313**	**1.59**	**14.8**	**4.69**	**9.54**	**5.75**	**7.71**	**17.2**
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	**0.026**	**0.0142**	**0.0214**	**0.0226**	**0.0228**	**0.0281**
Dissolved Copper	1.3	**0.00469**	**0.0106**	**0.0112**	**0.162**	**0.0498**	**0.22**	**0.0869**	**0.0724**	**0.345**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	**0.00106**	**0.00135**	<0.001	<0.001
Dissolved Zinc	2	**0.0692**	**0.0153**	**1.25**	**12.6**	**4.57**	**7.49**	**5.9**	**5.62**	**14.9**
Total of Total Metals Concentrations		0.0145	0.03559	1.6207	15.38223	5.041	**10.088**	**6.080**	**7.993**	**17.720**
Total of Dissolved Metals Concentrations		0.07389	0.0259	1.2612	12.788	4.634	**7.732**	**6.011**	**5.715**	**15.273**
Inorganics mg/L										
Nitrate	10 (NR)	**0.45**	**0.32**	**0.59**	<2.5	<2.5	<5	<0.25	<0.25	<2.5
Sulfate	250 (NR)	**64**	**56**	**220**	**240**	**550**	**530**	**350**	**450**	**600**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	**0.00019**	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	**0.0001**
alpha-BHC	0.00005(DL)	**0.00030**	**0.00018**	**0.0027**	**0.014**	**0.0067**	**0.0067**	**0.0066**	**0.0086**	**0.0077**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.00023**	**0.00015**	**0.0011**	**0.0039**	**0.0029**	**0.0034**	**0.0033**	**0.0034**	**0.0039**
delta-BHC	0.00005(DL)	**0.00023**	**0.000078**	**0.0023**	**0.018**	**0.014**	**0.013**	**0.013**	**0.017**	**0.013**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.00009**	<0.00005	**0.0014**	**0.0069**	**0.0067**	**0.0059**	**0.0058**	**0.0067**	**0.0075**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.003	<0.003	<0.005	<0.005	<0.005	<0.005
Total Pesticides		0.0009	0.000408	0.0075	0.04280	0.03030	0.0292	0.0287	0.0357	0.0322
pH (std units)		6.10	5.85	5.97	5.73	5.88	6.64	5.27	5.92	5.92
Specific Conductance (mS/cm)		0.425	0.395	0.633	1.26	0.92	1.19	0.743	1.23	1.233
Turbidity (NTUs)		1.45	0.47	3.6	0.0	0.0	1.2	0	0	2.57
DO (mg/L)		0.74	2.18	3.9	0.2	0.0	0	0.67	1.75	0.76
ORP (mV)		82	154	79.6	44	10	54	108	71.0	55.0

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	HSRA Type 1 RRS	OW-1	OW-1	OW-1	OW-1	OW-2	OW-2	OW-2	OW-2	OW-2
Sample Date	*Concentrations*	**10/9/2013**	**7/16/2013**	**4/15/2013**	**1/20/2013**	**11/14/2016**	**6/8/2016**	**11/13/2015**	**6/3/2015**	**5/20/2014**
Metals mg/L										
Total Arsenic	0.01	**0.0375**	**0.0636**	**0.0671**	**0.0918**	**0.0431**	**0.0382**	**0.0532**	**0.0321**	**0.057**
Total Copper	1.3	**0.417**	**0.33**	**0.293**	**0.0929**	<0.1	**0.0478**	**0.0476**	**0.0645**	**0.0512**
Total Lead	0.015	<0.001	<0.001	<0.001	**0.00106**	<0.001	<0.001	<0.001	<0.001	<0.0001
Total Zinc	2	**14.6**	**11.2**	**15.8**	**5.55**	**3.87**	**3.57**	**2.89**	**5.09**	**5.4**
Dissolved Arsenic	0.01	**0.0121**	**0.0188**	**0.0131**	**0.0709**	**0.0339**	<0.005	**0.0272**	**0.00919**	**0.0163**
Dissolved Copper	1.3	**0.23**	**0.129**	**0.0855**	**0.0716**	**0.0493**	**0.0251**	**0.0215**	**0.0291**	**0.0314**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001
Dissolved Zinc	2	**16.7**	**10.7**	**14.3**	**5.75**	**3.78**	**3.42**	**2.66**	**4.52**	**5.32**
Total of Total Metals Concentrations		**15.055**	**11.594**	**16.160**	**5.736**	**3.9131**	**3.656**	**2.991**	**5.187**	**5.508**
Total of Dissolved Metals Concentrations		**16.942**	**10.848**	**14.399**	**5.893**	**3.8632**	**3.4451**	**2.709**	**4.558**	**5.368**
Inorganics mg/L										
Nitrate	10 (NR)	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<0.25	<0.14
Sulfate	250 (NR)	**580**	**590**	**800**	**600**	**630**	**590**	**480**	**620**	**710**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	<0.0001	<0.0001	**0.00023**	<0.001	<0.002	**0.00012**	**0.00015**	**0.00018**	**0.00012**
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.002	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.002	<0.0001	**0.00019**	**0.00021**	**0.000088**
alpha-BHC	0.00005(DL)	**0.0097**	**0.0088**	**0.0098**	**0.012**	**0.052**	**0.022**	**0.042**	**0.022**	**0.062**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.000050	<0.001	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.0037**	**0.004**	**0.0036**	**0.004**	**0.0086**	**0.0051**	**0.0083**	**0.0052**	**0.011**
delta-BHC	0.00005(DL)	**0.017**	**0.016**	**0.016**	**0.017**	**0.18**	**0.081**	**0.15**	**0.063**	**0.16**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.001	<0.002	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.013**	**0.0086**	**0.0077**	**0.0083**	**0.056**	**0.018**	**0.045**	**0.016**	**0.066**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.001	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.001	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.005	<0.003	<0.003	<0.005	<0.005	<0.005
Total Pesticides		0.0434	0.0374	0.0373	0.0413	0.29660	0.12622	0.2456	0.1066	0.29921
pH (std units)		5.71	5.95	6.08	5.77	6.05	5.78	6.76	5.97	5.86
Specific Conductance (mS/cm)		1.404	1.323	1.753	1.40	1.28	0.96	1.14	1.2	1.66
Turbidity (NTUs)		6.35	75.6	6.9	4.3	0.0	0.0	82.1	10.2	6.8
DO (mg/L)		0.92	0.43	5.05	1.1	0.0	0.0	0	0.63	2.01
ORP (mV)		155.3	45.5	55.9	100.2	-5	25	46	43	60.0

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**OW-2**	**OW-2**	**OW-2**	**OW-2**	**OW-2**	**OW-3**	**OW-3**	**OW-3**	**OW-3**
Sample Date	*Concentrations*	**1/8/2014**	**10/9/2013**	**7/16/2013**	**4/16/2013**	**1/20/2013**	**11/14/2016**	**6/8/2016**	**11/13/2015**	**6/8/2015**
Metals mg/L										
Total Arsenic	0.01	**0.0392**	**0.029**	**0.031**	**0.0314**	**0.0258**	<0.005	<0.005	<0.005	<0.005
Total Copper	1.3	**0.0439**	**0.0338**	**0.0252**	**0.0159**	**0.0281**	**0.579**	**1.25**	**0.726**	**0.984**
Total Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.00219**	**0.00179**
Total Zinc	2	**8.35**	**6.13**	**6.33**	**4.89**	**2.33**	**5.22**	**8.49**	**4.81**	**9.05**
Dissolved Arsenic	0.01	**0.0252**	**0.015**	**0.0168**	**0.0278**	**0.0243**	<0.005	<0.005	<0.005	<0.005
Dissolved Copper	1.3	**0.0263**	**0.0222**	**0.018**	**0.00567**	**0.0236**	**0.559**	**1.23**	**0.692**	**0.807**
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Zinc	2	**6.31**	**5.80**	**5.95**	**4.83**	**2.24**	**5.31**	**8.48**	**4.92**	**7.22**
Total of Total Metals Concentrations		**8.433**	**6.193**	**6.386**	**4.937**	**2.384**	**5.799**	**9.74**	**5.538**	**10.036**
Total of Dissolved Metals Concentrations		**6.362**	**5.837**	**5.985**	**4.863**	**2.288**	**5.869**	**9.71**	**5.612**	**8.027**
Inorganics mg/L										
Nitrate	10 (NR)	<2.5	<5.0	<2.5	<2.5	<0.25	<2.5	**4**	<2.5	**0.52**
Sulfate	250 (NR)	**640**	**520**	**530**	**480**	**350**	**560**	**1100**	**560**	**420**
Organochlorine Pesticides mg/L										
4,4´-DDD	0.0001	**0.00019**	**0.00019**	<0.0001	**0.00039**	<0.002	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDE	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	**0.00027**	**0.00015**	<0.0001	**0.00035**	<0.001	<0.0001	<0.0001	<0.0001	<0.0001
alpha-BHC	0.00005(DL)	**0.024**	**0.031**	**0.015**	**0.0096**	**0.011**	**0.0041**	**0.0015**	**0.0036**	**0.0032**
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
beta-BHC	0.00005(DL)	**0.011**	**0.007**	**0.0046**	**0.0041**	**0.0043**	**0.0022**	**0.0019**	**0.0021**	**0.0018**
delta-BHC	0.00005(DL)	**0.084**	**0.08**	**0.028**	**0.019**	**0.022**	**0.0093**	**0.0044**	**0.01**	**0.0083**
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
gamma-BHC	0.0002	**0.031**	**0.033**	**0.01**	**0.0063**	**0.0038**	**0.002**	**0.0012**	**0.002**	**0.0021**
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.003	<0.003	<0.005	<0.005
Total Pesticides		0.15046	0.15134	0.05760	0.03974	0.0411	0.01760	0.00900	0.0177	0.0154
pH (std units)		5.75	5.49	5.67	5.78	5.6	5.05	4.77	5.17	4.95
Specific Conductance (mS/cm)		1.251	1.337	1.251	1.08	0.908	1.11	1.74	0.985	0.788
Turbidity (NTUs)		1.16	3.12	14.1	7.1	34	0.0	0.0	102	4.6
DO (mg/L)		0.64	0.76	0.37	0.61	1.02	0.8	0.0	0	0
ORP (mV)		42.8	81.5	98.9	58.1	37.2	253	161	274	297

TABLE 3: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well Number	*HSRA Type 1 RRS*	**OW-3**	**OW-3**	**OW-3**	**OW-3**	**OW-3**	**OW-3**	**MW-WO-01**
Sample Date	*Concentrations*	**5/21/2014**	**1/8/2014**	**10/9/2013**	**7/16/2013**	**4/16/2013**	**1/20/2013**	**3/15/2016**
Metals mg/L								
Total Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA
Total Copper	1.3	**1.32**	**1.09**	**0.918**	**0.954**	**1.08**	**0.126**	NA
Total Lead	0.015	**0.00157**	<0.001	<0.001	<0.001	<0.001	<0.001	NA
Total Zinc	2	**15.7**	**12**	**7.81**	**7.42**	**9.3**	**5.44**	NA
Dissolved Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA
Dissolved Copper	1.3	**1.71**	**1.09**	**0.906**	**0.962**	**1.04**	**0.115**	NA
Dissolved Lead	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA
Dissolved Zinc	2	**19.1**	**8.9**	**7.83**	**7.13**	**9.26**	**5.22**	NA
Total of Total Metals Concentrations		**17.022**	**13.090**	**8.728**	**8.374**	**10.380**	**5.566**	
Total of Dissolved Metals Concentrations		**20.810**	**9.990**	**8.736**	**8.092**	**10.300**	**5.335**	
Inorganics mg/L								
Nitrate	10 (NR)	**8.1**	**1.8**	<2.5	<1.2	<2.5	**0.98**	NA
Sulfate	250 (NR)	**700**	**460**	**500**	**450**	**540**	**390**	NA
Organochlorine Pesticides mg/L								
4,4´-DDD	0.0001	<0.001	<0.0001	<0.001	<0.001	<0.0001	<0.001	<0.0001
4,4´-DDE	0.0001	<0.001	<0.0001	<0.001	<0.001	<0.0001	<0.0001	<0.0001
4,4´-DDT	0.0001	<0.001	<0.0001	<0.001	<0.001	**0.0001**	<0.001	<0.0001
alpha-BHC	0.00005(DL)	**0.0026**	**0.0027**	**0.0028**	**0.0035**	**0.0023**	**0.0047**	<0.0001
alpha-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.0005	<0.0005	<0.0005	<0.0005
beta-BHC	0.00005(DL)	**0.0013**	**0.0016**	**0.0013**	**0.0019**	**0.0012**	**0.0024**	<0.0001
delta-BHC	0.00005(DL)	**0.0064**	<0.00005	**0.0089**	**0.0079**	**0.0057**	**0.0067**	<0.0001
Dieldrin	0.0001(DL)	<0.0001	<0.0001	<0.0001	<0.001	<0.0001	<0.001	<0.0001
gamma-BHC	0.0002	**0.0018**	**0.002**	**0.0038**	**0.0025**	**0.0021**	**0.0021**	<0.0001
gamma-Chlordane	0.002	<0.00005	<0.00005	<0.00005	<0.0005	<0.00005	<0.00005	NA
Heptachlor	0.0004	<0.00005	<0.00005	<0.00005	<0.0005	<0.00005	<0.00005	<0.0001
Methoxychlor	0.04	<0.0005	<0.0005	<0.0005	<0.005	<0.0005	<0.0005	<0.0003
Toxaphene	0.003	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.002
Total Pesticides		0.0121	0.0063	0.0168	0.0158	0.0114	0.0159	BDL
pH (std units)		4.53	4.51	4.32	4.65	4.82	5.06	
Specific Conductance (mS/cm)		1.58	0.855	0.992	0.922	1.076	0.93	
Turbidity (NTUs)		0	0.47	0.58	2.8	8.1	48	
DO (mg/L)		1.2	0.47	0.76	0.39	0.58	0.66	
ORP (mV)		260	168.3	208.7	202.6	204.2	128.5	

Notes:
<0.00005 = constituent not detected above laboratory quantitation limit
Bolded concentrations indicate detection above laboratory quantitation limit
Concentration above the Type 1 RRS
NR = not regulated under HSRA or VRP
DL = Detection limit
mg/L = milligrams per liter
P = Identification of target analytes using gas chromatography (GC) is based on retention time.
Although 2 dissimilar GC columns confirmed the presence of the target analyte in the sample, relative percent difference is >40%.

Prepared by: NJM 12/27/2016
Checked by: RNQ 1/3/2017

TABLE 4: SUMMARY OF SURFACE WATER ANALYTICAL RESULTS

Sample Location						SW-2010-5	SW-2010-5	SW-2010-5	SW-2010-5	SW2010-5	SW2010-5	SW2010-5	SW2010-5	SW2010-5	SW2010-5	SW2010-10	SW2010-10	SW2010-10	SW2010-10	SW2010-10	SW2010-10	SW2010-10	SW2010-10
Sample Date						11/15/2016	6/9/2016	11/18/2015	6/4/2015	11/19/2014	5/20/2014	11/19/2013	5/30/2013	11/16/2012	9/23/2010	11/15/2016	6/9/2016	11/18/2015	6/4/2015	11/19/2014	5/20/2014	11/19/2013	5/30/2013
Distance Along Stream (ft)						735	735	735	735	735	735	735	735	735	735	1152	1152	1152	1152	1152	1152	1152	1152
PARAMETER, UNITS	GA Instream	National AWQC	National AWQC Human Consumption of Water + Organism	National AWQC Human Consumption of Water	GA Instream Human Health																		
Total Organochlorine Pesticides (ug/L)						surface water sample from main channel upstream of culvert										surface water sample from main channel upstream of culvert							
	Ecological Exposure		**Human Health Exposure**																				
alpha-BHC	not established		0.0026	0.0049	0.0049	**0.2**	**0.074**	**0.059**	**0.062**	**0.083**	**0.075**	**0.085**	**0.092**	**0.11**	0.13	**0.23**	**0.22**	**0.15**	**0.11**	**0.097**	**0.12**	**0.17**	**0.18**
beta-BHC	not established		0.0091	0.017	0.017	**0.083**	**0.085**	**0.064**	**0.21**	**0.074**	**0.12**	**0.073**	**0.089**	**0.071**	0.23	**0.099**	**0.12**	**0.082**	**0.24**	**0.081**	**0.12**	**0.092**	**0.13**
gamma-BHC (lindane)	0.95 (acute)	0.95 (acute)	0.98	1.8	1.8	**0.021 J**	**0.023 J**	**0.013 J**	**0.013 J**	**0.0092 J**	**0.014 J**	<0.050	**0.0087 J**	<0.05	0.037 P	**0.075**	**0.1**	**0.063**	**0.054**	**0.028 J**	**0.046 J**	**0.060**	**0.066**
delta-BHC	not established			not established		**0.041 J**	**0.033 J**	**0.024 J**	**0.091**	<0.0031	**0.014**	**0.051**	**0.078**	**0.12**	0.2	**0.11**	**0.12**	**0.066**	**0.14**	**0.059**	**0.16**	**0.077**	**0.16**
Chlordane	0.0043	0.0043	0.0008	0.00081	0.00081	<0.05	<0.05	<0.014	<0.00005	<0.0022	<0.0022	<0.050	<0.0066	<0.05	<0.1	<0.05	<0.05	<0.014	<0.00005	<0.0022	<0.0022	<0.050	<0.0066
gamma-Chlordane	0.0043	0.0043	0.0008	0.00081	0.00081	<0.05	<0.05	<0.0047	<0.00005	<0.005	<0.005	<0.050	<0.0047	<0.05	NA	<0.05	**0.011 J**	<0.0047	<0.00005	<0.005	<0.005	<0.050	<0.0047
4,4'-DDD	not established		0.00031	0.00031	0.00031	<0.1	**0.0056 J**	<0.0082	<0.0001	<0.0091	<0.0091	<0.10	<0.014	<0.1	<0.0065	**0.011 J**	**0.033 J**	<0.0082	<0.0001	<0.0091	<0.0091	<0.10	<0.014
4,4'-DDE	not established		0.00022	0.00022	0.00022	<0.1	<0.1	<0.0069	<0.0001	<0.006	<0.006	<0.10	<0.0075	<0.1	<0.0077	<0.1	<0.1	<0.0069	<0.0001	<0.006	<0.006	<0.10	<0.0075
4,4'-DDT	0.001	0.001	0.00022	0.00022	0.00022	<0.1	<0.1	<0.0063	<0.0001	<0.0069	<0.0069	<0.10	<0.014	<0.1	<0.0097	<0.1	<0.1	<0.0063	<0.0001	<0.0069	<0.0069	<0.10	<0.014
Dieldrin	0.056	0.056	0.000052	0.000054	0.000054	**0.0085 J**	**0.0041 J**	<0.0072	<0.0001	<0.0091	<0.0091	<0.10	<0.013	<0.1	<0.0091	**0.0098 J**	**0.0066 J**	<0.0072	<0.0001	<0.0091	<0.0091	<0.10	<0.013
Heptachlor	0.0038	0.0038	0.000079	0.000079	0.000079	<0.05	<0.05	<0.0079	<0.00005	<0.0072	<0.0072	<0.050	<0.0038	<0.05	<0.007	<0.05	<0.05	<0.0079	<0.00005	<0.0072	<0.0072	<0.050	<0.0038
Methoxychlor	0.03	0.03	100	not established		<0.5	<0.5	<0.056	<0.0005	<0.043	<0.043	<0.50	<0.08	<0.5	<0.013	<0.5	<0.5	<0.056	<0.0005	<0.043	<0.043	<0.50	<0.08
Toxaphene	0.0002	0.0002	0.00028	0.00028	0.00028	<3.0	<3	<0.18	<0.005	<0.16	<0.16	<5.0	<0.085	<5	<0.5	<3	<3	<0.18	<0.005	<0.16	<0.16	<5.0	<0.085
Total Pesticides Concentrations (ug/L)						0.3535	0.2247	0.16	0.376	0.1662	0.223	0.209	0.2677	0.301		0.5348	0.6106	0.361	0.544	0.265	0.446	0.399	0.536
Total Metals (mg/L)																							
Arsenic	0.15	0.15	0.000018	0.00014	0.01	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	0.008	NA	NA	NA	NA	NA	NA	NA	NA
Copper	0.0152*	0.0152*	1.3	not established		NA	NA	NA	NA	NA	NA	NA	NA	**0.0161**	0.016	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.0049*	0.0049*	not established			NA	NA	NA	NA	NA	NA	NA	NA	<0.001	0.00067 J	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	0.200*	0.200*	7.4	26	not established	NA	NA	NA	NA	NA	NA	NA	NA	**1.16**	0.97	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Metals (mg/L)																							
Arsenic	0.15	0.15	0.000018	0.00014	0.01	**0.00148 J**	**0.00136 J**	**0.00212 J**	**0.00228 J**	**0.000704 J**	**0.00175 J**	<0.005	**0.00156 J**	<0.005	0.0015 J	**0.00121 J**	**0.00166 J**	**0.00206 J**	**0.00235 J**	**0.000954 J**	**0.00188 J**	<0.005	**0.00172 J**
Copper	0.0152*	0.0152*	1.3	not established		**0.00706**	**0.00536**	**0.0063**	**0.00517**	**0.00471**	**0.00684**	**0.101**	**0.007**	**0.00365**	0.0074	**0.00659**	**0.00471**	**0.00773**	**0.0054**	**0.00442**	**0.00663**	**0.0149**	**0.00616**
Lead	0.0049*	0.0049*	not established			<0.001	<0.001	<0.000309	<0.001	<0.000099	<0.0001	<0.001	<0.00014	<0.001	<0.0002	**0.000782 J**	<0.001	<0.000309	<0.001	<0.000099	<0.0001	<0.001	<0.00014
Zinc	0.200*	0.200*	7.4	26	not established	**0.789**	**0.504**	**0.381**	**0.444**	**0.469**	**0.434**	**0.840**	**0.706**	**1.03**	0.89	**0.557**	**0.407**	**0.444**	**0.407**	**0.456**	**0.427**	**0.706**	**0.593**
Total Dissolved Metals Concentrations (mg/L)						0.79754	0.51072	0.38942	0.45145	0.474414	0.44259	0.941	0.71456	1.03365		0.565582	0.41337	0.45379	0.41475	0.461374	0.43551	0.0855	0.60088
Total Trichlorobenzenes (ug/L)																							
1,2,3-Trichlorobenzene	not established			not established		NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.97	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	not established		35	70	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.54	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate and Sulfate (mg/L)																							
Nitrate as N	not established		10 (nitrates)		not established	**0.9 J**	**1.9 J**	**1.4 J**	**1.2**	**1.8**	**1.7**	**0.72**	**1.3**	**0.55**	0.74	**1.1 J**	**1.8 J**	**1.3 J**	**1.3**	**1.6**	**1.8**	**0.86**	**1.5**
Sulfate	not established		not established			**97**	**97**	**97**	**78**	**100**	**85**	**83**	**93**	**87**	110	**100**	**99**	**100**	**80**	**92**	**89**	**95**	**97**
Hardness as CaCo3 (mg/L)	not established		not established			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	125	NA		NA	NA	NA	NA	NA
pH (std units)						6.52	7.04	7.31	7.44	6.96	7.35	5.62	6.61			6.35	7.13	7.27	7.53	7.12	7.44	6.42	6.98
Specific Conductance (mS/cm)						0.462	0.509	0.545	0.423	0.443	0.501	0.683	0.812			0.508	0.527	0.533	0.429	0.465	0.615	0.66	0.849
Turbidity (NTUs)						0.0	0	23.1	0	5.88	0	0	0			2.1	0	0	49.2	37.4	0	75.1	0
DO (mg/L)						5.34	6.38	6.2	3.64	10.65	8.03	7.33	9.68			4.71	6.74	5.93	4.8	4.51	7.54	10.1	8.59
ORP (mV)						169	37	65	47	27	57	127	51			190	109	130	104	47	122	140	119

TABLE 4: SUMMARY OF SURFACE WATER ANALYTICAL RESULTS

Sample Location						SW2010-10	SW2010-10	SW2010-11	SW2010-11	SW2010-11	SW2010-11	SW2010-11	SW2010-11	SW2010-11	SW2010-11	SW2010-11	SW2010-14	SW2010-14	SW2010-14	SW2010-14	SW2010-14	SW2010-14
Sample Date						11/16/2012	9/23/2010	11/15/2016	6/9/2016	11/18/2015	6/4/2015	11/19/2014	5/20/2014	11/19/2013	5/30/2013	11/16/2012	11/15/2016	6/9/2016	11/18/2015	6/4/2015	11/19/2014	5/20/2014
Distance Along Stream (ft)						1152	1152		1222	1222	1222	1222	1222	1222	1222	1222	1667	1667	1667	1667	1667	1667
PARAMETER, UNITS	**GA Instream**	**National AWQC**	**National AWQC Human Consumption of Water + Organism**	**National AWQC Human Consumption of Water**	**GA Instream Human Health**	surface water sample from main channel upstream of culvert		surface water sample from main channel downstream of culvert									surface water sample from main channel downstream of culvert					
Total Organochlorine Pesticides (ug/L)																						
	Ecological Exposure		**Human Health Exposure**																			
alpha-BHC	not established		0.0026	0.0049	0.0049	**0.15**	0.13	**0.35**	**0.25**	**0.18**	**0.15**	**0.13**	**0.17**	**0.24**	**0.24**	**0.23**	**0.41**	**0.31**	**0.2**	**0.26**	**0.30**	**0.31**
beta-BHC	not established		0.0091	0.017	0.017	**0.092**	0.18	**1.1**	**0.43**	**0.092**	**0.24**	**0.091**	**0.3**	**0.29**	**0.29**	**0.27**	**0.57**	**0.53**	**0.3**	**0.55**	**0.41**	**0.38**
gamma-BHC (lindane)	0.95 (acute)	0.95 (acute)	0.98	1.8	1.8	<0.05	0.084	**0.15**	**0.12**	**0.073**	**0.069**	**0.044 J**	**0.074**	**0.091**	**0.097**	**0.098**	**0.1**	**0.11**	**0.071**	**0.083**	**0.086**	**0.093**
delta-BHC	not established			not established		**0.14**	0.11 P	**0.16**	**0.15**	**0.074**	**0.15**	**0.077**	**0.27**	**0.11**	**0.19**	**0.16**	**0.3**	**0.22**	**0.12**	**0.26**	**0.32**	**0.46**
Chlordane	0.0043	0.0043	0.0008	0.00081	0.00081	<0.05	<0.094	<0.05	<0.05	<0.014	<0.00005	<0.0022	<0.0022	<0.050	<0.0066	<0.05	<0.05	<0.05	<0.014	<0.00005	<0.0022	<0.0022
gamma-Chlordane	0.0043	0.0043	0.0008	0.00081	0.00081	<0.05	NA	<0.05	<0.05	<0.0047	<0.00005	<0.005	<0.005	<0.050	<0.0047	<0.05	<0.05	<0.05	<0.0047	<0.00005	<0.005	<0.005
4,4'-DDD	not established		0.00031	0.00031	0.00031	<0.1	<0.0061	<0.1	**0.006 J**	<0.0082	<0.0001	<0.0091	<0.0091	<0.10	<0.014	<0.1	**0.0075 J**	<0.1	<0.0082	<0.0001	<0.0091	<0.0091
4,4'-DDE	not established		0.00022	0.00022	0.00022	<0.1	<0.0073	<0.1	<0.1	<0.0069	<0.0001	<0.006	<0.006	<0.10	<0.0075	<0.1	<0.1	<0.1	<0.0069	<0.0001	<0.006	<0.006
4,4'-DDT	0.001	0.001	0.00022	0.00022	0.00022	<0.1	<0.0092	<0.1	<0.1	<0.0063	<0.0001	<0.0069	<0.0069	<0.10	<0.014	<0.1	<0.1	<0.1	<0.0063	<0.0001	<0.0069	<0.0069
Dieldrin	0.056	0.056	0.000052	0.000054	0.000054	<0.1	0.011 J	**0.022 J**	**0.011 J**	**0.016 J**	<0.0001	<0.0091	<0.0091	<0.10	<0.013	<0.1	**0.014 J**	**0.011 J**	**0.014 J**	**0.015 J**	<0.0091	<0.0091
Heptachlor	0.0038	0.0038	0.000079	0.000079	0.000079	<0.05	<0.0066	<0.05	<0.05	<0.0079	<0.00005	<0.0072	<0.0072	<0.050	<0.0038	<0.05	<0.05	<0.05	<0.0079	<0.00005	<0.0072	<0.0072
Methoxychlor	0.03	0.03	100	not established		<0.5	<0.012	<0.5	<0.5	<0.056	<0.0005	<0.043	<0.043	<0.50	<0.08	<0.5	<0.5	<0.5	<0.056	<0.0005	<0.043	<0.043
Toxaphene	0.0002	0.0002	0.00028	0.00028	0.00028	<5	<0.47	<3	<3	<0.18	<0.005	<0.16	<0.16	<5.0	<0.085	<5	<3	<3	<0.18	<0.005	<0.16	<0.16
Total Pesticides Concentrations (ug/L)						0.382		1.782	0.967	0.435	0.609	0.342	0.814	0.731	0.817	0.758	1.4015	1.181	0.705	1.168	1.116	1.243
Total Metals (mg/L)																						
Arsenic	0.15	0.15	0.000018	0.00014	0.01	<0.005	0.0041	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	NA	NA	NA	NA	NA	NA
Copper	0.0152*	0.0152*	1.3	not established		**0.00796**	0.01	NA	NA	NA	NA	NA	NA	NA	NA	**0.128**	NA	NA	NA	NA	NA	NA
Lead	0.0049*	0.0049*	not established			<0.001	<0.0005	NA	NA	NA	NA	NA	NA	NA	NA	**0.00356**	NA	NA	NA	NA	NA	NA
Zinc	0.200*	0.200*	7.4	26	not established	**0.736**	0.5	NA	NA	NA	NA	NA	NA	NA	NA	**2.09**	NA	NA	NA	NA	NA	NA
Dissolved Metals (mg/L)																						
Arsenic	0.15	0.15	0.000018	0.00014	0.01	<0.005	0.0023 J	**0.000646 J**	**0.00126 J**	**0.00168 J**	**0.00236 J**	**0.00102 J**	**0.00174 J**	<0.005	**0.00121 J**	<0.005	**0.001 J**	**0.000976 J**	**0.00109 J**	**0.00127 J**	**0.000716 J**	**0.0009 J**
Copper	0.0152*	0.0152*	1.3	not established		**0.00404**	0.0054	**0.256**	**0.0527**	**0.00669**	**0.00514**	**0.00434**	**0.00567**	**0.0932**	**0.0564**	**0.0572**	**0.0484**	**0.0197**	**0.0159**	**0.015**	**0.0183**	**0.0244**
Lead	0.0049*	0.0049*		not established		<0.001	<0.0002	<0.001	<0.001	<0.000309	<0.001	<0.000099	<0.0001	<0.001	<0.00014	<0.001	**0.000375 J**	<0.001	<0.000309	<0.001	<0.000099	<0.0001
Zinc	0.200*	0.200*	7.4	26	not established	**0.629**	0.44	**5.92**	**1.6**	**0.399**	**0.406**	**0.435**	**0.377**	**1.68**	**1.6**	**1.74**	**1.38**	**1.27**	**0.8**	**0.852**	**1.27**	**1.11**
Total Dissolved Metals Concentrations (mg/L)						0.63304		6.176646	1.65396	0.40737	0.4135	0.44036	0.38441	1.7732	1.65761	1.7972	1.429775	1.290676	0.81699	0.86827	1.289016	1.1353
Total Trichlorobenzenes (ug/L)																						
1,2,3-Trichlorobenzene	not established		not established			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	not established		35	70	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate and Sulfate (mg/L)																						
Nitrate as N	not established		10 (nitrates)		not established	0.79	NA	**5.4**	**3.2**	**1.8 J**	**1.3**	**1.6**	**1.7**	**2.2**	**3.0**	**3.1**	**2.1 J**	**2.5 J**	**1.8 J**	**1.8**	**1.9**	**2.2**
Sulfate	not established		not established			91	NA	**240**	**160**	**100**	**82**	**94**	**88**	**120**	**140**	**130**	**160**	**160**	**130**	**110**	**140**	**130**
Hardness as CaCo3 (mg/L)	not established		not established			NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH (std units)								6.14	7.02	7.49	7.34	7.93	7.33	6.43	6.94		6.44	7.29	7.38	7.67	6.98	7.19
Specific Conductance (mS/cm)								0.677	0.605	0.598	0.505	0.553	0.615	0.66	0.963		0.626	0.689	0.645	0.532	0.593	0.58
Turbidity (NTUs)								0	0	8.4	26.6	3.67	0	67.1	14.2		0.0	0	9.9	1.6	13.2	0
DO (mg/L)								4.83	6.54	7.23	4.54	9.2	8.16	9.98	7.07		5.16	5.34	6.75	4.68	10.44	10.44
ORP (mV)								213	117	118	92	82	150	134	186		193	94	108	92	64	139

TABLE 4: SUMMARY OF SURFACE WATER ANALYTICAL RESULTS

Sample Location						SW2010-14	SW2010-14	SW2010-14	SW2010-14	SW2010-15	SW2010-15	SW2010-15	SW2010-15	SW2010-15	SW2010-15	SW2010-15	SW2010-15	SW2010-15	SW2010-17	SW2010-17	SW2010-17	SW2010-17
Sample Date						11/19/2013	5/30/2013	11/16/2012	9/23/2010	11/15/2016	6/9/2016	11/18/2015	6/4/2015	11/19/2014	5/20/2014	11/19/2013	11/16/2012	9/23/2010	11/15/2016	6/9/2016	11/18/2015	6/4/2015
Distance Along Stream (ft)						1667	1667	1667	1667	1761	1761	1761	1761	1761	1761	1761	1761	1761	2099	2099	2099	2099
PARAMETER, UNITS	GA Instream	National AWQC	National AWQC Human Consumption of Water + Organism	National AWQC Human Consumption of Water	GA Instream Human Health	surface water sample from main channel downstream of culvert				surface water sample from main channel downstream of culvert									surface water sample from main channel downstream of culvert			
Total Organochlorine Pesticides (ug/L)																						
	Ecological Exposure		**Human Health Exposure**																			
alpha-BHC	not established		0.0026	0.0049	0.0049	**0.40**	**0.38**	**0.53**	0.62	**0.37**	**0.3**	**0.2**	**0.17**	**0.29**	**0.27**	**0.36**	**0.53**	0.62	**0.47**	**0.29**	**0.18**	**0.2**
beta-BHC	not established		0.0091	0.017	0.017	**0.44**	**0.47**	**0.46**	0.73	**0.51**	**0.49**	**0.29**	**0.45**	**0.4**	**0.36**	**0.40**	**0.46**	0.75	**0.47**	**0.52**	**0.27**	**0.48**
gamma-BHC (lindane)	0.95 (acute)	0.95 (acute)	0.98	1.8	1.8	**0.12**	**0.12**	**0.15**	0.22	**0.087**	**0.11**	**0.065**	**0.057**	**0.082**	**0.087**	**0.11**	**0.15**	0.22	**0.12**	**0.11**	**0.055**	**0.068**
delta-BHC	not established			not established		**0.29**	**0.37**	**0.53**	0.48 P	**0.25**	**0.2**	**0.11**	**0.21**	**0.28**	**0.43**	**0.27**	**0.48**	0.44 P	**0.27**	**0.21**	**0.095**	**0.23**
Chlordane	0.0043	0.0043	0.0008	0.00081	0.00081	<0.050	<0.0066	<0.05	<0.095	<0.05	<0.05	<0.014	<0.00005	<0.0022	<0.0022	<0.050	<0.05	<0.095	**0.0045 J**	<0.05	<0.014	<0.00005
gamma-Chlordane	0.0043	0.0043	0.0008	0.00081	0.00081	<0.050	<0.0047	<0.05	NA	<0.05	<0.05	<0.0047	<0.00005	<0.005	<0.005	<0.050	<0.05	NA	0.05	<0.05	<0.0047	<0.00005
4,4'-DDD	not established		0.00031	0.00031	0.00031	<0.10	<0.014	<0.1	<0.0062	<0.1	<0.1	<0.0082	<0.0001	<0.0091	<0.0091	<0.10	<0.1	<0.0062	<0.1	<0.1	<0.0082	<0.0001
4,4'-DDE	not established		0.00022	0.00022	0.00022	<0.10	<0.0075	<0.1	<0.0073	<0.1	<0.1	<0.0069	<0.0001	<0.006	<0.006	<0.10	<0.1	<0.0073	<0.1	<0.1	<0.0069	<0.0001
4,4'-DDT	0.001	0.001	0.00022	0.00022	0.00022	<0.10	<0.014	<0.1	<0.0092	<0.1	<0.1	**0.0068 J**	<0.0001	<0.0069	<0.0069	<0.10	<0.1	<0.0092	<0.1	<0.1	<0.0063	<0.0001
Dieldrin	0.056	0.056	0.000052	0.000054	0.000054	<0.10	<0.013	<0.1	0.015 J	**0.012 J**	**0.01 J**	<0.0072	**0.012 J**	<0.0091	<0.0091	<0.10	<0.1	0.017 J	**0.011 J**	**0.011 J**	<0.0072	**0.013 J**
Heptachlor	0.0038	0.0038	0.000079	0.000079	0.000079	<0.050	<0.0038	<0.05	<0.0067	<0.5	<0.05	<0.0079	<0.00005	<0.0072	<0.0072	<0.050	<0.05	<0.0067	<0.05	<0.05	<0.0079	<0.00005
Methoxychlor	0.03	0.03	100	not established		<0.50	<0.08	<0.5	<0.012	<0.5	<0.5	<0.056	<0.0005	<0.043	<0.043	<0.50	<0.5	<0.012	<0.5	<0.5	<0.056	<0.0005
Toxaphene	0.0002	0.0002	0.00028	0.00028	0.00028	<5.0	<0.085	<5	<0.48	<3	<3	<0.18	<0.005	<0.16	<0.16	<5.0	<5	<0.48	<3	<3	<0.18	<0.005
Total Pesticides Concentrations (ug/L)						1.25	1.34	1.67		1.229	1.1	0.6718	0.899	1.052	1.147	1.14	1.62		1.3455	1.141	0.6	0.991
Total Metals (mg/L)																						
Arsenic	0.15	0.15	0.000018	0.00014	0.01	NA	NA	<0.005	0.028	NA	NA	NA	NA	NA	NA	NA	<0.005	0.0025	NA	NA	NA	NA
Copper	0.0152*	0.0152*	1.3	not established		NA	NA	**0.0918**	0.78	NA	NA	NA	NA	NA	NA	NA	**0.0701**	0.084	NA	NA	NA	NA
Lead	0.0049*	0.0049*		not established		NA	NA	<0.001	0.014	NA	NA	NA	NA	NA	NA	NA	<0.001	<0.0005	NA	NA	NA	NA
Zinc	0.200*	0.200*	7.4	26	not established	NA	NA	**2.46**	15	NA	NA	NA	NA	NA	NA	NA	**2.18**	2.4	NA	NA	NA	NA
Dissolved Metals (mg/L)																						
Arsenic	0.15	0.15	0.000018	0.00014	0.01	<0.005	**0.00086 J**	<0.01	<0.0013	**0.000886 J**	**0.000952 J**	**0.00115**	**0.0013 J**	**0.000827 J**	**0.00096 J**	<0.005	<0.01	<0.0013	**0.00114 J**	**0.00112 J**	**0.00111 J**	**0.00143 J**
Copper	0.0152*	0.0152*	1.3	not established		**0.0463**	**0.0393**	**0.0215**	0.048	**0.0276**	**0.0222**	**0.0144**	**0.0108**	**0.018**	**0.0181**	**0.0382**	**0.0179**	0.038	**0.0165**	**0.0116**	**0.0107**	**0.00947**
Lead	0.0049*	0.0049*		not established		<0.001	<0.00014	<0.002	<0.0002	**0.00022 J**	<0.001	<0.000309	<0.001	<0.000099	<0.0001	<0.001	<0.002	<0.0002	**0.000382 J**	<0.001	<0.000309	<0.001
Zinc	0.200*	0.200*	7.4	26	not established	**1.89**	**1.62**	**1.96**	2.5	**1.43**	**1.29**	**0.74**	**0.693**	**1.23**	**0.965**	**1.91**	**1.77**	2.2	**1.2**	**0.89**	**0.704**	**0.697**
Total Dissolved Metals Concentrations (mg/L)						1.9363	1.66016	1.9815		1.458706	1.313152	0.75555	0.70493	1.248827	0.98406	1.9482	1.7879		1.218022	0.90272	0.71581	0.7079
Total Trichlorobenzenes (ug/L)																						
1,2,3-Trichlorobenzene	not established			not established		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.95	NA	NA	NA	NA
1,2,4-Trichlorobenzene	not established		35	70	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.53	NA	NA	NA	NA
Nitrate and Sulfate (mg/L)																						
Nitrate as N	not established		10 (nitrates)		not established	**1.9**	**2.5**	**2.3**	NA	**2.2 J**	**2.6**	**1.6 J**	**1.7**	**1.8**	**2.2**	**1.8**	**2.2**	530	**2 J**	**2.6**	**1.6 J**	**1.7**
Sulfate	not established			not established		**130**	**140**	**140**	NA	**170**	**160**	**130**	**110**	**150**	**130**	**130**	**150**	330	**160**	**150**	**120**	**110**
Hardness as CaCo3 (mg/L)	not established			not established		NA	NA	NA	NA	175	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH (std units)						6.43	7.03			6.38	7.05	7.15	7.62	6.87	7.36	6.71			5.8	7.21	6.7	7.16
Specific Conductance (mS/cm)						0.734	1.05			0.626	0.686	0.641	0.532	0.606	0.641	0.722			0.636	0.678	0.647	0.533
Turbidity (NTUs)						25.7	0			2.9	0	11.7	13.7	3.89	9.81	22.8			15.0	8.9	14.1	11.5
DO (mg/L)						9.49	10.02			6.35	6.09	6.94	4.75	11.09	9.93	4.03			7.68	6.66	7.99	5.66
ORP (mV)						134	189			185	83	86	77	85	130	137			184	115	35	33

TABLE 4: SUMMARY OF SURFACE WATER ANALYTICAL RESULTS

Sample Location						SW2010-17	SW2010-17	SW2010-17	INFLOW 1	INFLOW 1	INFLOW 1	INFLOW 2	INFLOW 2	INFLOW 2	SW2014-20	SW2014-20
Sample Date						11/19/2014	5/20/2014	9/23/2010	6/4/2015	11/19/2014	3/31/2014	6/4/2015	11/19/2014	3/31/2014	11/15/2016	6/9/2016
Distance Along Stream (ft)						2099	2099	2099	side seep inflowing into drainage feature located on west side of track and upstream of railroad culvert location SW-2010-11			side seep inflowing into main channel of unnamed stream located on west side of track and downstream of railroad culvert			side seep inflowing into drainage feature located on west side of track and upstream of railroad culvert location SW-2010-11	
PARAMETER, UNITS	GA Instream	National AWQC	National AWQC Human Consumption of Water + Organism	National AWQC Human Consumption of Water	GA Instream Human Health	surface water sample from main channel downstream of culvert			seep sample			seep sample			seep sample	
Total Organochlorine Pesticides (ug/L)																
	Ecological Exposure		**Human Health Exposure**													
alpha-BHC	not established		0.0026	0.0049	0.0049	**0.29**	**0.24**	0.31	**0.22**	**0.12**	**0.22**	**0.038 J**	**0.17**	<0.05	**0.54**	**0.44**
beta-BHC	not established		0.0091	0.017	0.017	**0.37**	**0.33**	0.48	**1.9**	**0.079**	**1.2**	**0.073**	**0.28**	**0.12**	**3**	**3.4**
gamma-BHC (lindane)	0.95 (acute)	0.95 (acute)	0.98	1.8	1.8	**0.082**	**0.075**	0.11	**0.12**	**0.038 J**	**0.11**	<0.00005	**0.058**	<0.05	**0.25**	**0.22**
delta-BHC	not established			not established		**0.26**	**0.4**	0.21 P	**0.24**	**0.072**	**0.38**	**0.061**	**0.13**	<0.05	**0.28**	**0.29**
Chlordane	0.0043	0.0043	0.0008	0.00081	0.00081	<0.0022	<0.0022	<0.094	<0.00005	<0.0022	<0.05	<0.00005	<0.0022	<0.05	<0.05	<0.05
gamma-Chlordane	0.0043	0.0043	0.0008	0.00081	0.00081	<0.005	<0.005	NA	<0.00005	<0.0050	<0.05	<0.00005	<0.0050	<0.05	<0.05	<0.05
4,4'-DDD	not established		0.00031	0.00031	0.00031	<0.0091	<0.0091	<0.0061	<0.0001	<0.0091	<0.1	<0.0001	<0.0091	<0.1	<0.1	<0.1
4,4'-DDE	not established		0.00022	0.00022	0.00022	<0.006	<0.006	<0.0073	<0.0001	<0.0060	<0.1	<0.0001	<0.0060	<0.1	<0.1	<0.1
4,4'-DDT	0.001	0.001	0.00022	0.00022	0.00022	<0.0069	<0.0069	<0.0092	<0.0001	<0.0069	<0.1	<0.0001	<0.0069	<0.1	<0.1	<0.1
Dieldrin	0.056	0.056	0.000052	0.000054	0.000054	<0.0091	<0.0091	<0.0086	**0.037 J**	<0.0091	<0.1	<0.0001	<0.0091	<0.1	**0.056 J**	**0.049 J**
Heptachlor	0.0038	0.0038	0.000079	0.000079	0.000079	<0.0072	<0.0072	<0.0066	<0.00005	<0.0072	<0.05	<0.00005	<0.0072	<0.05	<0.05	<0.05
Methoxychlor	0.03	0.03	100	not established		<0.043	<0.043	<0.012	<0.0005	<0.043	<0.5	<0.0005	<0.043	<0.5	**0.032 J**	<0.5
Toxaphene	0.0002	0.0002	0.00028	0.00028	0.00028	<0.16	<0.16	<0.47	<0.005	<0.16	<5	<0.005	<0.16	<5	<3	<3
Total Pesticides Concentrations (ug/L)						1.002	1.045		2.517	0.309	1.91	0.172	0.638	0.12	4.158	4.399
Total Metals (mg/L)																
Arsenic	0.15	0.15	0.000018	0.00014	0.01	NA	NA	0.0029	NA	NA	<0.005	NA	NA	<0.005	NA	NA
Copper	0.0152*	0.0152*	1.3	not established		NA	NA	0.054	NA	NA	**0.476**	NA	NA	**0.0021**	NA	NA
Lead	0.0049*	0.0049*		not established		NA	NA	<0.0005	NA	NA	<0.001	NA	NA	<0.001	NA	NA
Zinc	0.200*	0.200*	7.4	26	not established	NA	NA	1.9	NA	NA	**6.28**	NA	NA	**0.219**	NA	NA
Dissolved Metals (mg/L)																
Arsenic	0.15	0.15	0.000018	0.00014	0.01	**0.000935 J**	**0.00122 J**	0.0013 J	**0.000269 J**	**0.000917 J**	<0.005	**0.00104 J**	**0.000923 J**	<0.005	**0.000316 J**	**0.000441 J**
Copper	0.0152*	0.0152*	1.3	not established		**0.014**	**0.017**	0.024	**0.246**	**0.00492**	**0.256**	**0.000426 J**	**0.0136**	<0.002	**0.641**	**0.509**
Lead	0.0049*	0.0049*		not established		<0.000099	<0.0001	<0.0002	<0.001	<0.000099	<0.001	<0.001	<0.000099	<0.001	**0.000388 J**	**0.000147 J**
Zinc	0.200*	0.200*	7.4	26	not established	**1.12**	**0.956**	1.6	**6.62**	**0.482**	**6.08**	<0.01	**0.847**	**0.221**	**11.8**	**7.7**
Total Dissolved Metals Concentrations (mg/L)						1.134935	0.97422		6.866269	0.487837	6.336	0.001466	0.861523	0.221	12.441704	8.209588
Total Trichlorobenzenes (ug/L)																
1,2,3-Trichlorobenzene	not established			not established		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	not established		35	70	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate and Sulfate (mg/L)																
Nitrate as N	not established		10 (nitrates)		not established	**1.8**	**2.1**	NA	**7.8**	**1.5**	**9.1**	<0.25	**2.1**	**0.34**	**11**	**11**
Sulfate	not established			not established		**150**	**120**	NA	**280**	**92**	**390**	**49**	**130**	**96**	**420**	**470**
Hardness as CaCo3 (mg/L)	not established			not established		NA	NA	NA	NA	NA	NA	NA	NA	NA	258	NA
pH (std units)						6.26	6.59		7.12	6.9		7.6	6.99		5.52	6.14
Specific Conductance (mS/cm)						0.593	0.643		0.789	0.465		0.641	0.535		0.909	1.12
Turbidity (NTUs)						8.74	0		0.3	11.5		3.6	4.88		0.0	21.6
DO (mg/L)						13.76	14.19		3.37	12.31		0	8.82		3.58	5.26
ORP (mV)						145	92		136	70		-49	103		223	158

TABLE 4: SUMMARY OF SURFACE WATER ANALYTICAL RESULTS

Sample Location						SW2014-20	SW2014-20	SW2014-20	SW2014-20	SW2014-21	SW2014-21	SW2014-21	SW2014-21	SW2014-21	SW2014-21
Sample Date						11/18/2015	6/4/2015	11/19/2014	5/20/2014	11/15/2016	6/9/2016	11/18/2015	6/4/2015	11/19/2014	5/20/2014
Distance Along Stream (ft)						side seep inflowing into drainage feature located on west side of track and upstream of railroad culvert location SW-2010-11				side seep inflowing into drainage feature on west side of track and about 85 ft upstream of location SW2014-20					
PARAMETER, UNITS	GA Instream	National AWQC	National AWQC Human Consumption of Water + Organism	National AWQC Human Consumption of Water	GA Instream Human Health	seep sample				seep sample					
Total Organochlorine Pesticides (ug/L)															
	Ecological Exposure		**Human Health Exposure**												
alpha-BHC	not established		0.0026	0.0049	0.0049	**0.33**	**0.33**	**0.14**	**0.28**	**0.38**	**0.31**	**0.17**	**0.25**	**0.2**	**0.22**
beta-BHC	not established		0.0091	0.017	0.017	**2.1**	**2.2**	**1.5**	**1.0**	**3.9**	**3.8**	**2.2**	**2.2**	**1.2**	**1.2**
gamma-BHC (lindane)	0.95 (acute)	0.95 (acute)	0.98	1.8	1.8	**0.16**	**0.16**	**0.078**	**0.13**	**0.18**	**0.18**	**0.092**	**0.13**	**0.10**	**0.11**
delta-BHC	not established			not established		**0.17**	**0.3**	**0.18**	**0.49**	**0.27**	**0.29**	**0.13**	**0.22**	**0.15**	**0.53**
Chlordane	0.0043	0.0043	0.0008	0.00081	0.00081	<0.014	<0.00005	<0.0022	<0.0022	<0.05	<0.05	<0.014	<0.00005	<0.0022	<0.0022
gamma-Chlordane	0.0043	0.0043	0.0008	0.00081	0.00081	<0.0047	<0.00005	<0.005	<0.005	<0.05	<0.05	<0.0047	<0.00005	<0.0050	<0.005
4,4'-DDD	not established		0.00031	0.00031	0.00031	<0.0082	<0.0001	<0.0091	<0.0091	<0.1	<0.1	<0.0082	<0.0001	<0.0091	<0.0091
4,4'-DDE	not established		0.00022	0.00022	0.00022	<0.0069	<0.0001	<0.006	<0.006	<0.1	<0.1	<0.0069	<0.0001	<0.006	<0.006
4,4'-DDT	0.001	0.001	0.00022	0.00022	0.00022	<0.0063	<0.0001	<0.0069	<0.0069	<0.1	<0.1	<0.0063	<0.0001	<0.0069	<0.0069
Dieldrin	0.056	0.056	0.000052	0.000054	0.000054	**0.038 J**	**0.046 J**	<0.0091	**0.021 J**	**0.066 J**	**0.066 J**	**0.041 J**	**0.043 J**	<0.0091	**0.020 J**
Heptachlor	0.0038	0.0038	0.000079	0.000079	0.000079	<0.0079	<0.00005	<0.0072	<0.0072	<0.05	<0.05	<0.0079	<0.00005	<0.0072	<0.0072
Methoxychlor	0.03	0.03	100	not established		<0.056	<0.0005	<0.043	<0.043	<0.5	<0.5	<0.056	<0.0005	<0.043	<0.043
Toxaphene	0.0002	0.0002	0.00028	0.00028	0.00028	<0.18	<0.005	<0.16	<0.16	<3	<3	<0.18	<0.005	<0.16	<0.16
Total Pesticides Concentrations (ug/L)						2.798	3.036	1.898	1.921	4.796	4.646	2.633	2.843	1.65	2.06
Total Metals (mg/L)															
Arsenic	0.15	0.15	0.000018	0.00014	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	0.0152*	0.0152*	1.3	not established		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.0049*	0.0049*		not established		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	0.200*	0.200*	7.4	26	not established	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Metals (mg/L)															
Arsenic	0.15	0.15	0.000018	0.00014	0.01	**0.000183 J**	**0.000338 J**	<0.000536	<0.00054	**0.000312 J**	**0.000321 J**	**0.000180 J**	**0.000272 J**	<0.000536	<0.00054
Copper	0.0152*	0.0152*	1.3	not established		**0.227**	**0.148**	**0.157**	**0.229**	**0.901**	**0.682**	**0.327**	**0.348**	**0.0714**	**0.296**
Lead	0.0049*	0.0049*		not established		<0.000309	<0.001	**0.00281**	<0.0001	**0.00053 J**	**0.000321 J**	<0.000309	<0.001	<0.000099	<0.0001
Zinc	0.200*	0.200*	7.4	26	not established	**5.84**	**5.86**	**4.24**	**5.65**	**12.4**	**8.45**	**6.35**	**7.05**	**3.75**	**6.13**
Total Dissolved Metals Concentrations (mg/L)						6.067183	6.008338	4.39981	5.879	12.490942	9.132642	6.67718	7.398272	3.8214	6.426
Total Trichlorobenzenes (ug/L)															
1,2,3-Trichlorobenzene	not established			not established		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	not established		35	70	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate and Sulfate (mg/L)															
Nitrate as N	not established		10 (nitrates)		not established	**6.9**	**7.1**	**8.3**	**9.5**	**11**	**11**	**7.6**	**8.4**	**8.1**	**9.9**
Sulfate	not established			not established		**300**	**270**	**350**	**330**	**410**	**470**	**310**	**310**	**280**	**360**
Hardness as CaCo3 (mg/L)	not established			not established		NA	NA	NA	NA	NA	NA		NA	NA	NA
pH (std units)						6.67	7.07	6.57	6.74	5.24	5.95	6.63	6.82	6.58	6.75
Specific Conductance (mS/cm)						0.821	0.783	0.867	1.09	0.888	1.13	0.858	0.797	0.876	1.14
Turbidity (NTUs)						0.2	139	13.5	0	20.1	5.3	0	0.2	62.5	0
DO (mg/L)						5.37	2.99	7.14	7.62	2.83	6.47	4.72	2.14	8.02	7.09
ORP (mV)						175	153	120	179	192	157	173	135	115	156

Notes:

<0.025 = Constituent not detected above the detection limit shown.
ug/L = micrograms per liter
mg/L = milligrams per liter

J = Result reported between the method detection limit (MDL) and reporting limit (RL). Result is a quantitative estimate.

P = Identification of target analytes using gas chromatography (GC) is based on retention time. Although 2 dissimilar GC columns confirmed the presence of the target analyte in the sample, relative percent difference is >40%.

NA = constituent not analyzed
* = criteria is based on an average hardness of 186 mg/L from November 2016
Bolded = indicates a positive detection in the 2012 through 2016 results
2012 through 2016 Sampling Results that exceeded Georgia Instream Concentrations (GEPD 2013) for Ecological Exposure
2012 through 2016 Sampling Results that exceeded Georgia Instream Concentrations (GEPD 2013) for Human Health Exposure (used when there was not an ecological exposure criteria)

Prepared by: NJM 12/29/2016
Checked by: RNQ 1/10/2017

TABLE 5: SUMMARY OF M & J SOLVENTS SITE-SPECIFIC VOCs ANALYZED

Well		MW-1B	MW-1B	MW-1B	MW-1B	MW-1B	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-25	MW-25	MW-25	MW-25
Date Sampled		**11/8/2016**	**6/1/2016**	**11/10/2015**	**5/27/2015**	**11/11/2014**	**11/8/2016**	**6/6/2016**	**11/12/2015**	**5/29/2015**	**11/12/2014**	**9/13/2010**	**11/10/2016**	**6/7/2016**	**11/13/2015**	**6/2/2015**
Lithology Screened		Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil
Constituent	**Units**															
1,1,1,2-Tetrachloroethane	ug/L											<1				
1,1,1-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
1,1-Dichloropropene	ug/L	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0		<1	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	ug/L	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<9.5	<150	<150	<150	<150
2-Butanone	ug/L	<50.0	<50	<50	<50	<50	<50	<50	<50	<50	<50	<10	<50.0	<50	<50	<50
4-Methyl-2-pentanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<25	<50	<50	<50	<50
Benzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0
Chlorobenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
Chloroethane	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1	<10	<10	<10	<10
Chloroform	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
Chloromethane	ug/L	<5.0	<5.0	<10	<10	<10	<5.0	<5.0	<10	<10	<10	<1	<5.0	<5.0	<10	<10
cis-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**6.9**	**8.1**	**10**	**9.2**	**2.7**	<5.0	<5.0	<5.0	<5.0
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
Isobutyl Alcohol	ug/L	<200	<200	<200	<200		<200	<200	<200	<200			<200	<200	<200	<200
Isopropylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5.0	<5.0	<5.0	<5.0
Naphthalene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0		<5	<5.0	<5.0	<5.0	<5.0
Styrene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
Tetrahydrofuran	ug/L	<10	<10	<10	<10		<10	<10	<10	<10		<10	<10	<10	<10	<10
Toluene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
Trichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1	<2.0	<2.0	<2.0	<2.0
Xylenes, Total	ug/L	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0		<1	<5.0	<5.0	<5.0	<5.0
Total VOCs	ug/L	BDL	BDL	BDL	BDL	BDL	BDL	**6.9**	**8.1**	**10**	**9.2**	**2.7**	BDL	BDL	BDL	BDL

TABLE 5: SUMMARY OF M & J SOLVENTS SITE-SPECIFIC VOCs ANALYZED

Well		MW-26	MW-26	MW-26	MW-26	MW-101	MW-101	MW-101	MW-101	MW-101	MW-102	MW-102	MW-102	MW-102	MW-104A	MW-104A
Date Sampled		11/9/2016	6/2/2016	11/11/2015	5/28/2015	11/8/2016	6/1/2016	11/10/2015	5/27/2015	11/11/2014	11/8/2016	6/2/2016	11/10/2015	5/27/2015	11/8/2016	6/3/2016
Lithology Screened		Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil
Constituent	**Units**															
1,1,1,2-Tetrachloroethane	ug/L															
1,1,1-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloropropene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	ug/L	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150
2-Butanone	ug/L	<50	<50	<50	<50	<50.0	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	ug/L	<5.0	<5.0	<10	<10	<5.0	<5.0	<10	<10	<10	<5.0	<5.0	<10	<10	<5.0	<5.0
cis-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isobutyl Alcohol	ug/L	<200	<200	<200	<200	<200	<200	<200	<200		<200	<200	<200	<200	<200	<200
Isopropylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Styrene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrahydrofuran	ug/L	<10	<10	<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10
Toluene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, Total	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total VOCs	ug/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

TABLE 5: SUMMARY OF M & J SOLVENTS SITE-SPECIFIC VOCs ANALYZED

Well		MW-104A	MW-104A	MW-104A	MW-104A	MW-104D	MW-104D	MW-104D	MW-104D	MW-104D Duplicate	MW-104D	MW-104D	MW-106D	MW-106D	MW-106D	MW-106D
Date Sampled		**11/11/2015**	**6/1/2015**	**11/12/2014**	**9/15/2010**	**11/9/2016**	**6/6/2016**	**11/12/2015**	**6/3/2015**	**6/3/2015**	**11/13/2014**	**9/15/2010**	**11/9/2016**	**6/7/2016**	**11/13/2015**	**6/2/2015**
Lithology Screened		Residual Soil	Residual Soil	Residual Soil	Residual Soil	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock
Constituent	**Units**															
1,1,1,2-Tetrachloroethane	ug/L				<1							<200				
1,1,1-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	**28**	**29**	<250	<200	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
1,1-Dichloropropene	ug/L	<5.0	<5.0		<1	<5000	<5000	<5000	<5.0	<5.0		<200	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene (VOC)	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	ug/L	<150	<150	<150	**73**	<150000	<150,000	<150000	**20,000**	**22000**		**11,000**	<150	<150	<150	<150
2-Butanone	ug/L	<50	<50	<50	<10	**320,000**	**350,000**	**350,000**	**210,000**	**220000**	**260,000**	**380,000**	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	<10	<10	<10	<10	**110,000**	**130,000**	**110,000**	**100,000**	**96000**	**120,000**	**140,000**	<10	<10	<10	<10
Acetone	ug/L	<50	<50	<50	<25	**240,000**	**290,000**	**390,000**	**200,000**	**220000**	**290,000**	**370,000**	<50	<50	<50	<50
Benzene	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	**360**	**330**	**290**	**330**	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0		<5000	<5000	<5000	<5.0	<5.0	<250		<5.0	<5.0	<5.0	<5.0
Chlorobenzene	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	**20**	**20**	<250	<200	<5.0	<5.0	<5.0	<5.0
Chloroethane	ug/L	<10	<10	<10	<1	<10000	<10000	<10000	**100**	**100**	<500	**390**	<10	<10	<10	<10
Chloroform	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
Chloromethane	ug/L	<10	<10	<10	<1	<5000	<5000	<10000	<10	<10	<500	<200	<5.0	<5.0	<10	<10
cis-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	**4200**	**4200**	**4300**	**3900**	<5.0	<5.0	<5.0	<5.0
Isobutyl Alcohol	ug/L	<200	<200			<200000	<200,000	<200000	<200				<200	<200	<200	<200
Isopropylbenzene	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	**67**	**67**	<250	<200	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<5.0	<5.0	<5.0	<5	<5000	<5000	<5000	**52**	**53**	<250	<1000	<5.0	<5.0	<5.0	<5.0
Naphthalene (VOC)	ug/L	<5.0	<5.0		<5	<5000	<5000	<5000	**120**	**120**		<1000	<5.0	<5.0	<5.0	<5.0
Styrene	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
Tetrahydrofuran	ug/L	<10	<10		<10	**60000**	**72000**	**57,000**	**49000**	**48000**		**69000**	<10	<10	<10	<10
Toluene	ug/L	<5.0	<5.0	<5.0	<1	**69000**	**83000**	**66000**	**71000**	**71000**	**67000**	**62000**	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	**40**	**41**	<250	<200	<5.0	<5.0	<5.0	<5.0
Trichloroethene	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane	ug/L	<5.0	<5.0	<5.0	<1	<5000	<5000	<5000	<5.0	<5.0	<250	<200	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	ug/L	<2.0	<2.0	<2.0	<1	<2000	<2000	<2000	<2.0	<2.0	<100	<200	<2.0	<2.0	<2.0	<2.0
Xylenes, Total	ug/L	<5.0	<5.0		<2	**21000**	**18000**	**22000**	**21000**	**21000**	**19700**	**18000**	<5.0	<5.0	<5.0	<5.0
Total VOCs	ug/L	BDL	BDL	BDL	**73**	**820,000**	**943,000**	**995,000**	**675,987**	**702,960**	**761,290**	**1,054,620**	BDL	BDL	BDL	BDL

TABLE 5: SUMMARY OF M & J SOLVENTS SITE-SPECIFIC VOCs ANALYZED

Well		MW-107D	MW-107D	MW-107D	MW-107D	MW-108	MW-108	MW-108	MW-108	MW-109	MW-109	MW-109	MW-109	MW-110	MW-110	MW-110
Date Sampled		**11/9/2016**	**6/6/2016**	**11/12/2015**	**6/1/2015**	**11/10/2016**	**6/2/2016**	**11/11/2015**	**5/28/2015**	**11/10/2016**	**6/8/2016**	**11/16/2015**	**6/3/2015**	**11/10/2016**	**6/3/2016**	**11/11/2015**
Lithology Screened		Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock
Constituent	**Units**															
1,1,1,2-Tetrachloroethane	ug/L															
1,1,1-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloropropene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	ug/L	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150
2-Butanone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	ug/L	<5.0	<5.0	<10	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<10
cis-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isobutyl Alcohol	ug/L	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Isopropylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**6.6**	<5.0	<5.0	<5.0	<5.0	<5.0
Styrene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrahydrofuran	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Toluene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, Total	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total VOCs	ug/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	**6.6**	BDL	BDL	BDL	BDL	BDL

TABLE 5: SUMMARY OF M & J SOLVENTS SITE-SPECIFIC VOCs ANALYZED

Well		MW-110	MW-110	MW-111	MW-111	MW-111	MW-111	MW-112	MW-112	MW-112	MW-112	MW-113	MW-113	MW-113	MW-113	MW-114
Date Sampled		**5/29/2015**	**11/12/2014**	**11/10/2016**	**6/8/2016**	**11/16/2015**	**6/3/2015**	**11/9/2016**	**6/2/2016**	**11/10/2015**	**5/28/2015**	**11/10/2016**	**6/7/2016**	**11/16/2015**	**6/2/2015**	**11/10/2016**
Lithology Screened		Shallow Fractured Bedrock	Shallow Fractured Bedrock	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil
Constituent	**Units**															
1,1,1,2-Tetrachloroethane	ug/L															
1,1,1-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloropropene	ug/L	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	ug/L	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150
2-Butanone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	ug/L	<5.0	<5.0	**80**	**100**	**93**	**97**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	ug/L	<10	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<10	<10	<5.0
cis-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**66**	**60**	**58**	**56**	<5.0
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isobutyl Alcohol	ug/L	<200		<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Isopropylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene (VOC)	ug/L	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Styrene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrahydrofuran	ug/L	<10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Toluene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**62**	**51**	**51**	**44**	<5.0
Trichlorofluoromethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, Total	ug/L	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total VOCs	ug/L	BDL	BDL	**80**	**100**	**93**	**97**	BDL	BDL	BDL	BDL	**128**	**111**	**109**	**100**	BDL

TABLE 5: SUMMARY OF M & J SOLVENTS SITE-SPECIFIC VOCs ANALYZED

Well		MW-114	MW-114	MW-114	MW-115	MW-115	MW-115	MW-115	MW-116	MW-116	MW-116	MW-116	MW-117	MW-117	MW-119	MW-119
Date Sampled		**6/7/2016**	**11/16/2015**	**6/2/2015**	**11/10/2016**	**6/7/2016**	**11/16/2015**	**6/1/2015**	**11/10/2016**	**6/3/2016**	**11/12/2015**	**5/28/2015**	**11/10/2016**	**6/3/2016**	**11/11/2016**	**6/8/2016**
Lithology Screened		Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil
Constituent	**Units**															
1,1,1,2-Tetrachloroethane	ug/L															
1,1,1-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloropropene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	ug/L	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	**340**
2-Butanone	ug/L	<50	<50	<50	<5.00	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	ug/L	<5.0	<10	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isobutyl Alcohol	ug/L	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Isopropylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Styrene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrahydrofuran	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Toluene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, Total	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total VOCs	ug/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	**340**

TABLE 5: SUMMARY OF M & J SOLVENTS SITE-SPECIFIC VOCs ANALYZED

Well		MW-119	MW-119	MW-119	MW-120	MW-120	MW-120	MW-120	MW-120	MW-121	MW-121	MW-121	MW-121	TW-1	TW-1	TW-1
Date Sampled		**11/17/2015**	**6/5/2015**	**11/18/2014**	**11/11/2016**	**6/8/2016**	**11/17/2015**	**6/4/2015**	**11/19/2014**	**11/11/2016**	**6/7/2016**	**11/13/2015**	**6/5/2015**	**11/9/2016**	**6/2/2016**	**11/11/2015**
Lithology Screened		Residual Soil	Residual Soil	Residual Soil	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Shallow Fractured Bedrock	Residual Soil	Residual Soil	Residual Soil
Constituent	**Units**															
1,1,1,2-Tetrachloroethane	ug/L															
1,1,1-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**6.6**	<5.0	<5.0
1,1,2,2-Tetrachloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**6.0**	<5.0	<5.0
1,1-Dichloropropene	ug/L	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	ug/L	<150	**370**		<150	<150	<150	**220**	**420**	<150	<150	<150	<150	<150	<150	<150
2-Butanone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**0.87 J**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	ug/L	<10	<10	<10	<5.0	<5.0	<10	<10	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<10
cis-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	**12**	**11**	**8.6**	**7.1**	**7.6**	<5.0	<5.0	<5.0	<5.0	**880**	**250**	**350**
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isobutyl Alcohol	ug/L	<200	<200		<200	<200	<200	<200		<200	<200	<200	<200	<200	<200	<200
Isopropylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene (VOC)	ug/L	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0	**90**	**11**
Styrene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**7.8**	**5.9**	**5.7**
Tetrahydrofuran	ug/L	<10	<10		<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10
Toluene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	ug/L	<5.0	<5.0	<5.0	**6.5**	**6.3**	**8.5**	<5.0	**3.4 J**	<5.0	<5.0	<5.0	<5.0	**1200**	**720**	**1000**
Trichlorofluoromethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**12**	**2.6**	**3.6**
Xylenes, Total	ug/L	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total VOCs	ug/L	BDL	**370**	BDL	**18.5**	**17.3**	**17.1**	**227.1**	**427.6**	BDL	BDL	BDL	BDL	**2112.4**	**1068.5**	**1370.3**

TABLE 5: SUMMARY OF M & J SOLVENTS SITE-SPECIFIC VOCs ANALYZED

Well		TW-1	TW-2	TW-2	TW-2	TW-2	TW-3	TW-3	TW-3	TW-3	TW-3	TW-4	TW-4	TW-4	TW-4	TW-5
Date Sampled		**5/28/2015**	**11/9/2016**	**6/2/2016**	**11/12/2015**	**5/28/2015**	**11/10/2016**	**6/3/2016**	**11/12/2015**	**6/5/2015**	**11/13/2014**	**11/9/2016**	**6/3/2016**	**11/12/2015**	**5/29/2015**	**11/10/2016**
Lithology Screened		Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil
Constituent	**Units**															
1,1,1,2-Tetrachloroethane	ug/L															
1,1,1-Trichloroethane	ug/L	**9.9**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	ug/L	**6.7**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloropropene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	ug/L	<150	<150	<150	<150	<150	<150	<150	<150	<150		<150	<150	<150	<150	<150
2-Butanone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	**13**	**15**	**10**	**11**	**8.6**	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	**19**	**15**	**15**	**13**	**14**	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	ug/L	<5.0	**14**	**13**	**18**	**14**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	ug/L	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<10	<10	<10	<5.0	<5.0	<10	<10	<5.0
cis-1,2-Dichloroethene	ug/L	**580**	**75**	**58**	**69**	**53**	**170**	**130**	**200**	**140**	**200**	<5.0	<5.0	<5.0	<5.0	<5.0
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isobutyl Alcohol	ug/L	<200	<200	<200	<200	<200	<200	<200	<200	<200		<200	<200	<200	<200	<200
Isopropylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene (VOC)	ug/L	**48**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0
Styrene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	ug/L	**11**	<5.0	**5.5**	**6.9**	**8.9**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrahydrofuran	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10
Toluene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	ug/L	**1900**	**55**	**46**	**68**	**51**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	ug/L	**5**	<2.0	<2.0	<2.0	<2.0	**3**	**2.2**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, Total	ug/L	**5.1**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0
Total VOCs	ug/L	**2565.7**	**144**	**122.5**	**161.9**	**126.9**	**205**	**162.2**	**225**	**164**	**222.6**	BDL	BDL	BDL	BDL	BDL

205.0

TABLE 5: SUMMARY OF M & J SOLVENTS SITE-SPECIFIC VOCs ANALYZED

Well		TW-5	TW-5	TW-5	TW-5	TW-6	TW-6	TW-6	TW-6	TW-7	TW-7	TW-7	TW-7	TW-7	TW-8	TW-8
Date Sampled		**6/3/2016**	**11/16/2015**	**6/1/2015**	**11/13/2014**	**11/11/2016**	**6/6/2016**	**11/16/2015**	**6/1/2015**	**11/11/2016**	**6/6/2016**	**11/17/2015**	**6/5/2015**	**11/18/2014**	**11/14/2016**	**6/6/2016**
Lithology Screened		Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil
Constituent	**Units**															
1,1,1,2-Tetrachloroethane	ug/L															
1,1,1-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloropropene	ug/L	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0
1,2,4-Trichlorobenzene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**35**
1,2-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	ug/L	<150	<150	<150		<150	<150	<150	<150	<150	<150	<150	<150		<150	<150
2-Butanone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<5.00	<50
Benzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**45**
Carbon tetrachloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**80**	**420**
Chloroethane	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	ug/L	<5.0	<10	<10	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
cis-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isobutyl Alcohol	ug/L	<200	<200	<200		<200	<200	<200	<200	<200	<200	<200	<200		<200	<200
Isopropylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene (VOC)	ug/L	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	**5.4**	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0
Styrene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrahydrofuran	ug/L	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10		<10	<10
Toluene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, Total	ug/L	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0
Total VOCs	ug/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	**5.4**	BDL	BDL	BDL	BDL	BDL	**80**	**500**

TABLE 5: SUMMARY OF M & J SOLVENTS SITE-SPECIFIC VOCs ANALYZED

Well		TW-8	TW-8	TW-9	TW-9	TW-9	TW-9	TW-10	TW-10	TW-10	TW-10	TW-11	TW-11	TW-11	TW-12	TW-12
Date Sampled		**11/13/2015**	**6/2/2015**	**11/14/2016**	**6/7/2016**	**11/17/2015**	**6/8/2015**	**11/14/2016**	**6/7/2016**	**11/17/2015**	**6/8/2015**	**6/1/2016**	**11/11/2015**	**5/27/2015**	**6/1/2016**	**11/10/2015**
Lithology Screened		Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil
Constituent	**Units**															
1,1,1,2-Tetrachloroethane	ug/L															
1,1,1-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloropropene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene (VOC)	ug/L	**78**	**69**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	ug/L	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150
2-Butanone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	**140**	**110**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	ug/L	**810**	**550**	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	ug/L	<10	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<10	<10	<5.0	<10	<10	<5.0	<10
cis-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isobutyl Alcohol	ug/L	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Isopropylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Styrene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrahydrofuran	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Toluene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, Total	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total VOCs	ug/L	**1028**	**729**	BDL	BDL	**10**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

TABLE 5: SUMMARY OF M & J SOLVENTS SITE-SPECIFIC VOCs ANALYZED

Well		TW-12	OW-1	OW-1	OW-2	OW-2	OW-3	OW-3
Date Sampled		**5/27/2015**	**11/11/2016**	**6/8/2016**	**11/14/2016**	**6/8/2016**	**11/14/2016**	**6/8/2016**
Lithology Screened		Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil	Residual Soil
Constituent	**Units**							
1,1,1,2-Tetrachloroethane	ug/L							
1,1,1-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloropropene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene (VOC)	ug/L	<5.0	<5.0	<5.0	**6.8**	<5.0	<5.0	<5.0
1,2-Dichloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	ug/L	<150	<150	<150	<150	<150	<150	<150
2-Butanone	ug/L	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	<10	<10	<10	<10	<10	<10	<10
Acetone	ug/L	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	ug/L	<5.0	**57**	**47**	**220**	**22**	**18**	**14**
Chloroethane	ug/L	<10	<10	<10	<10	<10	<10	<10
Chloroform	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	ug/L	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isobutyl Alcohol	ug/L	<200	<200	<200	<200	<200	<200	<200
Isopropylbenzene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene (VOC)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Styrene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrahydrofuran	ug/L	<10	<10	<10	<10	<10	<10	<10
Toluene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, Total	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total VOCs	ug/L	BDL	**57**	**47**	**226.8**	**22**	**18**	**14**

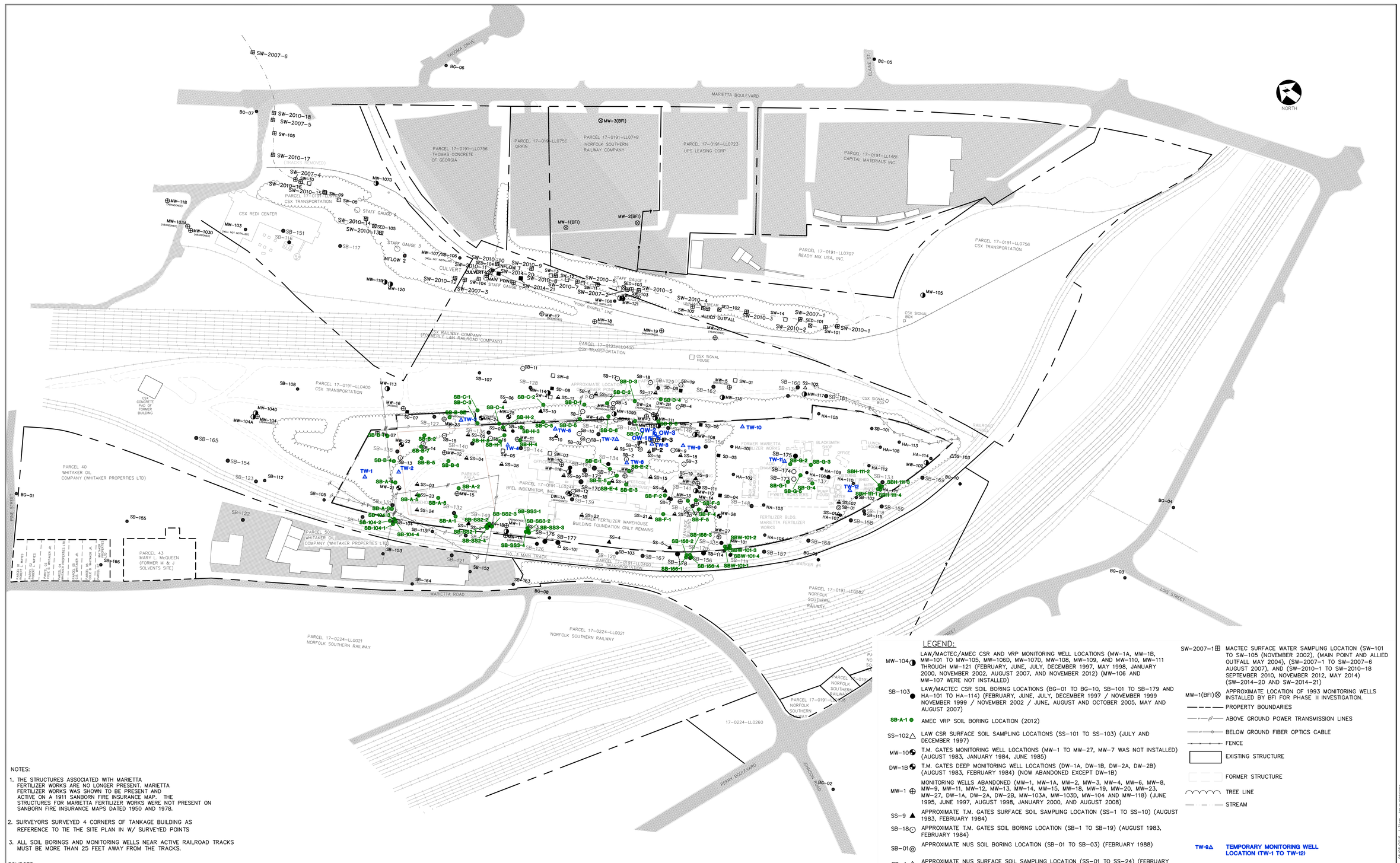
Notes:
1. ug/L = micrograms per liter
2. Bolded concentrations are postive detection of constituents
3. VOCs = volatile organic compounds analyzed by USEPA method 8260B
4. BDL = below detection limit

Prepared by: NJM 12/29/2016
Checked by: RNQ 1/10/2017

TABLE 6: SUMMARY OF HOURS INVOICED AND DESCRIPTION OF SERVICES FOR DOCUMENTATION OF PE DIRECT OVERSIGHT FOR VOLUNTARY REMEDIATION PROGRAM ACTIVITIES

	Hours Invoiced	Billing Period	Invoice #	Description of Services
Gregory J. Wrenn, P.E.	4.0	7/23/2016-8/19/2016	H081003197	Preparation and submittal of August 2016 VRP Status Report No. 9. Communication with BFEL to discuss path forward for site. Summary of Report No. 9 to CSX consultant.
Total Project Hours for Billing Period	42.6		8/26/2016	
Gregory J. Wrenn, P.E.	4.0	8/20/2016-10/21/2016	H081003311	Reviwed EPD September 22, 2016 comments. Evaluated comments and drafted intial responses. Preparation for second semi-annual sampling event for 2016. Notified CSX of sampling activities to be conducted on their property and schedule.
Total Project Hours for Billing Period	17.5		10/31/2016	
Gregory J. Wrenn, P.E.	4.0	10/22/2016-11/25/2016	H081003358	Coordinated field team and laboratory for second semi-annual 2016 sampling event. Conducted conducted second semi-annual groundwater and surface water sampling event for 2016, including additional VOC sampling and analysis to evaluate impacts from M&J Solvents site. Measured water level site-wide and conducted laboratory analyses.
Total Project Hours for Billing Period	242.8		12/9/2016	
Gregory J. Wrenn, P.E.	1.0	11/26/2016-12/23/2016	H081003397	Initial data management and data evaluation for VRP Status Report No. 10. Laboratory analysis of water samples.
Total Project Hours for Billing Period	14.2		12/29/2016	
Total Hours for PE Gregory J. Wrenn	**13.0**			
Total Project Hours	**317.1**			

FIGURES



NOTES:

1. THE STRUCTURES ASSOCIATED WITH MARIETTA FERTILIZER WORKS ARE NO LONGER PRESENT. MARIETTA FERTILIZER WORKS WAS SHOWN TO BE PRESENT AND ACTIVE ON A 1911 SANBORN FIRE INSURANCE MAP. THE STRUCTURES FOR MARIETTA FERTILIZER WORKS WERE NOT PRESENT ON SANBORN FIRE INSURANCE MAPS DATED 1950 AND 1978.
2. SURVEYORS SURVEYED 4 CORNERS OF TANKAGE BUILDING AS REFERENCE TO TIE THE SITE PLAN IN W/ SURVEYED POINTS
3. ALL SOIL BORINGS AND MONITORING WELLS NEAR ACTIVE RAILROAD TRACKS MUST BE MORE THAN 25 FEET AWAY FROM THE TRACKS.

SOURCES:

1. T.M. GATES REPORTS 1986
2. NUS CORPORATION SITE INVESTIGATION REPORT, AUGUST 1988.
3. TOPOGRAPHIC SURVEY MAP PREPARED FOR BFEL BY TRAVIS PRUITT AND ASSOCIATES, DECEMBER 19, 1989.
4. AERIAL PHOTOGRAPH AND COMPOSITE PLAT BY BLUE RIDGE ENGINEERING, DECEMBER 10, 1996.
5. BOUNDARY SURVEY BY W.L. JORDEN AND COMPANY, APRIL 2, 1997. LAW CSR SOIL BORINGS AND MONITORING WELLS SURVEYED BY W.L. JORDEN IN 1997, 1998, 1999, AND 2000.
6. MARIETTA FERTILIZER WORKS STRUCTURES FROM SANBORN FIRE INSURANCE MAP 1911.
7. MACTEC/LAW CSR SOIL BORINGS AND MONITORING WELLS (2002–2007) AND SURFACE WATER LOCATIONS SURVEYED BY MACTEC ENGINEERING AND CONSULTING INC.
8. PROPERTY OWNERS SHOWN ARE BASED ON 1996 FULTON COUNTY TAX RECORDS
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CADD NOTE: DRAWING XREFS ROTATED @ 0,0; 55° FROM SURVEY FILE COORDINATE POSITION.

SCALE IN FEET
0 100 200

LEGEND:

- MW-104 ◑ LAW/MACTEC/AMEC CSR AND VRP MONITORING WELL LOCATIONS (MW-1A, MW-1B, MW-101 TO MW-105, MW-106D, MW-107D, MW-108, MW-109, AND MW-110, MW-111 THROUGH MW-121 (FEBRUARY, JUNE, JULY, DECEMBER 1997, MAY 1998, JANUARY 2000, NOVEMBER 2002, AUGUST 2007, AND NOVEMBER 2012) (MW-106 AND MW-107 WERE NOT INSTALLED)
- SB-103 ● LAW/MACTEC CSR SOIL BORING LOCATIONS (BG-01 TO BG-10, SB-101 TO SB-179 AND HA-101 TO HA-114) (FEBRUARY, JUNE, JULY, DECEMBER 1997 / NOVEMBER 1999 NOVEMBER 1999 / NOVEMBER 2002 / JUNE, AUGUST AND OCTOBER 2005, MAY AND AUGUST 2007)
- SB-A-1 ● AMEC VRP SOIL BORING LOCATION (2012)
- SS-102 △ LAW CSR SURFACE SOIL SAMPLING LOCATIONS (SS-101 TO SS-103) (JULY AND DECEMBER 1997)
- MW-10 ◔ T.M. GATES MONITORING WELL LOCATIONS (MW-1 TO MW-27, MW-7 WAS NOT INSTALLED) (AUGUST 1983, JANUARY 1984, JUNE 1985)
- DW-1B ◔ T.M. GATES DEEP MONITORING WELL LOCATIONS (DW-1A, DW-1B, DW-2A, DW-2B) (AUGUST 1983, FEBRUARY 1984) (NOW ABANDONED EXCEPT DW-1B)
- MW-1 ⊕ MONITORING WELLS ABANDONED (MW-1, MW-1A, MW-2, MW-3, MW-4, MW-6, MW-8, MW-9, MW-11, MW-12, MW-13, MW-14, MW-15, MW-18, MW-19, MW-20, MW-23, MW-27, DW-1A, DW-2A, DW-2B, MW-103A, MW-103D, MW-104 AND MW-118) (JUNE 1995, JUNE 1997, AUGUST 1998, JANUARY 2000, AND AUGUST 2008)
- SS-9 ▲ APPROXIMATE T.M. GATES SURFACE SOIL SAMPLING LOCATION (SS-1 TO SS-10) (AUGUST 1983, FEBRUARY 1984)
- SB-18 ⊙ APPROXIMATE T.M. GATES SOIL BORING LOCATION (SB-1 TO SB-19) (AUGUST 1983, FEBRUARY 1984)
- SB-01 ◎ APPROXIMATE NUS SOIL BORING LOCATION (SB-01 TO SB-03) (FEBRUARY 1988)
- SS-4 ▲ APPROXIMATE NUS SURFACE SOIL SAMPLING LOCATION (SS-01 TO SS-24) (FEBRUARY 1988)
- SD-4 ■ APPROXIMATE NUS SEDIMENT SAMPLING LOCATION (SD-01 TO SD-03 OFF-SITE, SD-04 TO SD-09 ON-SITE) (FEBRUARY 1988)
- SW-4 □ APPROXIMATE T.M. GATES SURFACE WATER SAMPLING LOCATION (SW-01 TO SW-14 ON-SITE, SW-15 TO SW-17 OFF-SITE) (APRIL 1985)
- ○ STAFF GAUGE
- SED-101 ⊠ MACTEC SEDIMENT SAMPLING LOCATION (SED-101 TO SED-105 AND APPROXIMATE LOCATION OF MAIN POINT) (JANUARY 2000 AND MAY 2004)
- SW-2007-1 ⊞ MACTEC SURFACE WATER SAMPLING LOCATION (SW-101 TO SW-105 (NOVEMBER 2002), (MAIN POINT AND ALLIED OUTFALL MAY 2004), (SW-2007-1 TO SW-2007-6 AUGUST 2007), AND (SW-2010-1 TO SW-2010-18 SEPTEMBER 2010, NOVEMBER 2012, MAY 2014) (SW-2014-20 AND SW-2014-21)
- MW-1(BFI) ⊗ APPROXIMATE LOCATION OF 1993 MONITORING WELLS INSTALLED BY BFI FOR PHASE II INVESTIGATION.
- PROPERTY BOUNDARIES
- ABOVE GROUND POWER TRANSMISSION LINES
- BELOW GROUND FIBER OPTICS CABLE
- FENCE
- EXISTING STRUCTURE
- FORMER STRUCTURE
- TREE LINE
- STREAM
- TW-9 △ **TEMPORARY MONITORING WELL LOCATION (TW-1 TO TW-12)**
- OW-3 ⊠ **OBSERVATION WELL FOR INJECTION PILOT STUDY (OW-1 - OW-3)**
- IP-3 ⊙ **INJECTION POINT**
- ● **APPROXIMATE LOCATION INFLOW SAMPLES**

REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED R. QUINN
DRAWN T. GLADSTONE
CHECKED G. WRENN
IN CHARGE G. WRENN
DATE 8/4/2014

FORMER ESTECH GENERAL CHEMICALS SITE
ATLANTA, GEORGIA

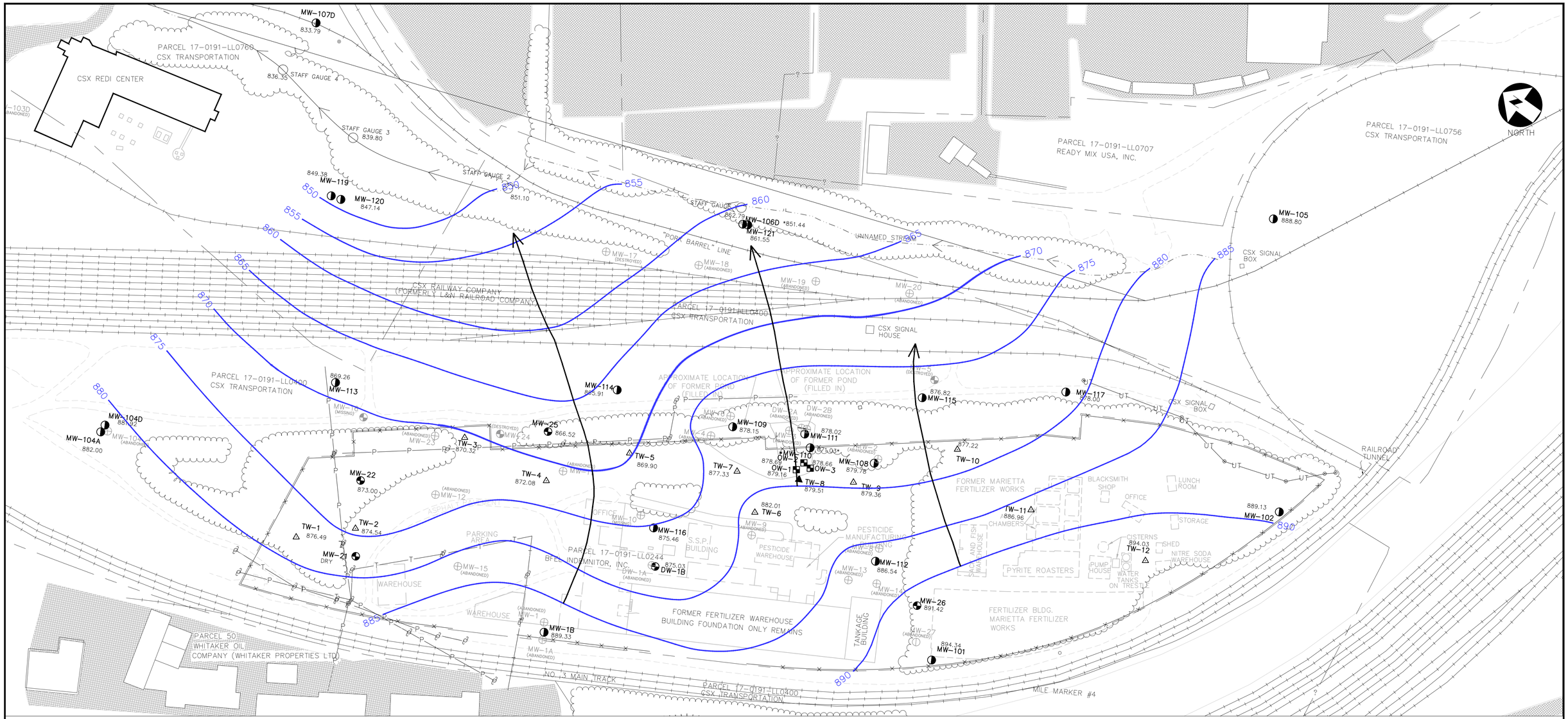
AMEC FOSTER WHEELER
ENVIRONMENT & INFRASTRUCTURE, INC.
1075 BIG SHANTY ROAD, NW, SUITE 100
KENNESAW, GEORGIA 30144 (770) 421-3400

amec foster wheeler

SOIL AND GROUNDWATER SAMPLING LOCATIONS

SCALE: AS SHOWN
CONTRACT: 6122-08-0154
DWG. NO.: 1
REV:
PAGE NO.:

J:\BFEL ATLANTA\JULY 2015\SSS AND GW SAMP. LOC-1.dwg - Layout1 - 08/05/2015 - 1:31pm - tonya.gladstone



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CADD NOTE: DRAWING XREFS ROTATED @ 0,0; 55° FROM SURVEY FILE COORDINATE POSITION.

LEGEND:

MW-104 — LAW/MACTEC/AMEC/ CSR AND VRP MONITORING WELL LOCATIONS (MW-1A, MW-1B, MW-101 TO MW-105, MW-106D, MW-107D, MW-108, MW-109, AND MW-110, MW-111 THROUGH MW-121 (FEBRUARY, JUNE, JULY, DECEMBER 1997, MAY 1998, JANUARY 2000, NOVEMBER 2002, AND AUGUST 2007, AND NOVEMBER–DECEMBER 2012, (MW-106 AND MW-107 WERE NOT INSTALLED)

MW-10 — T.M. GATES MONITORING WELL LOCATIONS (MW-1 TO MW-27, MW-7 WAS NOT INSTALLED) (AUGUST 1983, JANUARY 1984, JUNE 1985)

DW-1B — T.M. GATES DEEP MONITORING WELL LOCATIONS (DW-1A, DW-1B, DW-2A, DW-2B) (AUGUST 1983, FEBRUARY 1984)

TW-10 — TEMPORARY MONITORING WELL LOCATIONS (TW-1 THROUGH TW-12) (MAY 2012) AND (OW-1 THROUGH OW-3) (JANUARY 2013)

MW-19 — MONITORING WELLS ABANDONED (MW-1, MW-1A, MW-2, MW-3, MW-4, MW-6, MW-8, MW-9, MW-11, MW-12, MW-13, MW-14, MW-15, MW-18, MW-19, MW-20, MW-23, MW-27, DW-1A, DW-2A, DW-2B, AND MW-104) (JUNE 1995, JUNE 1997, AUGUST 1998, JANUARY 2000, AUGUST 2007). MW-103A, MW-103D AND MW-118 ABANDONED BY CSX, FEBRUARY 2008.

- EXISTING STRUCTURE
- FORMER STRUCTURE
- TREE LINE
- STREAM
- 890 — POTENTIOMETRIC SURFACE CONTOUR (FEET, NGVD)
- INTERPRETED GROUND–WATER FLOW DIRECTION
- 894.34 — GROUNDWATER ELEVATION (FEET, NGVD)
- * 871.03 — GROUNDWATER ELEVATIONS IN WELLS NOT USED TO CALCULATE POTENTIOMETRIC SURFACE
- STREAM GAUGE
- PROPERTY BOUNDARIES
- ABOVEGROUND POWER TRANSMISSION LINES
- BELOWGROUND FIBER OPTICS CABLE
- FENCE

SCALE IN FEET
0 100 200

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CHECKED	R. QUINN
IN CHARGE	G. WRENN
DATE	1/5/2017

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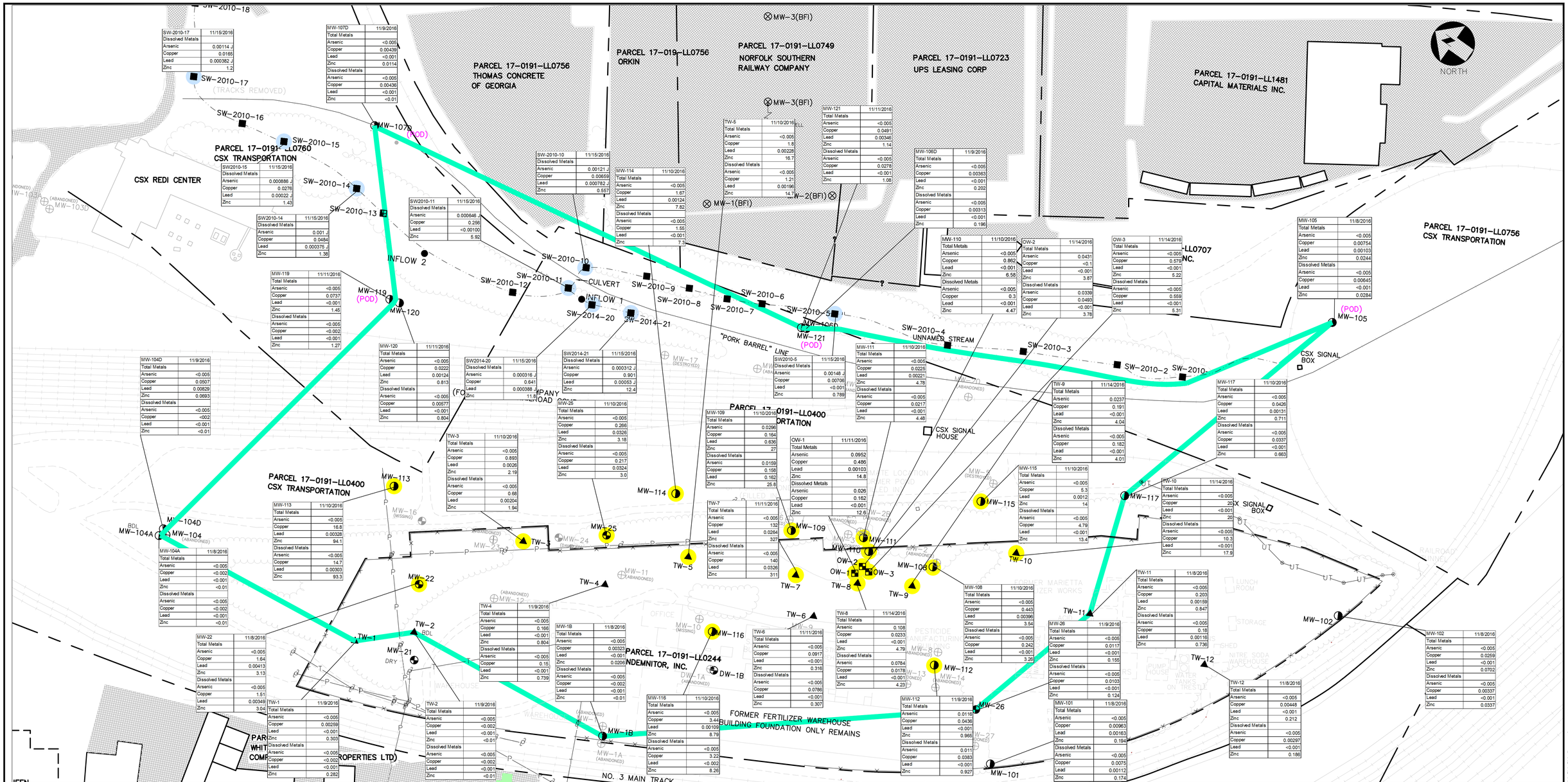
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POTENTIOMETRIC SURFACE NOVEMBER 2016

SCALE	AS SHOWN
CONTRACT	6122-08-0154
DWG. NO.	FIG. 2
REV	
PAGE NO.	

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LEGEND:

LAW/MACTEC/AMEC CSR AND VRP MONITORING WELL LOCATIONS (MW–1A, MW–1B, MW–101 TO MW–105, MW–104A, MW–104D, MW–106D, MW–107D, MW–108, MW–109, AND MW–110, MW–111 THROUGH MW–121 (FEBRUARY, JUNE, JULY, DECEMBER 1997, MAY 1998, JANUARY 2000, NOVEMBER 2002, AUGUST 2007, AND NOVEMBER 2012) (MW–106 AND MW–107 WERE NOT INSTALLED)

MW–104 — MW–10 — DW–1B — MW–1 — TW–1

T.M. GATES MONITORING WELL LOCATIONS (MW–1 TO MW–27, MW–7 WAS NOT INSTALLED) (AUGUST 1983, JANUARY 1984, JUNE 1985)

T.M. GATES DEEP MONITORING WELL LOCATIONS (DW–1A, DW–1B, DW–2A, DW–2B) (AUGUST 1983, FEBRUARY 1984)

MONITORING WELLS ABANDONED (MW–1, MW–1A, MW–2, MW–3, MW–4, MW–6, MW–8, MW–9, MW–11, MW–12, MW–13, MW–14, MW–15, MW–18, MW–19, MW–20, MW–23, MW–27, DW–1A, DW–2A, DW–2B, AND MW–104) (JUNE 1995, JUNE 1997, AUGUST 1998, JANUARY 2000, AND AUGUST 2007)
CSX ABANDONED WELLS MW–103A, MW–103D AND MW–118

TEMPORARY WELLS (MAY 2012)

INFLOW 1 — SEEP ALONG STREAM

SW–2010–1 — MACTEC/AMEC SURFACE WATER SAMPLING LOCATIONS (SW–2010–1 TO SW–2010–18, SW–2014–20 AND SW–2014–21)

MW–1(BFI) — APPROXIMATE LOCATION OF MONITORING WELLS INSTALLED FOR 1993 PHASE II INVESTIGATION.

(POD) — POINT OF DEMONSTRATION WELL

ARSENIC, LEAD, COPPER, AND ZINC IN GROUNDWATER ARE DELINEATED PER THE VRP DELINEATION CRITERIA 12–8–108(E) DEFAULT RESIDENTIAL CLEANUP STANDARDS (TYPE I RRS)

ARSENIC	0.01 MG/L
LEAD	0.015 MG/L
COPPER	1.3 MG/L
ZINC	2 MG/L

HORIZONTAL DELINEATION OF GROUND–WATER CONTAMINATION BASED ON TYPE I RRS

PROPERTY BOUNDARIES

ABOVEGROUND POWER TRANSMISSION LINES

BELOWGROUND FIBER OPTICS CABLE

FENCE

EXISTING STRUCTURE

FORMER STRUCTURE

TREE LINE

STREAM

NA — CONSTITUENT NOT ANALYZED

ALL CONCENTRATIONS EXPRESSED IN MILLIGRAMS PER LITER (mg/L)

GROUNDWATER CONCENTRATION IS GREATER THAN TYPE I RRS

SURFACE WATER CONCENTRATION IS GREATER THAN GEORGIA INSTREAM WATER QUALITY CRITERIA FOR AQUATIC RECEPTORS (COPPER OR ZINC)

OBSERVATION WELL FOR PILOT INJECTION STUDY

BDL — BELOW DETECTION LIMIT

SCALE IN FEET
0 100 200

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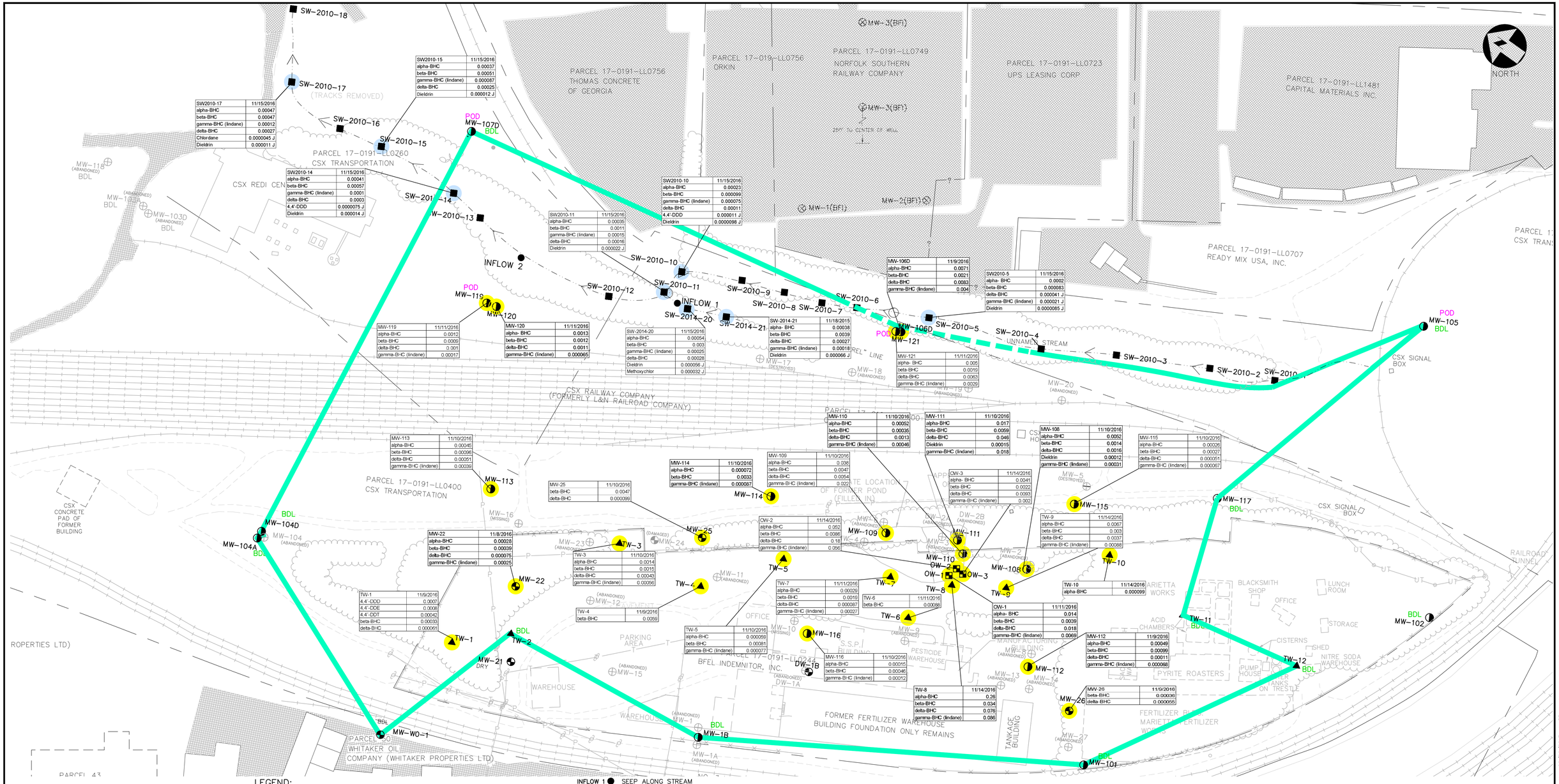
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DISTRIBUTION AND DELINEATION OF ARSENIC, LEAD, COPPER AND ZINC DETECTED IN GROUND WATER

SCALE	AS SHOWN
CONTRACT	6122–08–0154
DWG. NO.	3
REV	
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J:\BFEL ATLANTA\2017\DELINEATION OF LEAD COPPER ZINC–RI_JPP.dwg — Layout1 02/06/2017 11:18am tonya.gladstone



SW2010-17	11/15/2016
alpha-BHC	0.00047
beta-BHC	0.00047
gamma-BHC (lindane)	0.00012
delta-BHC	0.00027
Chlordane	0.0000045 J
Dieldrin	0.000011 J

SW2010-15	11/15/2016
alpha-BHC	0.00037
beta-BHC	0.00051
gamma-BHC (lindane)	0.000087
delta-BHC	0.00025
Dieldrin	0.000012 J

SW2010-14	11/15/2016
alpha-BHC	0.00041
beta-BHC	0.00057
gamma-BHC (lindane)	0.0001
delta-BHC	0.0003
4,4'-DDD	0.0000075 J
Dieldrin	0.000014 J

SW2010-11	11/15/2016
alpha-BHC	0.00035
beta-BHC	0.0011
gamma-BHC (lindane)	0.00015
delta-BHC	0.00016
Dieldrin	0.000022 J

SW2010-10	11/15/2016
alpha-BHC	0.00023
beta-BHC	0.000099
gamma-BHC (lindane)	0.000075
delta-BHC	0.00011
4,4'-DDD	0.000011 J
Dieldrin	0.0000098 J

MW-106D	11/9/2016
alpha-BHC	0.0071
beta-BHC	0.0021
delta-BHC	0.0083
gamma-BHC (lindane)	0.004

SW2010-5	11/15/2016
alpha- BHC	0.0002
beta-BHC	0.000083
delta-BHC	0.000041 J
gamma-BHC (lindane)	0.000021 J
Dieldrin	0.0000085 J

MW-119	11/11/2016
alpha-BHC	0.0012
beta-BHC	0.0009
delta-BHC	0.001
gamma-BHC (lindane)	0.00017

MW-120	11/11/2016
alpha- BHC	0.0013
beta-BHC	0.0012
delta-BHC	0.0011
gamma-BHC (lindane)	0.000065

SW-2014-20	11/15/2016
alpha-BHC	0.00054
beta-BHC	0.003
gamma-BHC (lindane)	0.00025
delta-BHC	0.00028
Dieldrin	0.0000056 J
Methoxychlor	0.000032 J

SW-2014-21	11/18/2015
alpha- BHC	0.00038
beta-BHC	0.0039
delta-BHC	0.00027
gamma-BHC (lindane)	0.00018
Dieldrin	0.000066 J

MW-121	11/11/2016
alpha- BHC	0.005
beta-BHC	0.0019
delta-BHC	0.0063
gamma-BHC (lindane)	0.0028

MW-110	11/10/2016
alpha-BHC	0.00052
beta-BHC	0.00035
delta-BHC	0.0013
gamma-BHC (lindane)	0.00048

MW-111	11/10/2016
alpha-BHC	0.017
beta-BHC	0.0059
delta-BHC	0.046
Dieldrin	0.00015
gamma-BHC (lindane)	0.018

MW-108	11/10/2016
alpha-BHC	0.0052
beta-BHC	0.0014
delta-BHC	0.0016
Dieldrin	0.00012
gamma-BHC (lindane)	0.00031

MW-115	11/10/2016
alpha-BHC	0.00026
beta-BHC	0.00027
delta-BHC	0.000051
gamma-BHC (lindane)	0.000067

MW-113	11/10/2016
alpha-BHC	0.00045
beta-BHC	0.00096
delta-BHC	0.00051
gamma-BHC (lindane)	0.00039

MW-114	11/10/2016
alpha-BHC	0.000072
beta-BHC	0.0033
gamma-BHC (lindane)	0.000087

MW-109	11/10/2016
alpha-BHC	0.038
beta-BHC	0.0047
delta-BHC	0.0054
gamma-BHC (lindane)	0.022

MW-25	11/10/2016
beta-BHC	0.0047
delta-BHC	0.000099

OW-3	11/14/2016
alpha- BHC	0.0041
beta-BHC	0.0022
delta-BHC	0.0093
gamma-BHC (lindane)	0.002

TW-9	11/14/2016
alpha-BHC	0.0067
beta-BHC	0.003
delta-BHC	0.0037
gamma-BHC (lindane)	0.00068

MW-22	11/8/2016
alpha-BHC	0.00028
beta-BHC	0.00039
delta-BHC	0.000075
gamma-BHC (lindane)	0.00025

TW-3	11/10/2016
alpha-BHC	0.0014
beta-BHC	0.0015
delta-BHC	0.00043
gamma-BHC (lindane)	0.00056

OW-2	11/14/2016
alpha-BHC	0.052
beta-BHC	0.0086
delta-BHC	0.18
gamma-BHC (lindane)	0.056

TW-10	11/14/2016
alpha-BHC	0.000099

TW-1	11/9/2016
4,4'-DDD	0.0007
4,4'-DDE	0.0008
4,4'-DDT	0.00042
beta-BHC	0.00033
delta-BHC	0.000061

TW-4	11/9/2016
beta-BHC	0.0059

TW-5	11/10/2016
alpha-BHC	0.000059
beta-BHC	0.00081
gamma-BHC (lindane)	0.000077

TW-7	11/11/2016
alpha-BHC	0.00029
beta-BHC	0.0019
delta-BHC	0.000087
gamma-BHC (lindane)	0.00027

TW-6	11/11/2016
beta-BHC	0.00068

OW-1	11/11/2016
alpha-BHC	0.014
beta-BHC	0.0039
delta-BHC	0.018
gamma-BHC (lindane)	0.0069

MW-112	11/9/2016
alpha-BHC	0.00049
beta-BHC	0.00099
delta-BHC	0.00011
gamma-BHC (lindane)	0.000068

MW-116	11/10/2016
alpha-BHC	0.00015
beta-BHC	0.00046
gamma-BHC (lindane)	0.00012

TW-8	11/14/2016
alpha-BHC	0.26
beta-BHC	0.034
delta-BHC	0.076
gamma-BHC (lindane)	0.086

MW-26	11/9/2016
beta-BHC	0.00030
delta-BHC	0.000055

MW-22	11/8/2016
alpha-BHC	0.00028
beta-BHC	0.00039
delta-BHC	0.000075
gamma-BHC (lindane)	0.00025

LEGEND:

LAW/MACTEC/AMEC CSR AND VRP MONITORING WELL LOCATIONS (MW-1A, MW-1B, MW-101 TO MW-105, MW-104A, MW-104D, MW-106D, MW-107D, MW-108, MW-109, AND MW-110, MW-111 THROUGH MW-121 (FEBRUARY, JUNE, JULY, DECEMBER 1997, MAY 1998, JANUARY 2000, NOVEMBER 2002, AUGUST 2007, AND NOVEMBER 2012) (MW-106 AND MW-107 WERE NOT INSTALLED)

T.M. GATES MONITORING WELL LOCATIONS (MW-1 TO MW-27, MW-7 WAS NOT INSTALLED) (AUGUST 1983, JANUARY 1984, JUNE 1985)

T.M. GATES DEEP MONITORING WELL LOCATIONS (DW-1A, DW-1B, DW-2A, DW-2B) (AUGUST 1983, FEBRUARY 1984)

MONITORING WELLS ABANDONED (MW-1, MW-1A, MW-2, MW-3, MW-4, MW-6, MW-8, MW-9, MW-11, MW-12, MW-13, MW-14, MW-15, MW-18, MW-19, MW-20, MW-23, MW-27, DW-1A, DW-2A, DW-2B, AND MW-104) (JUNE 1995, JUNE 1997, AUGUST 1998, JANUARY 2000, AND AUGUST 2007)
CSX ABANDONED WELLS MW-103A, MW-103D AND MW-118

SEEP ALONG STREAM

MACTEC/AMEC SURFACE WATER SAMPLING LOCATIONS (SW-2010-1 TO SW-2010-18, SW-2014-20 AND SW-2014-21)

APPROXIMATE LOCATION OF MONITORING WELLS INSTALLED FOR 1993 DUE PHASE II INVESTIGATION.

TEMPORARY WELLS (MAY 2012)

POD — POINT OF DEMONSTRATION WELL

BDL — BELOW DETECTION LIMIT

PROPERTY BOUNDARIES

ABOVEGROUND POWER TRANSMISSION LINES

BELOWGROUND FIBER OPTICS CABLE

FENCE

EXISTING STRUCTURE

FORMER STRUCTURE

TREE LINE

STREAM

PESTICIDES, IN GROUND WATER ARE DELINEATED PER THE VRP DELINEATION CRITERIA 12-8-108(E) DEFAULT RESIDENTIAL CLEANUP STANDARDS (TYPE I RRS).

GROUNDWATER CONCENTRATION IS GREATER THAN TYPE I RRS

SURFACE WATER CONCENTRATION IS GREATER THAN GEORGIA INSTREAM WATER QUALITY CRITERIA (HUMAN HEALTH) (ALPHA AND BETA BHC)

HORIZONTAL DELINEATION OF GROUNDWATER CONTAMINATION BASED ON TYPE I RRS

OBSERVATION WELL FOR PILOT INJECTION STUDY

ALL CONCENTRATIONS EXPRESSED IN MILLIGRAMS PER LITER (mg/L)

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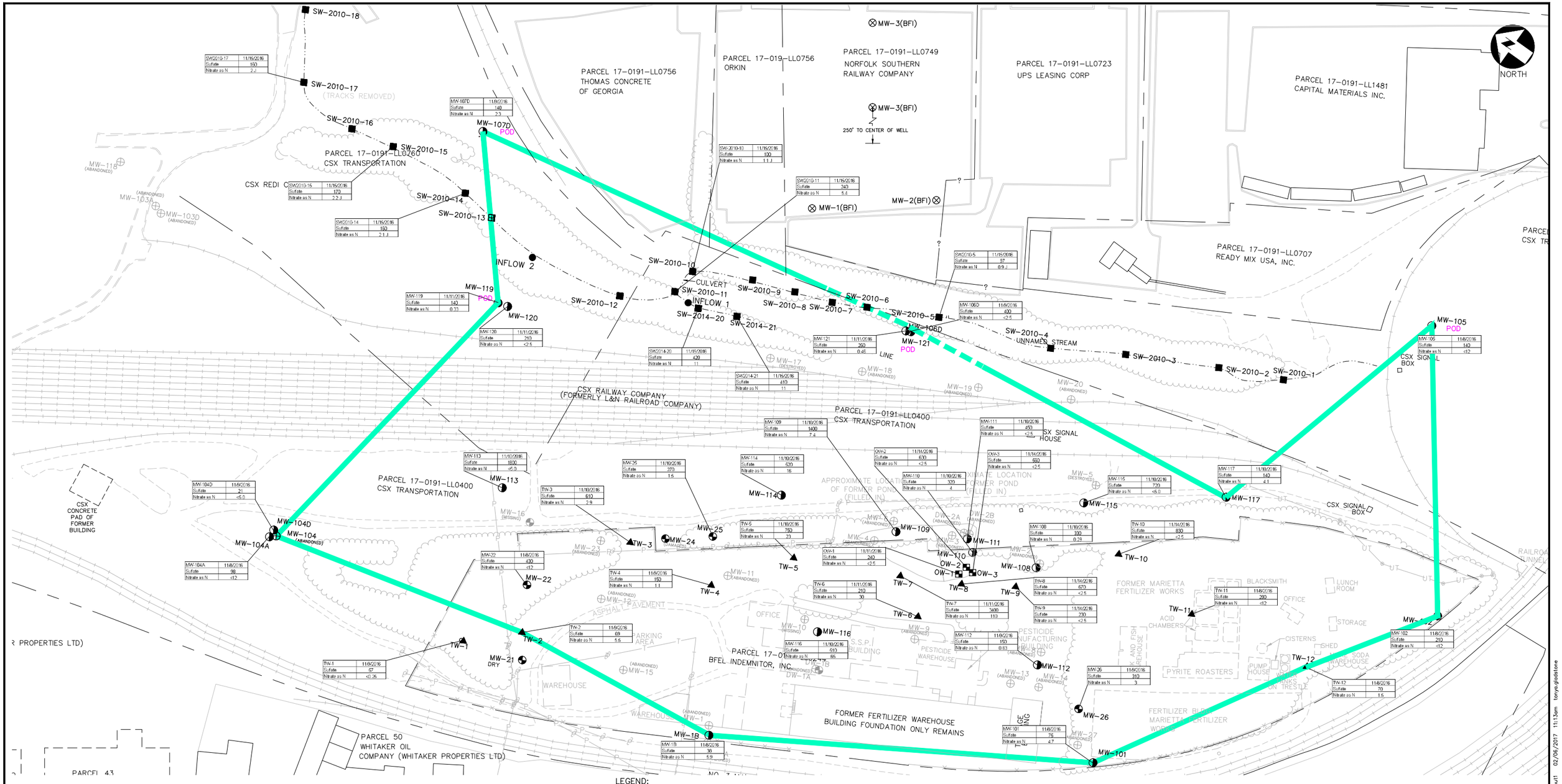
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DISTRIBUTION AND DELINEATION OF PESTICIDES DETECTED IN GROUND WATER

SCALE	AS SHOWN
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LEGEND:

MW-104 ◑ LAW/MACTEC/AMEC CSR AND VRP MONITORING WELL LOCATIONS (MW-1A, MW-1B, MW-101 TO MW-105, MW-103D, MW-104A, MW-104D, MW-106D, MW-107D, MW-108, MW-109, AND MW-110, MW-111 THROUGH MW-121 (FEBRUARY, JUNE, JULY, DECEMBER 1997, MAY 1998, JANUARY 2000, NOVEMBER 2002, AUGUST 2007, AND NOVEMBER 2012) (MW-106 AND MW-107 WERE NOT INSTALLED)

MW-10 ◔ T.M. GATES MONITORING WELL LOCATIONS (MW-1 TO MW-27, MW-7 WAS NOT INSTALLED) (AUGUST 1983, JANUARY 1984, JUNE 1985)

DW-1B ◔ T.M. GATES DEEP MONITORING WELL LOCATIONS (DW-1A, DW-1B, DW-2A, DW-2B) (AUGUST 1983, FEBRUARY 1984)

MW-1 ⊕ MONITORING WELLS ABANDONED (MW-1, MW-1A, MW-2, MW-3, MW-4, MW-6, MW-8, MW-9, MW-11, MW-12, MW-13, MW-14, MW-15, MW-18, MW-19, MW-20, MW-23, MW-27, DW-1A, DW-2A, DW-2B, AND MW-104) (JUNE 1995, JUNE 1997, AUGUST 1998, JANUARY 2000, AND AUGUST 2007)
CSX ABANDONED WELLS, MW-103A, MW-103D AND MW-118

TW-1 ▲ TEMPORARY WELLS (MAY 2012)

INFLOW 1 ● SEEP ALONG STREAM

OW-1 ▪ OBSERVATION WELL FOR PILOT INJECTION STUDY

SW-2010-1 ■ MACTEC/AMEC SURFACE WATER SAMPLING LOCATIONS (SW-2010-1 TO SW-2010-18, SW-2014-20 AND SW-2014-21)

MW-1(BFI) ⊗ APPROXIMATE LOCATION OF MONITORING WELLS INSTALLED FOR 1993 DUE PHASE II INVESTIGATION.

NITRATE AND SULFATE IN GROUNDWATER ARE DELINEATED PER THE VRP DELINEATION CRITERIA 12-8-108(E) DEFAULT RESIDENTIAL CLEANUP STANDARDS (TYPE I RRS)

NITRATE 10 MG/L
SULFATE 250 MG/L

POD POINT OF DEMONSTRATION WELL

HORIZONTAL DELINEATION OF GROUND-WATER CONTAMINATION BASED ON TYPE I RRS

PROPERTY BOUNDARIES
ABOVEGROUND POWER TRANSMISSION LINES
BELOWGROUND FIBER OPTICS CABLE
FENCE
EXISTING STRUCTURE
FORMER STRUCTURE
TREE LINE
STREAM

ALL CONCENTRATIONS EXPRESSED IN MILLIGRAMS PER LITER (mg/L)

SCALE IN FEET
0 100 200

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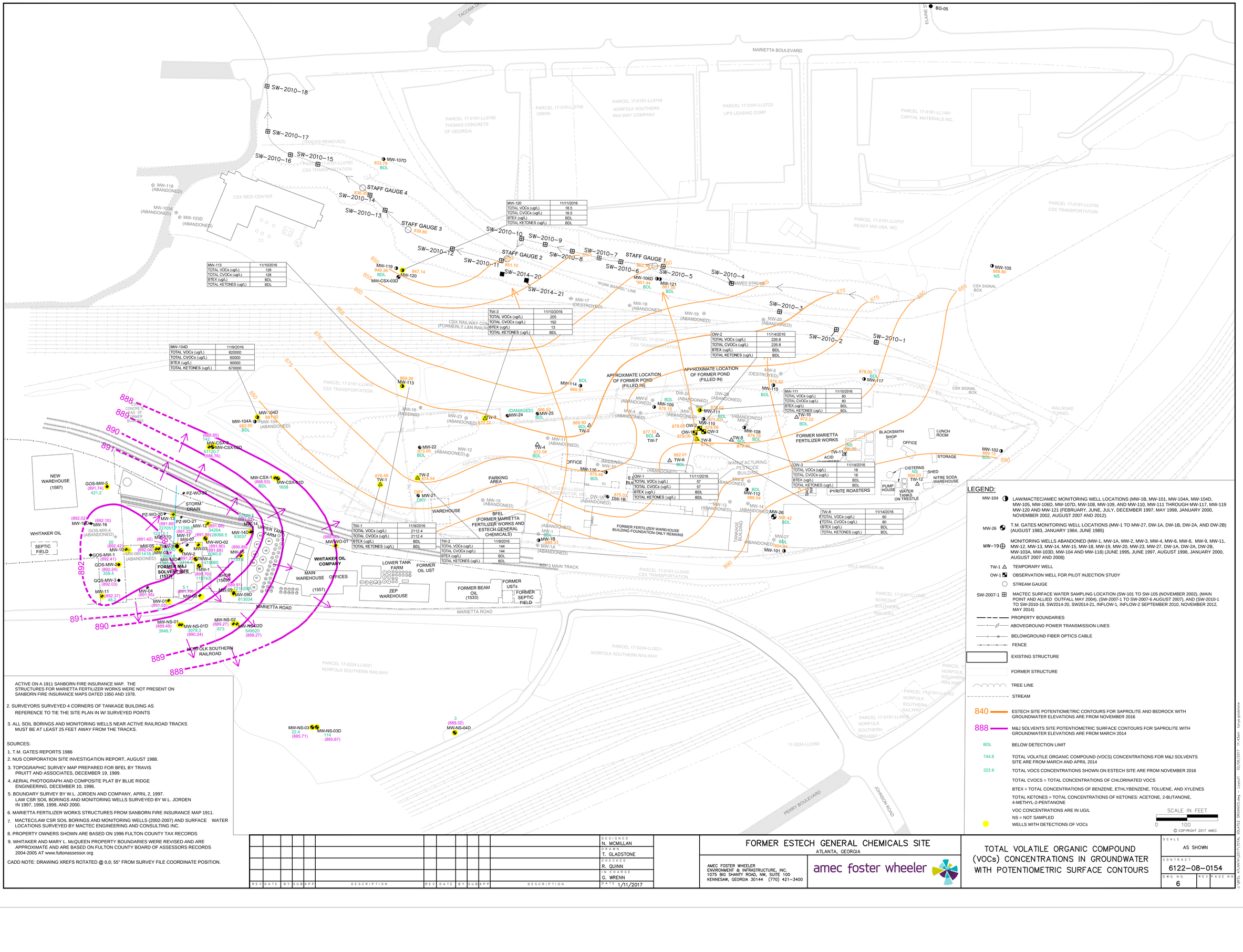
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DISTRIBUTION AND DELINEATION OF NITRATE AND SULFATE IN GROUND WATER

SCALE	AS SHOWN
CONTRACT	6122-08-0154
DWG. NO.	5
REV	
PAGE NO	

J:\BFEL ATLANTA\2017\DELINEATION OF NITRATE AND SULFATE-R1_HP.dwg - Layout1 02/06/2017 11:13am tonya.gladstone



ACTIVE ON A 1911 SANBORN FIRE INSURANCE MAP. THE STRUCTURES FOR MARIETTA FERTILIZER WORKS WERE NOT PRESENT ON SANBORN FIRE INSURANCE MAPS DATED 1950 AND 1978.

2. SURVEYORS SURVEYED 4 CORNERS OF TANKAGE BUILDING AS REFERENCE TO TIE THE SITE PLAN IN W/ SURVEYED POINTS

3. ALL SOIL BORINGS AND MONITORING WELLS NEAR ACTIVE RAILROAD TRACKS MUST BE AT LEAST 25 FEET AWAY FROM THE TRACKS.

SOURCES:

1. T.M. GATES REPORTS 1986
2. NUS CORPORATION SITE INVESTIGATION REPORT, AUGUST 1988.
3. TOPOGRAPHIC SURVEY MAP PREPARED FOR BFEL BY TRAVIS PRUITT AND ASSOCIATES, DECEMBER 19, 1989.
4. AERIAL PHOTOGRAPH AND COMPOSITE PLAT BY BLUE RIDGE ENGINEERING, DECEMBER 10, 1996.
5. BOUNDARY SURVEY BY W.L. JORDEN AND COMPANY, APRIL 2, 1997. LAW CSR SOIL BORINGS AND MONITORING WELLS SURVEYED BY W.L. JORDEN IN 1997, 1998, 1999, AND 2000.
6. MARIETTA FERTILIZER WORKS STRUCTURES FROM SANBORN FIRE INSURANCE MAP 1911.
7. MACTEC/LAW CSR SOIL BORINGS AND MONITORING WELLS (2002-2007) AND SURFACE WATER LOCATIONS SURVEYED BY MACTEC ENGINEERING AND CONSULTING INC.
8. PROPERTY OWNERS SHOWN ARE BASED ON 1996 FULTON COUNTY TAX RECORDS
9. WHITAKER AND MARY L. McQUEEN PROPERTY BOUNDARIES WERE REVISED AND ARE APPROXIMATE AND ARE BASED ON FULTON COUNTY BOARD OF ASSESSORS RECORDS 2004-2005 AT www.fultonassessor.org

CADD NOTE: DRAWING XREFS ROTATED @ 0.0; 55° FROM SURVEY FILE COORDINATE POSITION.

LEGEND:

- MW-104 — LAW/MACTEC/AMEC MONITORING WELL LOCATIONS (MW-1B, MW-101, MW-104A, MW-104D, MW-105, MW-106D, MW-107D, MW-108, MW-109, AND MW-110, MW-111 THROUGH MW-117, MW-119 MW-120 AND MW-121 (FEBRUARY, JUNE, JULY, DECEMBER 1997, MAY 1998, JANUARY 2000, NOVEMBER 2002, AUGUST 2007 AND 2012).
- MW-26 — T.M. GATES MONITORING WELL LOCATIONS (MW-1 TO MW-27, DW-1A, DW-1B, DW-2A, AND DW-2B) (AUGUST 1983, JANUARY 1984, JUNE 1985)
- MW–19 — MONITORING WELLS ABANDONED (MW-1, MW-1A, MW-2, MW-3, MW-4, MW-6, MW-8, MW-9, MW-11, MW-12, MW-13, MW-14, MW-15, MW-18, MW-19, MW-20, MW-23, MW-27, DW-1A, DW-2A, DW-2B, MW-103A, MW-103D, MW-104 AND MW-118) (JUNE 1995, JUNE 1997, AUGUST 1998, JANUARY 2000, AUGUST 2007 AND 2008)
- TW-1 — TEMPORARY WELL
- OW-1 — OBSERVATION WELL FOR PILOT INJECTION STUDY
- STREAM GAUGE
- SW-2007-1 — MACTEC SURFACE WATER SAMPLING LOCATION (SW-101 TO SW-105 (NOVEMBER 2002), (MAIN POINT AND ALLIED OUTFALL MAY 2004), (SW-2007-1 TO SW-2007-6 AUGUST 2007), AND (SW-2010-1 TO SW-2010-18, SW2014-20, SW2014-21, INFLOW-1, INFLOW-2 SEPTEMBER 2010, NOVEMBER 2012, MAY 2014)
- PROPERTY BOUNDARIES
- ABOVEGROUND POWER TRANSMISSION LINES
- BELOWGROUND FIBER OPTICS CABLE
- FENCE
- EXISTING STRUCTURE
- FORMER STRUCTURE
- TREE LINE
- STREAM
- 840 — ESTECH SITE POTENTIOMETRIC CONTOURS FOR SAPROLITE AND BEDROCK WITH GROUNDWATER ELEVATIONS ARE FROM NOVEMBER 2016
- 888 — M&J SOLVENTS SITE POTENTIOMETRIC SURFACE CONTOURS FOR SAPROLITE WITH GROUNDWATER ELEVATIONS ARE FROM MARCH 2014
- BDL — BELOW DETECTION LIMIT
- 744.8 — TOTAL VOLATILE ORGANIC COMPOUND (VOCS) CONCENTRATIONS FOR M&J SOLVENTS SITE ARE FROM MARCH AND APRIL 2014
- 222.6 — TOTAL VOCS CONCENTRATIONS SHOWN ON ESTECH SITE ARE FROM NOVEMBER 2016

TOTAL CVOCS = TOTAL CONCENTRATIONS OF CHLORINATED VOCS

BTEX = TOTAL CONCENTRATIONS OF BENZENE, ETHLYBENZENE, TOLUENE, AND XYLENES

TOTAL KETONES = TOTAL CONCENTRATIONS OF KETONES: ACETONE, 2-BUTANONE, 4-METHYL-2-PENTANONE

VOC CONCENTRATIONS ARE IN UG/L

NS = NOT SAMPLED

WELLS WITH DETECTIONS OF VOCs

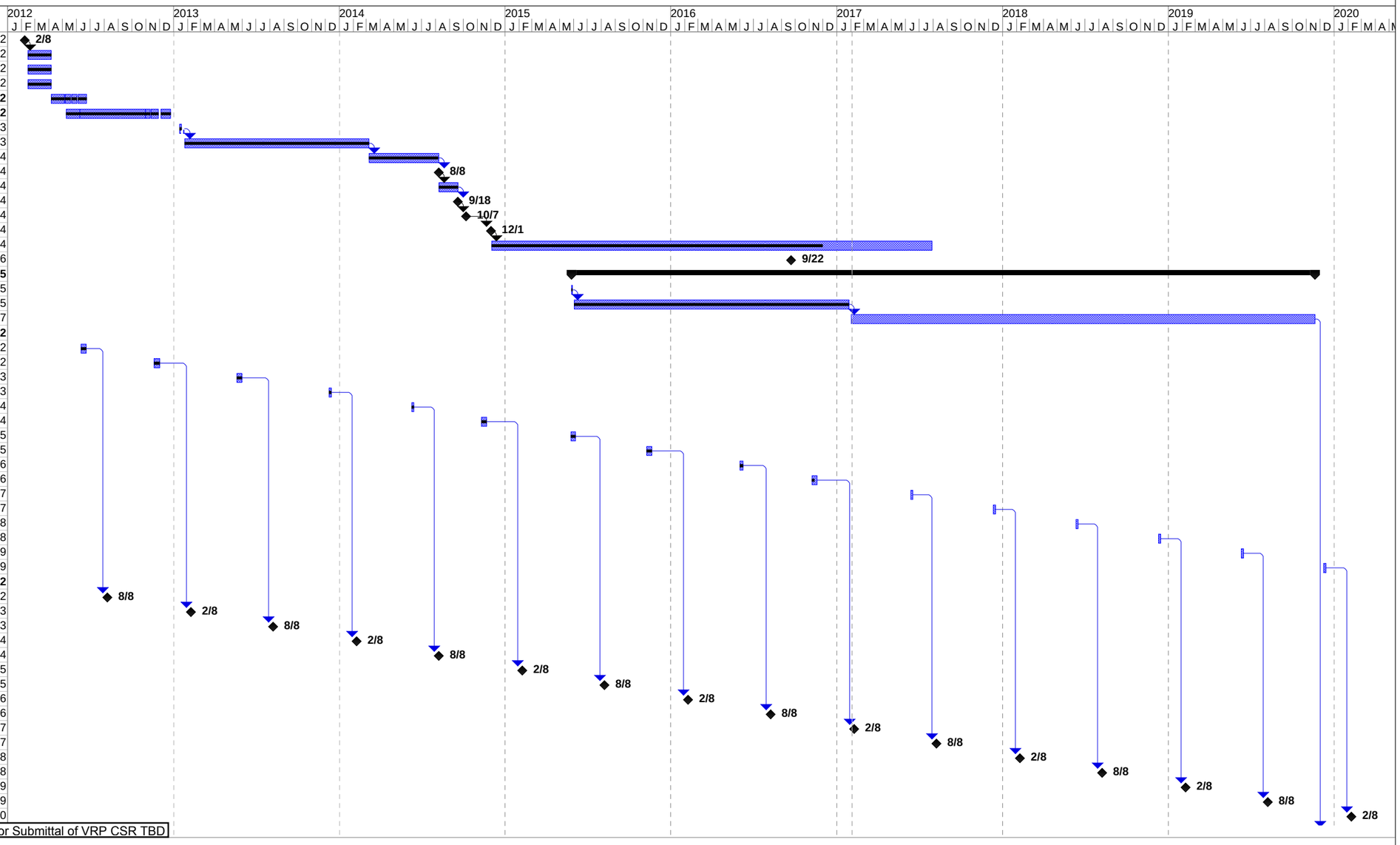
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FIGURE 7 - SCHEDULE FOR IMPLEMENTATION OF VOLUNTARY REMEDIATON PLAN
FORMER ESTECH, ATLANTA, GA

ID	Task Name	Start
1	EPD approves VRP Application and Remediation Plan	Wed 2/8/12
2	Prepare/File/Submit Affidavit to BFEL Property Deed	Wed 2/15/12
3	Prepare/Submit Financial Assurance for VRP	Wed 2/15/12
4	Prepare/Submit Updated VRP Implementation Schedule	Wed 2/15/12
5	**Copper/Zinc Source ID & Soil Inv on BFEL Property**	**Fri 4/6/12**
10	**Soil/GW Inv on CSX Property**	**Wed 5/9/12**
16	Groundwater EHC-M Injection Pilot Test - BFEL Property	Mon 1/14/13
17	Pilot Test Performance Monitoring	Fri 1/25/13
18	Re-Evaluate Remediation Alternatives	Fri 3/7/14
19	Submit Revised Remediation Plan	Fri 8/8/14
20	EPD Review Revised Remediation Plan	Fri 8/8/14
21	BFEL/EPD Site Review Meeting	Thu 9/18/14
22	EPD Comment Letter (Oct. 7, 2014)	Tue 10/7/14
23	EPD Comment Letter (Dec. 1, 2014)	Mon 12/1/14
24	Evaluate Up-Gradient VOC Impact to BFEL Property	Tue 12/2/14
25	EPC Comment Letter (Sept. 22, 2016	Thu 9/22/16
26	**Remediation Implementation**	**Wed 5/27/15**
27	Collect Treatability Study Samples	Wed 5/27/15
28	Data Analysis	Tue 6/2/15
29	Surficial Limestone Implementation/Evaluation	Wed 2/1/17
30	**Semi-Annual GW/SW Sampling**	**Mon 6/11/12**
31	Semi-Annual Sampling Event 1	Mon 6/11/12
32	Semi-Annual Sampling Event 2	Mon 11/19/12
33	Semi-Annual Sampling Event 3	Mon 5/20/13
34	Semi-Annual Sampling Event 4	Mon 12/9/13
35	Semi-Annual Sampling Event 5	Mon 6/9/14
36	Semi-Annual Sampling Event 6	Mon 11/10/14
37	Semi-Annual Sampling Event 7	Tue 5/26/15
38	Semi-Annual Sampling Event 8	Mon 11/9/15
39	Semi-Annual Sampling Event 9	Wed 6/1/16
40	Semi-Annual Sampling Event 10	Mon 11/7/16
41	Semi-Annual GW/SW Sampling 11	Mon 6/12/17
42	Semi-Annual GW/SW Sampling 12	Mon 12/11/17
43	Semi-Annual GW/SW Sampling 13	Mon 6/11/18
44	Semi-Annual GW/SW Sampling 14	Mon 12/10/18
45	Semi-Annual GW/SW Sampling 15	Mon 6/10/19
46	Semi-Annual GW/SW Sampling 16	Mon 12/9/19
47	**Submit Semi-Annual Status Report**	**Wed 8/8/12**
48	Submit Semi-Annual Status Report 1	Wed 8/8/12
49	Submit Semi-Annual Status Report 2	Fri 2/8/13
50	Submit Semi-Annual Status Report 3	Thu 8/8/13
51	Submit Semi-Annual Status Report 4	Sat 2/8/14
52	Submit Semi-Annual Status Report 5	Fri 8/8/14
53	Submit Semi-Annual Status Report 6	Sun 2/8/15
54	Submit Semi-Annual Status Report 7	Sat 8/8/15
55	Submit Semi-Annual Status Report 8	Mon 2/8/16
56	Submit Semi-Annual Status Report 9	Mon 8/8/16
57	Submit Semi-Annual Status Report 10	Wed 2/8/17
58	Submit Semi-Annual Status Report 11	Tue 8/8/17
59	Submit Semi-Annual Status Report 12	Thu 2/8/18
60	Submit Semi-Annual Status Report 13	Wed 8/8/18
61	Submit Semi-Annual Status Report 14	Fri 2/8/19
62	Submit Semi-Annual Status Report 15	Thu 8/8/19
63	Submit Semi-Annual Status Report 16	Sat 2/8/20
64	Submit Final Compliance Status Report	Schedule for Submittal of VRP CSR TBD



Project: BFEL Atlanta VRP Schedule
Date: Fri 2/3/17

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

APPENDIX A

LABORATORY REPORTS AND FIELD SAMPLING FORMS FOR NOVEMBER 2016 GROUNDWATER SAMPLING EVENT

WATER LABORATORY REPORTS

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 25, 2016

Rhonda Quinn
AMEC E&I, Inc. -Kennesaw
1075 Big Shanty Rd NW
Kennesaw GA 30144

TEL: (770) 421-3400
FAX: (770) 421-3486

RE: BFEL Atlanta

Dear Rhonda Quinn: Order No: 1611A86

Analytical Environmental Services, Inc. received 14 samples on 11/10/2016 5:25:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

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

CHAIN OF CUSTODY

Work Order: 1611A86

Date: 11/10/16 Page _____ of _____

COMPANY:	ADDRESS:
Amec Foster Wheeler	1075 Big Shanty Rd, Ste 100 Kennesaw, GA 30144
PHONE: 770-421-3400	FAX: 770-421-3486
SAMPLED BY: D Howard, E Guillen, N McMillan, D Morris	SIGNATURE: Daniel K Howard

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	* ANALYSIS REQUESTED: VOC 8260 list	Tot metals list 6020	Diss Metals list 6020	Pest 8081A	Nitrate-Sulfate 9056	PRESERVATION (See codes): H+I	N	I	I	I	REMARKS	No # of Containers
1	TB-03	11/10/16	0900	X		W	2											2
2	MW-25		1102	X		GW	2	1	1	2	1							7
3	TW-3		1332	X		GW	2	1	1	2	1							7
4	TW-5		1512	X		GW	2	1	1	2	1							7
5	MW-108		1520	X		GW	2	1	1	2	1							7
6	MW-114		1605	X		GW	2	1	1	2	1							7
7	MW-113		1015	X		GW	2	1	1	2	1							7
8	MW-115		1020	X		GW	2	1	1	2	1							7
9	MW-117		1220	X		GW	2	1	1	2	1							7
10	MW-116		1540	X		GW	2	1	1	2	1							7
11	MW-111		1400	X		GW	2	1	1	2	1							7
12	MW-109		1540	X		GW	2	1	1	2	1							7
13	MW-110		1141	X		GW	2	1	1	2	1							7
14	DUP-2		1200	X		GW		1	1	2	1							5

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Daniel K Howard	11/10/16/1640	1: [signature]	Nov-10-16 1640
2: [signature]	Nov-10-16 5:25	2: Jessica Autry	11/10/16 5:25 pm
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:
* Diss metals will be Filtered by the lab
Temp Blanks

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL (COURIER)
GREYHOUND OTHER_____

PROJECT INFORMATION

PROJECT NAME: BFEL Atlanta
PROJECT #: 612208015 4.22
SITE ADDRESS: 1525 Pine St Atlanta, GA
SEND REPORT TO: Rhonda Quinn
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #:_____ PO#:_____

RECEIPT

Total # of Containers

Turnaround Time Request
- (●) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.
SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: AMEC E&I, Inc. -Kennesaw
Project: BFEL Atlanta
Lab ID: 1611A86

Case Narrative

Ion Chromotography Analysis by Method 9056A:

Due to sample matrix, sample(s) 1611A86-007D, -008D, and -011D required dilution during preparation and/or analysis resulting in elevated reporting limits.

Pesticide Analysis by Method 8081:

Due to sample matrix, sample 1611A86-002E required dilution during preparation and/or analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TB-03
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 9:00:00 AM
Lab ID:	1611A86-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
1,4-Dioxane	BRL	0.15		mg/L	233009	1	11/15/2016 21:15	NP
2-Butanone	BRL	0.050		mg/L	233009	1	11/15/2016 21:15	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233009	1	11/15/2016 21:15	NP
Acetone	BRL	0.050		mg/L	233009	1	11/15/2016 21:15	NP
Benzene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Carbon disulfide	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Chlorobenzene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Chloroethane	BRL	0.010		mg/L	233009	1	11/15/2016 21:15	NP
Chloroform	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Chloromethane	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Cyclohexane	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Ethylbenzene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233009	1	11/15/2016 21:15	NP
Isopropylbenzene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Methylene chloride	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Naphthalene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Styrene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Tetrachloroethene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Tetrahydrofuran	BRL	0.010		mg/L	233009	1	11/15/2016 21:15	NP
Toluene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Trichloroethene	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Vinyl chloride	BRL	0.0020		mg/L	233009	1	11/15/2016 21:15	NP
Xylenes, Total	BRL	0.0050		mg/L	233009	1	11/15/2016 21:15	NP
Surr: 4-Bromofluorobenzene	93.3	67-118		%REC	233009	1	11/15/2016 21:15	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	233009	1	11/15/2016 21:15	NP
Surr: Toluene-d8	101	82.5-122		%REC	233009	1	11/15/2016 21:15	NP

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-25
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 11:02:00 AM
Lab ID:	1611A86-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
1,4-Dioxane	BRL	0.15		mg/L	233009	1	11/16/2016 02:42	NP
2-Butanone	BRL	0.050		mg/L	233009	1	11/16/2016 02:42	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233009	1	11/16/2016 02:42	NP
Acetone	BRL	0.050		mg/L	233009	1	11/16/2016 02:42	NP
Benzene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Carbon disulfide	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Chlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Chloroethane	BRL	0.010		mg/L	233009	1	11/16/2016 02:42	NP
Chloroform	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Chloromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Cyclohexane	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Ethylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233009	1	11/16/2016 02:42	NP
Isopropylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Methylene chloride	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Naphthalene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Styrene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Tetrachloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Tetrahydrofuran	BRL	0.010		mg/L	233009	1	11/16/2016 02:42	NP
Toluene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Trichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Vinyl chloride	BRL	0.0020		mg/L	233009	1	11/16/2016 02:42	NP
Xylenes, Total	BRL	0.0050		mg/L	233009	1	11/16/2016 02:42	NP
Surr: 4-Bromofluorobenzene	94.2	67-118		%REC	233009	1	11/16/2016 02:42	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	233009	1	11/16/2016 02:42	NP
Surr: Toluene-d8	100	82.5-122		%REC	233009	1	11/16/2016 02:42	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-25
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 11:02:00 AM
Lab ID:	1611A86-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 05:55	JS
Copper	0.266	0.0400		mg/L	232823	20	11/22/2016 22:39	JS
Lead	0.0326	0.00100		mg/L	232823	1	11/17/2016 05:55	JS
Zinc	3.18	0.200		mg/L	232823	20	11/22/2016 22:39	JS
ION SCAN SW9056A								
Nitrate	1.5	0.25		mg/L	R330012	1	11/11/2016 10:29	JW
Sulfate	270	10		mg/L	R330012	10	11/11/2016 14:53	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233183	1	11/20/2016 21:48	JS
Copper	0.217	0.00200		mg/L	233183	1	11/20/2016 21:48	JS
Lead	0.0324	0.00100		mg/L	233183	1	11/20/2016 21:48	JS
Zinc	3.00	0.100		mg/L	233183	10	11/21/2016 17:34	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/16/2016 22:29	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/16/2016 22:29	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/16/2016 22:29	SH
alpha-BHC	BRL	0.00050		mg/L	232802	10	11/17/2016 21:41	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 22:29	SH
beta-BHC	0.0047	0.00050		mg/L	232802	10	11/17/2016 21:41	SH
delta-BHC	0.000099	0.000050		mg/L	232802	1	11/16/2016 22:29	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/16/2016 22:29	SH
gamma-BHC	BRL	0.000050		mg/L	232802	1	11/16/2016 22:29	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 22:29	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/16/2016 22:29	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/16/2016 22:29	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/16/2016 22:29	SH
Surr: Decachlorobiphenyl	49	15.3-120		%REC	232802	1	11/16/2016 22:29	SH
Surr: Tetrachloro-m-xylene	69	23.4-131		%REC	232802	1	11/16/2016 22:29	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-3
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 1:32:00 PM
Lab ID:	1611A86-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
1,4-Dioxane	BRL	0.15		mg/L	233009	1	11/16/2016 03:52	NP
2-Butanone	BRL	0.050		mg/L	233009	1	11/16/2016 03:52	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233009	1	11/16/2016 03:52	NP
Acetone	BRL	0.050		mg/L	233009	1	11/16/2016 03:52	NP
Benzene	0.013	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Carbon disulfide	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Chlorobenzene	0.019	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Chloroethane	BRL	0.010		mg/L	233009	1	11/16/2016 03:52	NP
Chloroform	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Chloromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
cis-1,2-Dichloroethene	0.17	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Cyclohexane	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Ethylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233009	1	11/16/2016 03:52	NP
Isopropylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Methylene chloride	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Naphthalene	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Styrene	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Tetrachloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Tetrahydrofuran	BRL	0.010		mg/L	233009	1	11/16/2016 03:52	NP
Toluene	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Trichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Vinyl chloride	0.0030	0.0020		mg/L	233009	1	11/16/2016 03:52	NP
Xylenes, Total	BRL	0.0050		mg/L	233009	1	11/16/2016 03:52	NP
Surr: 4-Bromofluorobenzene	93.5	67-118		%REC	233009	1	11/16/2016 03:52	NP
Surr: Dibromofluoromethane	103	81.7-124		%REC	233009	1	11/16/2016 03:52	NP
Surr: Toluene-d8	98.7	82.5-122		%REC	233009	1	11/16/2016 03:52	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-3
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 1:32:00 PM
Lab ID:	1611A86-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 06:01	JS
Copper	0.893	0.0400		mg/L	232823	20	11/22/2016 22:45	JS
Lead	0.00260	0.00100		mg/L	232823	1	11/17/2016 06:01	JS
Zinc	2.19	0.200		mg/L	232823	20	11/22/2016 22:45	JS
ION SCAN SW9056A								
Nitrate	2.9	2.5		mg/L	R330012	10	11/11/2016 15:08	JW
Sulfate	610	10		mg/L	R330012	10	11/11/2016 15:08	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233183	1	11/20/2016 22:19	JS
Copper	0.680	0.00200		mg/L	233183	1	11/20/2016 22:19	JS
Lead	0.00204	0.00100		mg/L	233183	1	11/22/2016 16:16	JS
Zinc	1.94	0.100		mg/L	233183	10	11/21/2016 17:41	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/16/2016 22:40	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/16/2016 22:40	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/16/2016 22:40	SH
alpha-BHC	0.0014	0.000050		mg/L	232802	1	11/17/2016 21:59	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 22:40	SH
beta-BHC	0.0015	0.000050		mg/L	232802	1	11/16/2016 22:40	SH
delta-BHC	0.00043	0.000050		mg/L	232802	1	11/16/2016 22:40	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/16/2016 22:40	SH
gamma-BHC	0.00056	0.000050		mg/L	232802	1	11/17/2016 21:59	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 22:40	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/16/2016 22:40	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/16/2016 22:40	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/16/2016 22:40	SH
Surr: Decachlorobiphenyl	56	15.3-120		%REC	232802	1	11/16/2016 22:40	SH
Surr: Tetrachloro-m-xylene	123	23.4-131		%REC	232802	1	11/16/2016 22:40	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-5
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 3:12:00 PM
Lab ID:	1611A86-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
1,4-Dioxane	BRL	0.15		mg/L	233009	1	11/16/2016 04:15	NP
2-Butanone	BRL	0.050		mg/L	233009	1	11/16/2016 04:15	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233009	1	11/16/2016 04:15	NP
Acetone	BRL	0.050		mg/L	233009	1	11/16/2016 04:15	NP
Benzene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Carbon disulfide	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Chlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Chloroethane	BRL	0.010		mg/L	233009	1	11/16/2016 04:15	NP
Chloroform	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Chloromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Cyclohexane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Ethylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233009	1	11/16/2016 04:15	NP
Isopropylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Methylene chloride	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Naphthalene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Styrene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Tetrachloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Tetrahydrofuran	BRL	0.010		mg/L	233009	1	11/16/2016 04:15	NP
Toluene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Trichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Vinyl chloride	BRL	0.0020		mg/L	233009	1	11/16/2016 04:15	NP
Xylenes, Total	BRL	0.0050		mg/L	233009	1	11/16/2016 04:15	NP
Surr: 4-Bromofluorobenzene	92.4	67-118		%REC	233009	1	11/16/2016 04:15	NP
Surr: Dibromofluoromethane	103	81.7-124		%REC	233009	1	11/16/2016 04:15	NP
Surr: Toluene-d8	99.8	82.5-122		%REC	233009	1	11/16/2016 04:15	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-5
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 3:12:00 PM
Lab ID:	1611A86-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 06:08	JS
Copper	1.80	0.0200		mg/L	232823	10	11/22/2016 17:20	JS
Lead	0.00228	0.00100		mg/L	232823	1	11/17/2016 06:08	JS
Zinc	16.7	0.100		mg/L	232823	10	11/22/2016 17:20	JS
ION SCAN SW9056A								
Nitrate	23	2.5		mg/L	R330012	10	11/11/2016 15:23	JW
Sulfate	750	10		mg/L	R330012	10	11/11/2016 15:23	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	233183	1	11/20/2016 22:25	JS
Copper	1.21	0.00200		mg/L	233183	1	11/20/2016 22:25	JS
Lead	0.00196	0.00100		mg/L	233183	1	11/20/2016 22:25	JS
Zinc	14.7	0.100		mg/L	233183	10	11/21/2016 17:47	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/16/2016 22:51	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/16/2016 22:51	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/16/2016 22:51	SH
alpha-BHC	0.000059	0.000050		mg/L	232802	1	11/17/2016 22:18	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 22:51	SH
beta-BHC	0.00081	0.000050		mg/L	232802	1	11/16/2016 22:51	SH
delta-BHC	BRL	0.000050		mg/L	232802	1	11/16/2016 22:51	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/16/2016 22:51	SH
gamma-BHC	0.000077	0.000050		mg/L	232802	1	11/17/2016 22:18	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 22:51	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/16/2016 22:51	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/16/2016 22:51	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/16/2016 22:51	SH
Surr: Decachlorobiphenyl	46.8	15.3-120		%REC	232802	1	11/16/2016 22:51	SH
Surr: Tetrachloro-m-xylene	76.7	23.4-131		%REC	232802	1	11/16/2016 22:51	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-108
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 3:20:00 PM
Lab ID:	1611A86-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
1,4-Dioxane	BRL	0.15		mg/L	233009	1	11/16/2016 04:38	NP
2-Butanone	BRL	0.050		mg/L	233009	1	11/16/2016 04:38	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233009	1	11/16/2016 04:38	NP
Acetone	BRL	0.050		mg/L	233009	1	11/16/2016 04:38	NP
Benzene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Carbon disulfide	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Chlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Chloroethane	BRL	0.010		mg/L	233009	1	11/16/2016 04:38	NP
Chloroform	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Chloromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Cyclohexane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Ethylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233009	1	11/16/2016 04:38	NP
Isopropylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Methylene chloride	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Naphthalene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Styrene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Tetrachloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Tetrahydrofuran	BRL	0.010		mg/L	233009	1	11/16/2016 04:38	NP
Toluene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Trichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Vinyl chloride	BRL	0.0020		mg/L	233009	1	11/16/2016 04:38	NP
Xylenes, Total	BRL	0.0050		mg/L	233009	1	11/16/2016 04:38	NP
Surr: 4-Bromofluorobenzene	94	67-118		%REC	233009	1	11/16/2016 04:38	NP
Surr: Dibromofluoromethane	103	81.7-124		%REC	233009	1	11/16/2016 04:38	NP
Surr: Toluene-d8	99.3	82.5-122		%REC	233009	1	11/16/2016 04:38	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-108
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 3:20:00 PM
Lab ID:	1611A86-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 06:14	JS
Copper	0.443	0.0400		mg/L	232823	20	11/22/2016 22:58	JS
Lead	0.00396	0.00100		mg/L	232823	1	11/17/2016 06:14	JS
Zinc	3.54	0.200		mg/L	232823	20	11/22/2016 22:58	JS
ION SCAN SW9056A								
Nitrate	0.29	0.25		mg/L	R330012	1	11/11/2016 11:13	JW
Sulfate	330	10		mg/L	R330012	10	11/11/2016 15:38	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233183	1	11/20/2016 22:32	JS
Copper	0.242	0.00200		mg/L	233183	1	11/20/2016 22:32	JS
Lead	BRL	0.00100		mg/L	233183	1	11/20/2016 22:32	JS
Zinc	3.26	0.100		mg/L	233183	10	11/21/2016 17:53	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/16/2016 23:02	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/16/2016 23:02	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/16/2016 23:02	SH
alpha-BHC	0.0052	0.00050		mg/L	232802	10	11/17/2016 22:36	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 23:02	SH
beta-BHC	0.0014	0.000050		mg/L	232802	1	11/17/2016 22:55	SH
delta-BHC	0.0016	0.000050		mg/L	232802	1	11/16/2016 23:02	SH
Dieldrin	0.00012	0.00010		mg/L	232802	1	11/16/2016 23:02	SH
gamma-BHC	0.00031	0.000050		mg/L	232802	1	11/17/2016 22:55	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 23:02	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/16/2016 23:02	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/16/2016 23:02	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/16/2016 23:02	SH
Surr: Decachlorobiphenyl	27.1	15.3-120		%REC	232802	1	11/16/2016 23:02	SH
Surr: Tetrachloro-m-xylene	94.4	23.4-131		%REC	232802	1	11/16/2016 23:02	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-114
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 4:05:00 PM
Lab ID:	1611A86-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
1,4-Dioxane	BRL	0.15		mg/L	233009	1	11/16/2016 05:01	NP
2-Butanone	BRL	0.050		mg/L	233009	1	11/16/2016 05:01	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233009	1	11/16/2016 05:01	NP
Acetone	BRL	0.050		mg/L	233009	1	11/16/2016 05:01	NP
Benzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Carbon disulfide	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Chlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Chloroethane	BRL	0.010		mg/L	233009	1	11/16/2016 05:01	NP
Chloroform	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Chloromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Cyclohexane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Ethylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233009	1	11/16/2016 05:01	NP
Isopropylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Methylene chloride	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Naphthalene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Styrene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Tetrachloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Tetrahydrofuran	BRL	0.010		mg/L	233009	1	11/16/2016 05:01	NP
Toluene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Trichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Vinyl chloride	BRL	0.0020		mg/L	233009	1	11/16/2016 05:01	NP
Xylenes, Total	BRL	0.0050		mg/L	233009	1	11/16/2016 05:01	NP
Surr: 4-Bromofluorobenzene	94.5	67-118		%REC	233009	1	11/16/2016 05:01	NP
Surr: Dibromofluoromethane	101	81.7-124		%REC	233009	1	11/16/2016 05:01	NP
Surr: Toluene-d8	99.7	82.5-122		%REC	233009	1	11/16/2016 05:01	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-114
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 4:05:00 PM
Lab ID:	1611A86-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 06:20	JS
Copper	1.67	0.100		mg/L	232823	50	11/22/2016 23:04	JS
Lead	0.00124	0.00100		mg/L	232823	1	11/17/2016 06:20	JS
Zinc	7.82	0.500		mg/L	232823	50	11/22/2016 23:04	JS
ION SCAN SW9056A								
Nitrate	16	2.5		mg/L	R330012	10	11/11/2016 15:52	JW
Sulfate	520	10		mg/L	R330012	10	11/11/2016 15:52	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233183	1	11/20/2016 22:57	JS
Copper	1.55	0.100		mg/L	233183	50	11/22/2016 22:08	JS
Lead	BRL	0.00100		mg/L	233183	1	11/20/2016 22:57	JS
Zinc	7.30	0.500		mg/L	233183	50	11/22/2016 22:08	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/16/2016 23:13	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/16/2016 23:13	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/16/2016 23:13	SH
alpha-BHC	0.000072	0.000050		mg/L	232802	1	11/17/2016 23:31	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 23:13	SH
beta-BHC	0.0033	0.00050		mg/L	232802	10	11/17/2016 23:13	SH
delta-BHC	BRL	0.000050		mg/L	232802	1	11/16/2016 23:13	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/16/2016 23:13	SH
gamma-BHC	0.000087	0.000050		mg/L	232802	1	11/17/2016 23:31	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 23:13	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/16/2016 23:13	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/16/2016 23:13	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/16/2016 23:13	SH
Surr: Decachlorobiphenyl	28.1	15.3-120		%REC	232802	1	11/16/2016 23:13	SH
Surr: Tetrachloro-m-xylene	84.5	23.4-131		%REC	232802	1	11/16/2016 23:13	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-113
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 10:15:00 AM
Lab ID:	1611A86-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
1,4-Dioxane	BRL	0.15		mg/L	233009	1	11/16/2016 05:25	NP
2-Butanone	BRL	0.050		mg/L	233009	1	11/16/2016 05:25	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233009	1	11/16/2016 05:25	NP
Acetone	BRL	0.050		mg/L	233009	1	11/16/2016 05:25	NP
Benzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Carbon disulfide	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Chlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Chloroethane	BRL	0.010		mg/L	233009	1	11/16/2016 05:25	NP
Chloroform	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Chloromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
cis-1,2-Dichloroethene	0.066	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Cyclohexane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Ethylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233009	1	11/16/2016 05:25	NP
Isopropylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Methylene chloride	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Naphthalene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Styrene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Tetrachloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Tetrahydrofuran	BRL	0.010		mg/L	233009	1	11/16/2016 05:25	NP
Toluene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Trichloroethene	0.062	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Vinyl chloride	BRL	0.0020		mg/L	233009	1	11/16/2016 05:25	NP
Xylenes, Total	BRL	0.0050		mg/L	233009	1	11/16/2016 05:25	NP
Surr: 4-Bromofluorobenzene	91.6	67-118		%REC	233009	1	11/16/2016 05:25	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	233009	1	11/16/2016 05:25	NP
Surr: Toluene-d8	99.9	82.5-122		%REC	233009	1	11/16/2016 05:25	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-113
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 10:15:00 AM
Lab ID:	1611A86-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 06:27	JS
Copper	16.8	1.00		mg/L	232823	500	11/22/2016 23:35	JS
Lead	0.00328	0.00100		mg/L	232823	1	11/17/2016 06:27	JS
Zinc	94.1	0.500		mg/L	232823	50	11/22/2016 23:29	JS
ION SCAN SW9056A								
Nitrate	BRL	5.0		mg/L	R330012	20	11/11/2016 17:20	JW
Sulfate	1800	20		mg/L	R330012	20	11/11/2016 17:20	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233183	1	11/20/2016 23:03	JS
Copper	14.7	0.200		mg/L	233183	100	11/22/2016 13:53	JS
Lead	0.00303	0.00100		mg/L	233183	1	11/20/2016 23:03	JS
Zinc	93.3	1.00		mg/L	233183	100	11/22/2016 13:53	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/16/2016 23:24	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/16/2016 23:24	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/16/2016 23:24	SH
alpha-BHC	0.00045	0.000050		mg/L	232802	1	11/17/2016 23:50	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 23:24	SH
beta-BHC	0.00096	0.000050		mg/L	232802	1	11/16/2016 23:24	SH
delta-BHC	0.00051	0.000050		mg/L	232802	1	11/16/2016 23:24	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/16/2016 23:24	SH
gamma-BHC	0.00039	0.000050		mg/L	232802	1	11/17/2016 23:50	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 23:24	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/16/2016 23:24	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/16/2016 23:24	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/16/2016 23:24	SH
Surr: Decachlorobiphenyl	41.5	15.3-120		%REC	232802	1	11/16/2016 23:24	SH
Surr: Tetrachloro-m-xylene	79.3	23.4-131		%REC	232802	1	11/16/2016 23:24	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-115
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 10:20:00 AM
Lab ID:	1611A86-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
1,4-Dioxane	BRL	0.15		mg/L	233009	1	11/16/2016 05:48	NP
2-Butanone	BRL	0.050		mg/L	233009	1	11/16/2016 05:48	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233009	1	11/16/2016 05:48	NP
Acetone	BRL	0.050		mg/L	233009	1	11/16/2016 05:48	NP
Benzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Carbon disulfide	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Chlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Chloroethane	BRL	0.010		mg/L	233009	1	11/16/2016 05:48	NP
Chloroform	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Chloromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Cyclohexane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Ethylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233009	1	11/16/2016 05:48	NP
Isopropylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Methylene chloride	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Naphthalene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Styrene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Tetrachloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Tetrahydrofuran	BRL	0.010		mg/L	233009	1	11/16/2016 05:48	NP
Toluene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Trichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Vinyl chloride	BRL	0.0020		mg/L	233009	1	11/16/2016 05:48	NP
Xylenes, Total	BRL	0.0050		mg/L	233009	1	11/16/2016 05:48	NP
Surr: 4-Bromofluorobenzene	93.1	67-118		%REC	233009	1	11/16/2016 05:48	NP
Surr: Dibromofluoromethane	101	81.7-124		%REC	233009	1	11/16/2016 05:48	NP
Surr: Toluene-d8	99.3	82.5-122		%REC	233009	1	11/16/2016 05:48	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-115
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 10:20:00 AM
Lab ID:	1611A86-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 06:33	JS
Copper	5.30	0.100		mg/L	232823	50	11/22/2016 23:42	JS
Lead	0.00120	0.00100		mg/L	232823	1	11/17/2016 06:33	JS
Zinc	14.0	0.500		mg/L	232823	50	11/22/2016 23:42	JS
ION SCAN SW9056A								
Nitrate	BRL	5.0		mg/L	R330012	20	11/11/2016 17:35	JW
Sulfate	720	20		mg/L	R330012	20	11/11/2016 17:35	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233183	1	11/20/2016 23:09	JS
Copper	4.79	0.100		mg/L	233183	50	11/22/2016 22:14	JS
Lead	BRL	0.00100		mg/L	233183	1	11/20/2016 23:09	JS
Zinc	13.4	0.500		mg/L	233183	50	11/22/2016 22:14	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/16/2016 23:35	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/16/2016 23:35	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/16/2016 23:35	SH
alpha-BHC	0.00026	0.000050		mg/L	232802	1	11/18/2016 00:08	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 23:35	SH
beta-BHC	0.00027	0.000050		mg/L	232802	1	11/16/2016 23:35	SH
delta-BHC	0.000051	0.000050		mg/L	232802	1	11/16/2016 23:35	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/16/2016 23:35	SH
gamma-BHC	0.000067	0.000050		mg/L	232802	1	11/18/2016 00:08	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 23:35	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/16/2016 23:35	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/16/2016 23:35	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/16/2016 23:35	SH
Surr: Decachlorobiphenyl	36.4	15.3-120		%REC	232802	1	11/16/2016 23:35	SH
Surr: Tetrachloro-m-xylene	87.2	23.4-131		%REC	232802	1	11/16/2016 23:35	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-117
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 12:20:00 PM
Lab ID:	1611A86-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
1,4-Dioxane	BRL	0.15		mg/L	233009	1	11/16/2016 10:31	NP
2-Butanone	BRL	0.050		mg/L	233009	1	11/16/2016 10:31	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233009	1	11/16/2016 10:31	NP
Acetone	BRL	0.050		mg/L	233009	1	11/16/2016 10:31	NP
Benzene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Carbon disulfide	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Chlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Chloroethane	BRL	0.010		mg/L	233009	1	11/16/2016 10:31	NP
Chloroform	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Chloromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Cyclohexane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Ethylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233009	1	11/16/2016 10:31	NP
Isopropylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Methylene chloride	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Naphthalene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Styrene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Tetrachloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Tetrahydrofuran	BRL	0.010		mg/L	233009	1	11/16/2016 10:31	NP
Toluene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Trichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Vinyl chloride	BRL	0.0020		mg/L	233009	1	11/16/2016 10:31	NP
Xylenes, Total	BRL	0.0050		mg/L	233009	1	11/16/2016 10:31	NP
Surr: 4-Bromofluorobenzene	93.3	67-118		%REC	233009	1	11/16/2016 10:31	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	233009	1	11/16/2016 10:31	NP
Surr: Toluene-d8	100	82.5-122		%REC	233009	1	11/16/2016 10:31	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-117
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 12:20:00 PM
Lab ID:	1611A86-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 06:58	JS
Copper	0.0426	0.00200		mg/L	232823	1	11/22/2016 16:47	JS
Lead	0.00131	0.00100		mg/L	232823	1	11/17/2016 06:58	JS
Zinc	0.711	0.0100		mg/L	232823	1	11/22/2016 16:47	JS
ION SCAN SW9056A								
Nitrate	4.1	0.25		mg/L	R330012	1	11/11/2016 12:12	JW
Sulfate	140	10		mg/L	R330012	10	11/11/2016 17:50	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233183	1	11/20/2016 23:16	JS
Copper	0.0337	0.00200		mg/L	233183	1	11/22/2016 17:26	JS
Lead	BRL	0.00100		mg/L	233183	1	11/20/2016 23:16	JS
Zinc	0.663	0.0100		mg/L	233183	1	11/22/2016 17:26	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/16/2016 23:46	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/16/2016 23:46	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/16/2016 23:46	SH
alpha-BHC	BRL	0.000050		mg/L	232802	1	11/16/2016 23:46	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 23:46	SH
beta-BHC	BRL	0.000050		mg/L	232802	1	11/16/2016 23:46	SH
delta-BHC	BRL	0.000050		mg/L	232802	1	11/16/2016 23:46	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/16/2016 23:46	SH
gamma-BHC	BRL	0.000050		mg/L	232802	1	11/16/2016 23:46	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 23:46	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/16/2016 23:46	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/16/2016 23:46	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/16/2016 23:46	SH
Surr: Decachlorobiphenyl	52.5	15.3-120		%REC	232802	1	11/16/2016 23:46	SH
Surr: Tetrachloro-m-xylene	94.4	23.4-131		%REC	232802	1	11/16/2016 23:46	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-116
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 3:40:00 PM
Lab ID:	1611A86-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
1,4-Dioxane	BRL	0.15		mg/L	233009	1	11/16/2016 10:54	NP
2-Butanone	BRL	0.050		mg/L	233009	1	11/16/2016 10:54	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233009	1	11/16/2016 10:54	NP
Acetone	BRL	0.050		mg/L	233009	1	11/16/2016 10:54	NP
Benzene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Carbon disulfide	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Chlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Chloroethane	BRL	0.010		mg/L	233009	1	11/16/2016 10:54	NP
Chloroform	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Chloromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Cyclohexane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Ethylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233009	1	11/16/2016 10:54	NP
Isopropylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Methylene chloride	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Naphthalene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Styrene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Tetrachloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Tetrahydrofuran	BRL	0.010		mg/L	233009	1	11/16/2016 10:54	NP
Toluene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Trichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Vinyl chloride	BRL	0.0020		mg/L	233009	1	11/16/2016 10:54	NP
Xylenes, Total	BRL	0.0050		mg/L	233009	1	11/16/2016 10:54	NP
Surr: 4-Bromofluorobenzene	95.3	67-118		%REC	233009	1	11/16/2016 10:54	NP
Surr: Dibromofluoromethane	103	81.7-124		%REC	233009	1	11/16/2016 10:54	NP
Surr: Toluene-d8	102	82.5-122		%REC	233009	1	11/16/2016 10:54	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-116
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 3:40:00 PM
Lab ID:	1611A86-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 07:04	JS
Copper	3.44	0.100		mg/L	232823	50	11/22/2016 23:48	JS
Lead	0.00109	0.00100		mg/L	232823	1	11/17/2016 07:04	JS
Zinc	8.79	0.500		mg/L	232823	50	11/22/2016 23:48	JS
ION SCAN SW9056A								
Nitrate	65	5.0		mg/L	R330012	20	11/11/2016 18:05	JW
Sulfate	510	20		mg/L	R330012	20	11/11/2016 18:05	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233183	1	11/20/2016 23:22	JS
Copper	3.22	0.100		mg/L	233183	50	11/22/2016 22:20	JS
Lead	BRL	0.00100		mg/L	233183	1	11/20/2016 23:22	JS
Zinc	8.26	0.500		mg/L	233183	50	11/22/2016 22:20	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/16/2016 23:57	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/16/2016 23:57	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/16/2016 23:57	SH
alpha-BHC	0.00015	0.000050		mg/L	232802	1	11/18/2016 00:27	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 23:57	SH
beta-BHC	0.00046	0.000050		mg/L	232802	1	11/16/2016 23:57	SH
delta-BHC	BRL	0.000050		mg/L	232802	1	11/16/2016 23:57	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/16/2016 23:57	SH
gamma-BHC	0.00012	0.000050		mg/L	232802	1	11/18/2016 00:27	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 23:57	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/16/2016 23:57	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/16/2016 23:57	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/16/2016 23:57	SH
Surr: Decachlorobiphenyl	61.5	15.3-120		%REC	232802	1	11/16/2016 23:57	SH
Surr: Tetrachloro-m-xylene	90.8	23.4-131		%REC	232802	1	11/16/2016 23:57	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-111
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 2:00:00 PM
Lab ID:	1611A86-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
1,4-Dioxane	BRL	0.15		mg/L	233009	1	11/16/2016 11:17	NP
2-Butanone	BRL	0.050		mg/L	233009	1	11/16/2016 11:17	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233009	1	11/16/2016 11:17	NP
Acetone	BRL	0.050		mg/L	233009	1	11/16/2016 11:17	NP
Benzene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Carbon disulfide	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Chlorobenzene	0.080	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Chloroethane	BRL	0.010		mg/L	233009	1	11/16/2016 11:17	NP
Chloroform	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Chloromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Cyclohexane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Ethylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233009	1	11/16/2016 11:17	NP
Isopropylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Methylene chloride	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Naphthalene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Styrene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Tetrachloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Tetrahydrofuran	BRL	0.010		mg/L	233009	1	11/16/2016 11:17	NP
Toluene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Trichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Vinyl chloride	BRL	0.0020		mg/L	233009	1	11/16/2016 11:17	NP
Xylenes, Total	BRL	0.0050		mg/L	233009	1	11/16/2016 11:17	NP
Surr: 4-Bromofluorobenzene	92.4	67-118		%REC	233009	1	11/16/2016 11:17	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	233009	1	11/16/2016 11:17	NP
Surr: Toluene-d8	101	82.5-122		%REC	233009	1	11/16/2016 11:17	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-111
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 2:00:00 PM
Lab ID:	1611A86-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 19:58	JS
Copper	0.0225	0.00200		mg/L	232823	1	11/17/2016 07:10	JS
Lead	0.00221	0.00100		mg/L	232823	1	11/17/2016 07:10	JS
Zinc	4.78	0.500		mg/L	232823	50	11/22/2016 23:54	JS
ION SCAN SW9056A								
Nitrate	BRL	2.5		mg/L	R330012	10	11/11/2016 18:19	JW
Sulfate	450	10		mg/L	R330012	10	11/11/2016 18:19	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	233183	1	11/20/2016 23:28	JS
Copper	0.0217	0.00200		mg/L	233183	1	11/20/2016 23:28	JS
Lead	BRL	0.00100		mg/L	233183	1	11/20/2016 23:28	JS
Zinc	4.48	0.500		mg/L	233183	50	11/22/2016 22:26	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/17/2016 00:09	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/17/2016 00:09	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/17/2016 00:09	SH
alpha-BHC	0.017	0.0010		mg/L	232802	20	11/18/2016 00:45	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/17/2016 00:09	SH
beta-BHC	0.0059	0.0010		mg/L	232802	20	11/18/2016 00:45	SH
delta-BHC	0.046	0.0050		mg/L	232802	100	11/18/2016 13:01	SH
Dieldrin	0.00015	0.00010		mg/L	232802	1	11/17/2016 00:09	SH
gamma-BHC	0.018	0.0010		mg/L	232802	20	11/18/2016 00:45	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/17/2016 00:09	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/17/2016 00:09	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/17/2016 00:09	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/17/2016 00:09	SH
Surr: Decachlorobiphenyl	37.8	15.3-120		%REC	232802	1	11/17/2016 00:09	SH
Surr: Tetrachloro-m-xylene	93.4	23.4-131		%REC	232802	1	11/17/2016 00:09	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-109
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 3:40:00 PM
Lab ID:	1611A86-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
1,4-Dioxane	BRL	0.15		mg/L	233009	1	11/16/2016 11:40	NP
2-Butanone	BRL	0.050		mg/L	233009	1	11/16/2016 11:40	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233009	1	11/16/2016 11:40	NP
Acetone	BRL	0.050		mg/L	233009	1	11/16/2016 11:40	NP
Benzene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Carbon disulfide	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Chlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Chloroethane	BRL	0.010		mg/L	233009	1	11/16/2016 11:40	NP
Chloroform	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Chloromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Cyclohexane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Ethylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233009	1	11/16/2016 11:40	NP
Isopropylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Methylene chloride	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Naphthalene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Styrene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Tetrachloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Tetrahydrofuran	BRL	0.010		mg/L	233009	1	11/16/2016 11:40	NP
Toluene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Trichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Vinyl chloride	BRL	0.0020		mg/L	233009	1	11/16/2016 11:40	NP
Xylenes, Total	BRL	0.0050		mg/L	233009	1	11/16/2016 11:40	NP
Surr: 4-Bromofluorobenzene	95.1	67-118		%REC	233009	1	11/16/2016 11:40	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	233009	1	11/16/2016 11:40	NP
Surr: Toluene-d8	99.7	82.5-122		%REC	233009	1	11/16/2016 11:40	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-109
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 3:40:00 PM
Lab ID:	1611A86-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	0.0296	0.00500		mg/L	232823	1	11/17/2016 07:17	JS
Copper	0.164	0.00200		mg/L	232823	1	11/17/2016 07:17	JS
Lead	0.636	0.100		mg/L	232823	100	11/23/2016 00:00	JS
Zinc	27.0	1.00		mg/L	232823	100	11/23/2016 00:00	JS
ION SCAN SW9056A								
Nitrate	7.4	5.0		mg/L	R330012	20	11/11/2016 18:34	JW
Sulfate	1400	20		mg/L	R330012	20	11/11/2016 18:34	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	0.0159	0.00500		mg/L	233183	1	11/20/2016 23:34	JS
Copper	0.158	0.00200		mg/L	233183	1	11/20/2016 23:34	JS
Lead	0.162	0.00100		mg/L	233183	1	11/20/2016 23:34	JS
Zinc	25.8	1.00		mg/L	233183	100	11/22/2016 13:59	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/17/2016 00:20	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/17/2016 00:20	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/17/2016 00:20	SH
alpha-BHC	0.038	0.0020		mg/L	232802	40	11/18/2016 13:20	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/17/2016 00:20	SH
beta-BHC	0.0047	0.0010		mg/L	232802	20	11/18/2016 01:04	SH
delta-BHC	0.0054	0.0010		mg/L	232802	20	11/18/2016 01:04	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/17/2016 00:20	SH
gamma-BHC	0.022	0.0010		mg/L	232802	20	11/18/2016 01:04	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/17/2016 00:20	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/17/2016 00:20	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/17/2016 00:20	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/17/2016 00:20	SH
Surr: Decachlorobiphenyl	34.8	15.3-120		%REC	232802	1	11/17/2016 00:20	SH
Surr: Tetrachloro-m-xylene	99.3	23.4-131		%REC	232802	1	11/17/2016 00:20	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-110
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 11:41:00 AM
Lab ID:	1611A86-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
1,4-Dioxane	BRL	0.15		mg/L	233009	1	11/16/2016 12:04	NP
2-Butanone	BRL	0.050		mg/L	233009	1	11/16/2016 12:04	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233009	1	11/16/2016 12:04	NP
Acetone	BRL	0.050		mg/L	233009	1	11/16/2016 12:04	NP
Benzene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Carbon disulfide	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Chlorobenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Chloroethane	BRL	0.010		mg/L	233009	1	11/16/2016 12:04	NP
Chloroform	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Chloromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Cyclohexane	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Ethylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233009	1	11/16/2016 12:04	NP
Isopropylbenzene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Methylene chloride	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Naphthalene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Styrene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Tetrachloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Tetrahydrofuran	BRL	0.010		mg/L	233009	1	11/16/2016 12:04	NP
Toluene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Trichloroethene	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Vinyl chloride	BRL	0.0020		mg/L	233009	1	11/16/2016 12:04	NP
Xylenes, Total	BRL	0.0050		mg/L	233009	1	11/16/2016 12:04	NP
Surr: 4-Bromofluorobenzene	94.4	67-118		%REC	233009	1	11/16/2016 12:04	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	233009	1	11/16/2016 12:04	NP
Surr: Toluene-d8	100	82.5-122		%REC	233009	1	11/16/2016 12:04	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-110
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 11:41:00 AM
Lab ID:	1611A86-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 20:10	JS
Copper	0.862	0.100		mg/L	232823	50	11/23/2016 00:13	JS
Lead	BRL	0.00100		mg/L	232823	1	11/17/2016 07:23	JS
Zinc	6.58	0.500		mg/L	232823	50	11/23/2016 00:13	JS
ION SCAN SW9056A								
Nitrate	4.0	0.25		mg/L	R330012	1	11/11/2016 13:55	JW
Sulfate	320	10		mg/L	R330012	10	11/11/2016 18:49	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233183	1	11/20/2016 23:41	JS
Copper	0.300	0.00200		mg/L	233183	1	11/20/2016 23:41	JS
Lead	BRL	0.00100		mg/L	233183	1	11/20/2016 23:41	JS
Zinc	4.47	0.500		mg/L	233183	50	11/22/2016 22:33	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/17/2016 00:31	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/17/2016 00:31	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/17/2016 00:31	SH
alpha-BHC	0.00052	0.000050		mg/L	232802	1	11/18/2016 01:22	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/17/2016 00:31	SH
beta-BHC	0.00035	0.000050		mg/L	232802	1	11/17/2016 00:31	SH
delta-BHC	0.0013	0.000050		mg/L	232802	1	11/17/2016 00:31	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/17/2016 00:31	SH
gamma-BHC	0.00046	0.000050		mg/L	232802	1	11/18/2016 01:22	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/17/2016 00:31	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/17/2016 00:31	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/17/2016 00:31	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/17/2016 00:31	SH
Surr: Decachlorobiphenyl	44.2	15.3-120		%REC	232802	1	11/17/2016 00:31	SH
Surr: Tetrachloro-m-xylene	83.6	23.4-131		%REC	232802	1	11/17/2016 00:31	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	DUP-2
Project Name:	BFEL Atlanta	**Collection Date:**	11/10/2016 12:00:00 PM
Lab ID:	1611A86-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	0.0306	0.00500		mg/L	232939	1	11/17/2016 10:19	JS
Copper	0.167	0.00200		mg/L	232939	1	11/17/2016 10:19	JS
Lead	0.711	0.00500		mg/L	232939	5	11/18/2016 16:41	JS
Zinc	20.1	0.0500		mg/L	232939	5	11/18/2016 16:41	JS
ION SCAN SW9056A								
Nitrate	7.6	5.0		mg/L	R330012	20	11/11/2016 19:03	JW
Sulfate	1400	20		mg/L	R330012	20	11/11/2016 19:03	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	0.0161	0.00500		mg/L	233183	1	11/20/2016 23:47	JS
Copper	0.151	0.00200		mg/L	233183	1	11/20/2016 23:47	JS
Lead	0.189	0.00100		mg/L	233183	1	11/20/2016 23:47	JS
Zinc	27.7	1.00		mg/L	233183	100	11/22/2016 14:05	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/17/2016 00:42	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/17/2016 00:42	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/17/2016 00:42	SH
alpha-BHC	0.032	0.0010		mg/L	232802	20	11/18/2016 01:40	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/17/2016 00:42	SH
beta-BHC	0.0047	0.0010		mg/L	232802	20	11/18/2016 01:40	SH
delta-BHC	0.0052	0.0010		mg/L	232802	20	11/18/2016 01:40	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/17/2016 00:42	SH
gamma-BHC	0.020	0.0010		mg/L	232802	20	11/18/2016 01:40	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/17/2016 00:42	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/17/2016 00:42	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/17/2016 00:42	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/17/2016 00:42	SH
Surr: Decachlorobiphenyl	41.6	15.3-120		%REC	232802	1	11/17/2016 00:42	SH
Surr: Tetrachloro-m-xylene	90.5	23.4-131		%REC	232802	1	11/17/2016 00:42	SH

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client AMEC Work Order Number 1611A86

Checklist completed by Pars Masoudi 11/10/2016
Signature Date

Carrier name: FedEx __ UPS __ Courier ✓ Client __ US Mail __ Other _____

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

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

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 2.4°C Cooler #2 2.4°C Cooler #3 1.6°C Cooler #4 1.5°C Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

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

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

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by PM

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611A86

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611A86-001A	TB-03	11/10/2016 9:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		11/15/2016 6:30:00 PM	11/15/2016
1611A86-002A	MW-25	11/10/2016 11:02:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 6:30:00 PM	11/16/2016
1611A86-002B	MW-25	11/10/2016 11:02:00AM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611A86-002B	MW-25	11/10/2016 11:02:00AM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/22/2016
1611A86-002C	MW-25	11/10/2016 11:02:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/20/2016
1611A86-002C	MW-25	11/10/2016 11:02:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611A86-002D	MW-25	11/10/2016 11:02:00AM	Groundwater	ION SCAN			11/11/2016
1611A86-002E	MW-25	11/10/2016 11:02:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/16/2016
1611A86-002E	MW-25	11/10/2016 11:02:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/17/2016
1611A86-003A	TW-3	11/10/2016 1:32:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 6:30:00 PM	11/16/2016
1611A86-003B	TW-3	11/10/2016 1:32:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611A86-003B	TW-3	11/10/2016 1:32:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/22/2016
1611A86-003C	TW-3	11/10/2016 1:32:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/20/2016
1611A86-003C	TW-3	11/10/2016 1:32:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611A86-003C	TW-3	11/10/2016 1:32:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611A86-003D	TW-3	11/10/2016 1:32:00PM	Groundwater	ION SCAN			11/11/2016
1611A86-003E	TW-3	11/10/2016 1:32:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/16/2016
1611A86-003E	TW-3	11/10/2016 1:32:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/17/2016
1611A86-004A	TW-5	11/10/2016 3:12:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 6:30:00 PM	11/16/2016
1611A86-004B	TW-5	11/10/2016 3:12:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611A86-004B	TW-5	11/10/2016 3:12:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/22/2016
1611A86-004C	TW-5	11/10/2016 3:12:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/20/2016
1611A86-004C	TW-5	11/10/2016 3:12:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611A86-004D	TW-5	11/10/2016 3:12:00PM	Groundwater	ION SCAN			11/11/2016
1611A86-004E	TW-5	11/10/2016 3:12:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/16/2016
1611A86-004E	TW-5	11/10/2016 3:12:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/17/2016
1611A86-005A	MW-108	11/10/2016 3:20:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 6:30:00 PM	11/16/2016
1611A86-005B	MW-108	11/10/2016 3:20:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611A86-005B	MW-108	11/10/2016 3:20:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/22/2016

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611A86

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611A86-005C	MW-108	11/10/2016 3:20:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/20/2016
1611A86-005C	MW-108	11/10/2016 3:20:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611A86-005D	MW-108	11/10/2016 3:20:00PM	Groundwater	ION SCAN			11/11/2016
1611A86-005E	MW-108	11/10/2016 3:20:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/16/2016
1611A86-005E	MW-108	11/10/2016 3:20:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/17/2016
1611A86-006A	MW-114	11/10/2016 4:05:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 6:30:00 PM	11/16/2016
1611A86-006B	MW-114	11/10/2016 4:05:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611A86-006B	MW-114	11/10/2016 4:05:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/22/2016
1611A86-006C	MW-114	11/10/2016 4:05:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/20/2016
1611A86-006C	MW-114	11/10/2016 4:05:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611A86-006D	MW-114	11/10/2016 4:05:00PM	Groundwater	ION SCAN			11/11/2016
1611A86-006E	MW-114	11/10/2016 4:05:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/16/2016
1611A86-006E	MW-114	11/10/2016 4:05:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/17/2016
1611A86-007A	MW-113	11/10/2016 10:15:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 6:30:00 PM	11/16/2016
1611A86-007B	MW-113	11/10/2016 10:15:00AM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611A86-007B	MW-113	11/10/2016 10:15:00AM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/22/2016
1611A86-007C	MW-113	11/10/2016 10:15:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/20/2016
1611A86-007C	MW-113	11/10/2016 10:15:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611A86-007D	MW-113	11/10/2016 10:15:00AM	Groundwater	ION SCAN			11/11/2016
1611A86-007E	MW-113	11/10/2016 10:15:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/16/2016
1611A86-007E	MW-113	11/10/2016 10:15:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/17/2016
1611A86-008A	MW-115	11/10/2016 10:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 6:30:00 PM	11/16/2016
1611A86-008B	MW-115	11/10/2016 10:20:00AM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611A86-008B	MW-115	11/10/2016 10:20:00AM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/22/2016
1611A86-008C	MW-115	11/10/2016 10:20:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/20/2016
1611A86-008C	MW-115	11/10/2016 10:20:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611A86-008D	MW-115	11/10/2016 10:20:00AM	Groundwater	ION SCAN			11/11/2016
1611A86-008E	MW-115	11/10/2016 10:20:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/16/2016
1611A86-008E	MW-115	11/10/2016 10:20:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/18/2016

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611A86

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611A86-009A	MW-117	11/10/2016 12:20:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 6:30:00 PM	11/16/2016
1611A86-009B	MW-117	11/10/2016 12:20:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611A86-009B	MW-117	11/10/2016 12:20:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/22/2016
1611A86-009C	MW-117	11/10/2016 12:20:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/20/2016
1611A86-009C	MW-117	11/10/2016 12:20:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611A86-009D	MW-117	11/10/2016 12:20:00PM	Groundwater	ION SCAN			11/11/2016
1611A86-009E	MW-117	11/10/2016 12:20:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/16/2016
1611A86-010A	MW-116	11/10/2016 3:40:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 6:30:00 PM	11/16/2016
1611A86-010B	MW-116	11/10/2016 3:40:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611A86-010B	MW-116	11/10/2016 3:40:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/22/2016
1611A86-010C	MW-116	11/10/2016 3:40:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/20/2016
1611A86-010C	MW-116	11/10/2016 3:40:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611A86-010D	MW-116	11/10/2016 3:40:00PM	Groundwater	ION SCAN			11/11/2016
1611A86-010E	MW-116	11/10/2016 3:40:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/16/2016
1611A86-010E	MW-116	11/10/2016 3:40:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/18/2016
1611A86-011A	MW-111	11/10/2016 2:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 6:30:00 PM	11/16/2016
1611A86-011B	MW-111	11/10/2016 2:00:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611A86-011B	MW-111	11/10/2016 2:00:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/22/2016
1611A86-011C	MW-111	11/10/2016 2:00:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/20/2016
1611A86-011C	MW-111	11/10/2016 2:00:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611A86-011D	MW-111	11/10/2016 2:00:00PM	Groundwater	ION SCAN			11/11/2016
1611A86-011E	MW-111	11/10/2016 2:00:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/17/2016
1611A86-011E	MW-111	11/10/2016 2:00:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/18/2016
1611A86-012A	MW-109	11/10/2016 3:40:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 6:30:00 PM	11/16/2016
1611A86-012B	MW-109	11/10/2016 3:40:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611A86-012B	MW-109	11/10/2016 3:40:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/23/2016
1611A86-012C	MW-109	11/10/2016 3:40:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/20/2016
1611A86-012C	MW-109	11/10/2016 3:40:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611A86-012D	MW-109	11/10/2016 3:40:00PM	Groundwater	ION SCAN			11/11/2016

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611A86

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611A86-012E	MW-109	11/10/2016 3:40:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/17/2016
1611A86-012E	MW-109	11/10/2016 3:40:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/18/2016
1611A86-013A	MW-110	11/10/2016 11:41:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 6:30:00 PM	11/16/2016
1611A86-013B	MW-110	11/10/2016 11:41:00AM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611A86-013B	MW-110	11/10/2016 11:41:00AM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/23/2016
1611A86-013C	MW-110	11/10/2016 11:41:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/20/2016
1611A86-013C	MW-110	11/10/2016 11:41:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611A86-013D	MW-110	11/10/2016 11:41:00AM	Groundwater	ION SCAN			11/11/2016
1611A86-013E	MW-110	11/10/2016 11:41:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/17/2016
1611A86-013E	MW-110	11/10/2016 11:41:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/18/2016
1611A86-014A	DUP-2	11/10/2016 12:00:00PM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/17/2016
1611A86-014A	DUP-2	11/10/2016 12:00:00PM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/18/2016
1611A86-014B	DUP-2	11/10/2016 12:00:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/20/2016
1611A86-014B	DUP-2	11/10/2016 12:00:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611A86-014C	DUP-2	11/10/2016 12:00:00PM	Groundwater	ION SCAN			11/11/2016
1611A86-014D	DUP-2	11/10/2016 12:00:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/17/2016
1611A86-014D	DUP-2	11/10/2016 12:00:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/18/2016

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611A86

ANALYTICAL QC SUMMARY REPORT

BatchID: 232802

Sample ID: **MB-232802** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **330080**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232802** Analysis Date: **11/15/2016** Seq No: **7175895**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	0.00010									
4,4´-DDE	BRL	0.00010									
4,4´-DDT	BRL	0.00010									
alpha-BHC	BRL	0.000050									
alpha-Chlordane	BRL	0.000050									
beta-BHC	BRL	0.000050									
delta-BHC	BRL	0.000050									
Dieldrin	BRL	0.00010									
gamma-BHC	BRL	0.000050									
gamma-Chlordane	BRL	0.000050									
Heptachlor	BRL	0.000050									
Methoxychlor	BRL	0.00050									
Toxaphene	BRL	0.0050									
Surr: Decachlorobiphenyl	0.000290	0	0.0005		58.0	15.3	120				
Surr: Tetrachloro-m-xylene	0.000440	0	0.0005		88.0	23.4	131				

Sample ID: **LCS-232802** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **330080**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232802** Analysis Date: **11/15/2016** Seq No: **7175897**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.000811	0.00010	0.0010		81.1	78.2	126				
Dieldrin	0.000819	0.00010	0.0010		81.9	74.4	125				
gamma-BHC	0.000824	0.000050	0.0010		82.4	65.6	131				
Heptachlor	0.000807	0.000050	0.0010		80.7	58.9	126				
Surr: Decachlorobiphenyl	0.000244	0	0.0005		48.7	15.3	120				
Surr: Tetrachloro-m-xylene	0.000440	0	0.0005		88.0	23.4	131				

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611A86

ANALYTICAL QC SUMMARY REPORT

BatchID: 232802

Sample ID: **1611903-007EMS**	Client ID:				Units: **mg/L**		Prep Date: **11/14/2016**		Run No: **330080**	
SampleType: **MS**	TestCode: **CHLORINATED PESTICIDES, TCL SW8081B**				BatchID: **232802**		Analysis Date: **11/15/2016**		Seq No: **7175902**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.000936	0.00010	0.0010		93.7	40.5	145				
Dieldrin	0.000945	0.00010	0.0010	0.00003427	91.1	47.8	143				
Heptachlor	0.001077	0.000050	0.0010		108	36.5	144				
Surr: Decachlorobiphenyl	0.000386	0	0.0005		77.3	15.3	120				
Surr: Tetrachloro-m-xylene	0.000384	0	0.0005		76.8	23.4	131				

Sample ID: **1611903-007EMS**	Client ID:				Units: **mg/L**		Prep Date: **11/14/2016**		Run No: **330272**	
SampleType: **MS**	TestCode: **CHLORINATED PESTICIDES, TCL SW8081B**				BatchID: **232802**		Analysis Date: **11/17/2016**		Seq No: **7178719**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
gamma-BHC	0.004959	0.00050	0.0010	0.003951	101	52.5	146				

Sample ID: **1611903-007EMSD**	Client ID:				Units: **mg/L**		Prep Date: **11/14/2016**		Run No: **330080**	
SampleType: **MSD**	TestCode: **CHLORINATED PESTICIDES, TCL SW8081B**				BatchID: **232802**		Analysis Date: **11/15/2016**		Seq No: **7175903**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.000898	0.00010	0.0010		89.8	40.5	145	0.0009365	4.21	23.6	
Dieldrin	0.000893	0.00010	0.0010	0.00003427	85.9	47.8	143	0.0009453	5.66	20	
Heptachlor	0.000998	0.000050	0.0010		99.9	36.5	144	0.001077	7.57	25.8	
Surr: Decachlorobiphenyl	0.000376	0	0.0005		75.1	15.3	120	0.0003865	0	0	
Surr: Tetrachloro-m-xylene	0.000369	0	0.0005		73.9	23.4	131	0.0003842	0	0	

Sample ID: **1611903-007EMSD**	Client ID:				Units: **mg/L**		Prep Date: **11/14/2016**		Run No: **330272**	
SampleType: **MSD**	TestCode: **CHLORINATED PESTICIDES, TCL SW8081B**				BatchID: **232802**		Analysis Date: **11/17/2016**		Seq No: **7178720**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
gamma-BHC	0.004680	0.00050	0.0010	0.003951	72.9	52.5	146	0.004959	5.79	24.6	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611A86

ANALYTICAL QC SUMMARY REPORT

BatchID: 232823

Sample ID: **MB-232823** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **330185**
SampleType: **MBLK** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232823** Analysis Date: **11/16/2016** Seq No: **7176237**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.00500									
Copper	BRL	0.00200									
Lead	BRL	0.00100									
Zinc	BRL	0.0100									

Sample ID: **LCS-232823** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **330185**
SampleType: **LCS** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232823** Analysis Date: **11/16/2016** Seq No: **7176238**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09883	0.00500	0.1000		98.8	80	120				
Copper	0.09813	0.00200	0.1000		98.1	80	120				
Lead	0.1074	0.00100	0.1000	0.0002250	107	80	120				
Zinc	0.09989	0.0100	0.1000		99.9	80	120				

Sample ID: **1611903-003BMS** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **330185**
SampleType: **MS** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232823** Analysis Date: **11/17/2016** Seq No: **7176242**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09744	0.00500	0.1000	0.0002170	97.2	75	125				
Copper	0.09432	0.00200	0.1000	0.0003900	93.9	75	125				
Lead	0.1076	0.00100	0.1000	0.0001570	107	75	125				
Zinc	0.1016	0.0100	0.1000	0.005350	96.2	75	125				

Sample ID: **1611903-003BMSD** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **330185**
SampleType: **MSD** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232823** Analysis Date: **11/17/2016** Seq No: **7176243**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09721	0.00500	0.1000	0.0002170	97.0	75	125	0.09744	0.236	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611A86

ANALYTICAL QC SUMMARY REPORT

BatchID: 232823

Sample ID: **1611903-003BMSD** Client ID:
SampleType: **MSD** TestCode: **Total Metals by ICP/MS SW6020B**
Units: **mg/L** Prep Date: **11/14/2016** Run No: **330185**
BatchID: **232823** Analysis Date: **11/17/2016** Seq No: **7176243**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Copper	0.09431	0.00200	0.1000	0.0003900	93.9	75	125	0.09432	0.011	20	
Lead	0.1058	0.00100	0.1000	0.0001570	106	75	125	0.1076	1.69	20	
Zinc	0.1018	0.0100	0.1000	0.005350	96.4	75	125	0.1016	0.197	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611A86

ANALYTICAL QC SUMMARY REPORT

BatchID: 232939

Sample ID: **MB-232939**	Client ID:			Units: **mg/L**	Prep Date: **11/15/2016**	Run No: **330205**
SampleType: **MBLK**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **232939**	Analysis Date: **11/17/2016**	Seq No: **7176919**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.00500									
Copper	BRL	0.00200									
Lead	BRL	0.00100									

Sample ID: **MB-232939**	Client ID:			Units: **mg/L**	Prep Date: **11/15/2016**	Run No: **330205**
SampleType: **MBLK**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **232939**	Analysis Date: **11/18/2016**	Seq No: **7179907**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	BRL	0.0100									

Sample ID: **LCS-232939**	Client ID:			Units: **mg/L**	Prep Date: **11/15/2016**	Run No: **330205**
SampleType: **LCS**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **232939**	Analysis Date: **11/17/2016**	Seq No: **7176920**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09534	0.00500	0.1000	0.0004270	94.9	80	120				
Copper	0.09364	0.00200	0.1000	0.0005210	93.1	80	120				
Lead	0.1041	0.00100	0.1000	0.0004770	104	80	120				
Zinc	0.09737	0.0100	0.1000		97.4	80	120				

Sample ID: **1611914-005BMS**	Client ID:			Units: **mg/L**	Prep Date: **11/15/2016**	Run No: **330205**
SampleType: **MS**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **232939**	Analysis Date: **11/17/2016**	Seq No: **7176924**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09454	0.00500	0.1000		94.5	75	125				
Copper	0.09505	0.00200	0.1000	0.0007390	94.3	75	125				
Lead	0.1042	0.00100	0.1000	0.0008960	103	75	125				

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611A86

ANALYTICAL QC SUMMARY REPORT

BatchID: 232939

Sample ID: **1611914-005BMS**	Client ID:				Units: **mg/L**		Prep Date: **11/15/2016**		Run No: **330205**	
SampleType: **MS**	TestCode: **Total Metals by ICP/MS** **SW6020B**				BatchID: **232939**		Analysis Date: **11/18/2016**		Seq No: **7179908**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Zinc	0.1087	0.0100	0.1000	0.01561	93.1	75	125			

Sample ID: **1611914-005BMSD**	Client ID:				Units: **mg/L**		Prep Date: **11/15/2016**		Run No: **330205**	
SampleType: **MSD**	TestCode: **Total Metals by ICP/MS** **SW6020B**				BatchID: **232939**		Analysis Date: **11/17/2016**		Seq No: **7176925**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Arsenic	0.09205	0.00500	0.1000		92.0	75	125	0.09454	2.67	20
Copper	0.09270	0.00200	0.1000	0.0007390	92.0	75	125	0.09505	2.50	20
Lead	0.1018	0.00100	0.1000	0.0008960	101	75	125	0.1042	2.33	20

Sample ID: **1611914-005BMSD**	Client ID:				Units: **mg/L**		Prep Date: **11/15/2016**		Run No: **330205**	
SampleType: **MSD**	TestCode: **Total Metals by ICP/MS** **SW6020B**				BatchID: **232939**		Analysis Date: **11/18/2016**		Seq No: **7179909**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Zinc	0.1051	0.0100	0.1000	0.01561	89.5	75	125	0.1087	3.37	20

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611A86

ANALYTICAL QC SUMMARY REPORT

BatchID: 233009

Sample ID: **MB-233009** Client ID: Units: **mg/L** Prep Date: **11/15/2016** Run No: **329994**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **233009** Analysis Date: **11/15/2016** Seq No: **7171003**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	0.0050									
1,1,2,2-Tetrachloroethane	BRL	0.0050									
1,1,2-Trichloroethane	BRL	0.0050									
1,1-Dichloroethane	BRL	0.0050									
1,1-Dichloroethene	BRL	0.0050									
1,1-Dichloropropene	BRL	0.0050									
1,2,4-Trichlorobenzene	BRL	0.0050									
1,2-Dichloroethane	BRL	0.0050									
1,2-Dichloropropane	BRL	0.0050									
1,4-Dioxane	BRL	0.15									
2-Butanone	BRL	0.050									
4-Methyl-2-pentanone	BRL	0.010									
Acetone	BRL	0.050									
Benzene	BRL	0.0050									
Carbon disulfide	BRL	0.0050									
Carbon tetrachloride	BRL	0.0050									
Chlorobenzene	BRL	0.0050									
Chloroethane	BRL	0.010									
Chloroform	BRL	0.0050									
Chloromethane	BRL	0.010									
cis-1,2-Dichloroethene	BRL	0.0050									
Cyclohexane	BRL	0.0050									
Ethylbenzene	BRL	0.0050									
Isobutyl Alcohol	BRL	0.20									
Isopropylbenzene	BRL	0.0050									
Methylene chloride	BRL	0.0050									
Naphthalene	BRL	0.0050									

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611A86

ANALYTICAL QC SUMMARY REPORT

BatchID: 233009

Sample ID: **MB-233009** Client ID: Units: **mg/L** Prep Date: **11/15/2016** Run No: **329994**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **233009** Analysis Date: **11/15/2016** Seq No: **7171003**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Styrene	BRL	0.0050									
Tetrachloroethene	BRL	0.0050									
Tetrahydrofuran	BRL	0.010									
Toluene	BRL	0.0050									
trans-1,2-Dichloroethene	BRL	0.0050									
Trichloroethene	BRL	0.0050									
Trichlorofluoromethane	BRL	0.0050									
Vinyl chloride	BRL	0.0020									
Xylenes, Total	BRL	0.0050									
Surr: 4-Bromofluorobenzene	0.04620	0	0.0500		92.4	67	118				
Surr: Dibromofluoromethane	0.04965	0	0.0500		99.3	81.7	124				
Surr: Toluene-d8	0.04988	0	0.0500		99.8	82.5	122				

Sample ID: **LCS-233009** Client ID: Units: **mg/L** Prep Date: **11/15/2016** Run No: **329994**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **233009** Analysis Date: **11/15/2016** Seq No: **7171002**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.04813	0.0050	0.0500		96.3	65.3	137				
Benzene	0.04832	0.0050	0.0500		96.6	74.9	123				
Chlorobenzene	0.04753	0.0050	0.0500		95.1	73.9	124				
Toluene	0.04910	0.0050	0.0500		98.2	75	124				
Trichloroethene	0.04557	0.0050	0.0500		91.1	73.1	128				
Surr: 4-Bromofluorobenzene	0.04674	0	0.0500		93.5	67	118				
Surr: Dibromofluoromethane	0.04973	0	0.0500		99.5	81.7	124				
Surr: Toluene-d8	0.04972	0	0.0500		99.4	82.5	122				

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611A86

ANALYTICAL QC SUMMARY REPORT

BatchID: 233009

Sample ID: **1611A86-002AMS**	Client ID: **MW-25**	Units: **mg/L**	Prep Date: **11/15/2016**	Run No: **329994**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **233009**	Analysis Date: **11/16/2016**	Seq No: **7171041**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.05207	0.0050	0.0500		104	60	150				
Benzene	0.05101	0.0050	0.0500		102	70.1	132				
Chlorobenzene	0.04793	0.0050	0.0500		95.9	70.9	131				
Toluene	0.05141	0.0050	0.0500		103	70.1	133				
Trichloroethene	0.04915	0.0050	0.0500		98.3	70	136				
Surr: 4-Bromofluorobenzene	0.04744	0	0.0500		94.9	67	118				
Surr: Dibromofluoromethane	0.05123	0	0.0500		102	81.7	124				
Surr: Toluene-d8	0.04998	0	0.0500		100.0	82.5	122				

Sample ID: **1611A86-002AMSD**	Client ID: **MW-25**	Units: **mg/L**	Prep Date: **11/15/2016**	Run No: **329994**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **233009**	Analysis Date: **11/16/2016**	Seq No: **7171042**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.05270	0.0050	0.0500		105	60	150	0.05207	1.20	17.7	
Benzene	0.04987	0.0050	0.0500		99.7	70.1	132	0.05101	2.26	20	
Chlorobenzene	0.04672	0.0050	0.0500		93.4	70.9	131	0.04793	2.56	20	
Toluene	0.05103	0.0050	0.0500		102	70.1	133	0.05141	0.742	20	
Trichloroethene	0.04839	0.0050	0.0500		96.8	70	136	0.04915	1.56	20	
Surr: 4-Bromofluorobenzene	0.04722	0	0.0500		94.4	67	118	0.04744	0	0	
Surr: Dibromofluoromethane	0.05084	0	0.0500		102	81.7	124	0.05123	0	0	
Surr: Toluene-d8	0.05029	0	0.0500		101	82.5	122	0.04998	0	0	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611A86

ANALYTICAL QC SUMMARY REPORT

BatchID: 233183

Sample ID: **MB-233183** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330413**
SampleType: **MBLK** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **233183** Analysis Date: **11/22/2016** Seq No: **7187982**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.00500									
Copper	BRL	0.00200									
Lead	BRL	0.00100									
Zinc	BRL	0.0100									

Sample ID: **LCS-233183** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330413**
SampleType: **LCS** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **233183** Analysis Date: **11/20/2016** Seq No: **7182962**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09620	0.00500	0.1000		96.2	80	120				
Copper	0.09669	0.00200	0.1000	0.0003620	96.3	80	120				
Lead	0.09947	0.00100	0.1000		99.5	80	120				
Zinc	0.09744	0.0100	0.1000		97.4	80	120				

Sample ID: **1611A86-002CMS** Client ID: **MW-25** Units: **mg/L** Prep Date: **11/18/2016** Run No: **330413**
SampleType: **MS** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **233183** Analysis Date: **11/20/2016** Seq No: **7182964**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.08930	0.00500	0.1000	0.0005200	88.8	75	125				
Copper	0.3054	0.00200	0.1000	0.2171	88.3	75	125				
Lead	0.1359	0.00100	0.1000	0.03240	104	75	125				

Sample ID: **1611A86-002CMS** Client ID: **MW-25** Units: **mg/L** Prep Date: **11/18/2016** Run No: **330413**
SampleType: **MS** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **233183** Analysis Date: **11/21/2016** Seq No: **7183444**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	3.021	0.100	0.1000	2.997	24.0	75	125				S

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611A86

ANALYTICAL QC SUMMARY REPORT

BatchID: 233183

Sample ID: **1611A86-002CMSD**	Client ID: **MW-25**				Units: **mg/L**		Prep Date: **11/18/2016**		Run No: **330413**	
SampleType: **MSD**	TestCode: **Dissolved Metals by ICP/MS SW6020B**				BatchID: **233183**		Analysis Date: **11/20/2016**		Seq No: **7182965**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.08863	0.00500	0.1000	0.0005200	88.1	75	125	0.08930	0.753	20	
Copper	0.3010	0.00200	0.1000	0.2171	83.9	75	125	0.3054	1.45	20	
Lead	0.1367	0.00100	0.1000	0.03240	104	75	125	0.1359	0.587	20	

Sample ID: **1611A86-002CMSD**	Client ID: **MW-25**				Units: **mg/L**		Prep Date: **11/18/2016**		Run No: **330413**	
SampleType: **MSD**	TestCode: **Dissolved Metals by ICP/MS SW6020B**				BatchID: **233183**		Analysis Date: **11/21/2016**		Seq No: **7183445**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	3.198	0.100	0.1000	2.997	201	75	125	3.021	5.69	20	S

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611A86

ANALYTICAL QC SUMMARY REPORT

BatchID: R330012

Sample ID: **MB-R330012** Client ID: Units: **mg/L** Prep Date: Run No: **330012**
SampleType: **MBLK** TestCode: **ION SCAN SW9056A** BatchID: **R330012** Analysis Date: **11/11/2016** Seq No: **7171613**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R330012** Client ID: Units: **mg/L** Prep Date: Run No: **330012**
SampleType: **LCS** TestCode: **ION SCAN SW9056A** BatchID: **R330012** Analysis Date: **11/11/2016** Seq No: **7171612**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.012	0.25	5.000		100	90	110				
Sulfate	25.19	1.0	25.00		101	90	110				

Sample ID: **1611A98-001AMS** Client ID: Units: **mg/L** Prep Date: Run No: **330012**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R330012** Analysis Date: **11/11/2016** Seq No: **7171648**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	7.710	0.25	5.000	2.303	108	90	110				
Sulfate	25.16	1.0	25.00	0.5304	98.5	90	110				

Sample ID: **1611B85-006AMS** Client ID: Units: **mg/L** Prep Date: Run No: **330012**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R330012** Analysis Date: **11/11/2016** Seq No: **7171651**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	51.60	2.5	50.00	0.8173	102	90	110				
Sulfate	290.8	10	250.0	45.74	98.0	90	110				

Sample ID: **1611A98-001AMSD** Client ID: Units: **mg/L** Prep Date: Run No: **330012**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R330012** Analysis Date: **11/11/2016** Seq No: **7171649**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	7.731	0.25	5.000	2.303	109	90	110	7.710	0.270	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611A86

ANALYTICAL QC SUMMARY REPORT

BatchID: R330012

Sample ID: **1611A98-001AMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date: Run No: **330012**
BatchID: **R330012** Analysis Date: **11/11/2016** Seq No: **7171649**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	25.27	1.0	25.00	0.5304	98.9	90	110	25.16	0.400	20	

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 25, 2016

Rhonda Quinn
AMEC E&I, Inc. -Kennesaw
1075 Big Shanty Rd NW
Kennesaw GA 30144

TEL: (770) 421-3400
FAX: (770) 421-3486

RE: BFEL Atlanta

Dear Rhonda Quinn: Order No: 1611C42

Analytical Environmental Services, Inc. received 7 samples on 11/11/2016 5:35:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

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

CHAIN OF CUSTODY

Work Order: 1611C42

Date: 11/11/16 Page _____ of _____

COMPANY:	ADDRESS:
Amec Foster Wheeler	1075 Big Shanty Rd, Ste 100 Kennesaw, GA 30144
PHONE: 770-421-3400	FAX: 770-421-3486
SAMPLED BY: D Howard, E Guillen, N McMillan	SIGNATURE: Daniel Howard

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)					REMARKS	No # of Containers
							H+I	N	I	S+I	I		
1	TB-04	11/11/16	0900	X		W	2						2
2	TW-6		1122	X		GW	2	1	1	2	1		7
3	TW-7		1338	X		GW	2	1	1	2	1		7
4	MW-119		1205	X		GW	2	1	1	2	1		7
5	MW-120		1515	X		GW	2	1	1	2	1		7
6	MW-121		1401	X		GW	2	1	1	2	1		7
7	OW-1 DH		1610	X		GW	2	1	1	2	1		7
8	Temp Blank												
9													
10													
11													
12													
13													
14													

ANALYSIS REQUESTED *

VOC list 8260	14 metals list 6020	Diss metals list 6020	Rest 8021B	Nitrate, Sulfate 9056

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Daniel L Howard	11/11/16 1705	1: [illegible] Nov-11-16	5:35
2: [illegible] Nov-11-16	5:35	2: Pat Mascaro	11/11/16 17:35
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:
* Diss metals will be Filtered by the lab

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL COURIER

GREYHOUND OTHER_____

PROJECT INFORMATION

PROJECT NAME: BFEL Atlanta

PROJECT #: 612208015 4.22

SITE ADDRESS: 1525 Pine St Atlanta, GA

SEND REPORT TO: Rhonda Quinn

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #:_____ PO#:_____

RECEIPT

Total # of Containers

Turnaround Time Request

- (●) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other _____

STATE PROGRAM (if any): _____

E-mail? Y / N; Fax? Y / N

DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.
SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: AMEC E&I, Inc. -Kennesaw
Project: BFEL Atlanta
Lab ID: 1611C42

Case Narrative

Sample Receiving Non-conformance:

Samples 002 through 007 did not have a collection date listed on the Chain of Custody. The information was taken from the container labels received.

Ion Chromotography Analysis by Method 9056A:

Due to sample matrix, sample(s) 1611C42-007D required dilution during preparation and/or analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TB-04
Project Name:	BFEL Atlanta	**Collection Date:**	11/11/2016 9:00:00 AM
Lab ID:	1611C42-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
1,4-Dioxane	BRL	0.15		mg/L	233089	1	11/16/2016 12:54	NP
2-Butanone	BRL	0.050		mg/L	233089	1	11/16/2016 12:54	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233089	1	11/16/2016 12:54	NP
Acetone	BRL	0.050		mg/L	233089	1	11/16/2016 12:54	NP
Benzene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Carbon disulfide	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Chlorobenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Chloroethane	BRL	0.010		mg/L	233089	1	11/16/2016 12:54	NP
Chloroform	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Chloromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Cyclohexane	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Ethylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233089	1	11/16/2016 12:54	NP
Isopropylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Methylene chloride	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Naphthalene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Styrene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Tetrachloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Tetrahydrofuran	BRL	0.010		mg/L	233089	1	11/16/2016 12:54	NP
Toluene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Trichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Vinyl chloride	BRL	0.0020		mg/L	233089	1	11/16/2016 12:54	NP
Xylenes, Total	BRL	0.0050		mg/L	233089	1	11/16/2016 12:54	NP
Surr: 4-Bromofluorobenzene	91.5	67-118		%REC	233089	1	11/16/2016 12:54	NP
Surr: Dibromofluoromethane	101	81.7-124		%REC	233089	1	11/16/2016 12:54	NP
Surr: Toluene-d8	101	82.5-122		%REC	233089	1	11/16/2016 12:54	NP

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-6
Project Name:	BFEL Atlanta	**Collection Date:**	11/11/2016 11:22:00 AM
Lab ID:	1611C42-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
1,4-Dioxane	BRL	0.15		mg/L	233089	1	11/16/2016 13:17	NP
2-Butanone	BRL	0.050		mg/L	233089	1	11/16/2016 13:17	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233089	1	11/16/2016 13:17	NP
Acetone	BRL	0.050		mg/L	233089	1	11/16/2016 13:17	NP
Benzene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Carbon disulfide	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Chlorobenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Chloroethane	BRL	0.010		mg/L	233089	1	11/16/2016 13:17	NP
Chloroform	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Chloromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Cyclohexane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Ethylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233089	1	11/16/2016 13:17	NP
Isopropylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Methylene chloride	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Naphthalene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Styrene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Tetrachloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Tetrahydrofuran	BRL	0.010		mg/L	233089	1	11/16/2016 13:17	NP
Toluene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Trichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Vinyl chloride	BRL	0.0020		mg/L	233089	1	11/16/2016 13:17	NP
Xylenes, Total	BRL	0.0050		mg/L	233089	1	11/16/2016 13:17	NP
Surr: 4-Bromofluorobenzene	91.5	67-118		%REC	233089	1	11/16/2016 13:17	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	233089	1	11/16/2016 13:17	NP
Surr: Toluene-d8	98.9	82.5-122		%REC	233089	1	11/16/2016 13:17	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-6
Project Name:	BFEL Atlanta	**Collection Date:**	11/11/2016 11:22:00 AM
Lab ID:	1611C42-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232939	1	11/20/2016 20:33	JS
Copper	0.0917	0.00200		mg/L	232939	1	11/20/2016 20:33	JS
Lead	BRL	0.00100		mg/L	232939	1	11/20/2016 20:33	JS
Zinc	0.316	0.0100		mg/L	232939	1	11/21/2016 16:56	JS
ION SCAN SW9056A								
Nitrate	30	2.5		mg/L	R330131	10	11/12/2016 12:27	JW
Sulfate	210	10		mg/L	R330131	10	11/12/2016 12:27	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233183	1	11/21/2016 06:09	JS
Copper	0.0786	0.00200		mg/L	233183	1	11/21/2016 06:09	JS
Lead	BRL	0.00100		mg/L	233183	1	11/21/2016 06:09	JS
Zinc	0.307	0.0100		mg/L	233183	1	11/23/2016 16:21	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232981	1	11/18/2016 02:36	SH
4,4´-DDE	BRL	0.00010		mg/L	232981	1	11/18/2016 02:36	SH
4,4´-DDT	BRL	0.00010		mg/L	232981	1	11/18/2016 02:36	SH
alpha-BHC	BRL	0.000050		mg/L	232981	1	11/18/2016 02:36	SH
alpha-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 02:36	SH
beta-BHC	0.00088	0.000050		mg/L	232981	1	11/18/2016 02:36	SH
delta-BHC	BRL	0.000050		mg/L	232981	1	11/18/2016 02:36	SH
Dieldrin	BRL	0.00010		mg/L	232981	1	11/18/2016 02:36	SH
gamma-BHC	BRL	0.000050		mg/L	232981	1	11/18/2016 02:36	SH
gamma-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 02:36	SH
Heptachlor	BRL	0.000050		mg/L	232981	1	11/18/2016 02:36	SH
Methoxychlor	BRL	0.00050		mg/L	232981	1	11/18/2016 02:36	SH
Toxaphene	BRL	0.0030		mg/L	232981	1	11/17/2016 02:33	SH
Surr: Decachlorobiphenyl	73.6	15.3-120		%REC	232981	1	11/18/2016 02:36	SH
Surr: Tetrachloro-m-xylene	87.5	23.4-131		%REC	232981	1	11/18/2016 02:36	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-7
Project Name:	BFEL Atlanta	**Collection Date:**	11/11/2016 1:38:00 PM
Lab ID:	1611C42-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
1,4-Dioxane	BRL	0.15		mg/L	233089	1	11/16/2016 13:41	NP
2-Butanone	BRL	0.050		mg/L	233089	1	11/16/2016 13:41	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233089	1	11/16/2016 13:41	NP
Acetone	BRL	0.050		mg/L	233089	1	11/16/2016 13:41	NP
Benzene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Carbon disulfide	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Chlorobenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Chloroethane	BRL	0.010		mg/L	233089	1	11/16/2016 13:41	NP
Chloroform	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Chloromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Cyclohexane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Ethylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233089	1	11/16/2016 13:41	NP
Isopropylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Methylene chloride	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Naphthalene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Styrene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Tetrachloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Tetrahydrofuran	BRL	0.010		mg/L	233089	1	11/16/2016 13:41	NP
Toluene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Trichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Vinyl chloride	BRL	0.0020		mg/L	233089	1	11/16/2016 13:41	NP
Xylenes, Total	BRL	0.0050		mg/L	233089	1	11/16/2016 13:41	NP
Surr: 4-Bromofluorobenzene	93.7	67-118		%REC	233089	1	11/16/2016 13:41	NP
Surr: Dibromofluoromethane	101	81.7-124		%REC	233089	1	11/16/2016 13:41	NP
Surr: Toluene-d8	99.8	82.5-122		%REC	233089	1	11/16/2016 13:41	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-7
Project Name:	BFEL Atlanta	**Collection Date:**	11/11/2016 1:38:00 PM
Lab ID:	1611C42-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232939	1	11/20/2016 20:39	JS
Copper	132	1.00		mg/L	232939	500	11/21/2016 17:03	JS
Lead	0.0264	0.00100		mg/L	232939	1	11/20/2016 20:39	JS
Zinc	327	5.00		mg/L	232939	500	11/21/2016 17:03	JS
ION SCAN SW9056A								
Nitrate	110	12		mg/L	R330131	50	11/12/2016 12:42	JW
Sulfate	3400	50		mg/L	R330131	50	11/12/2016 12:42	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233183	1	11/21/2016 06:15	JS
Copper	140	1.00		mg/L	233183	500	11/22/2016 11:25	JS
Lead	0.0326	0.00100		mg/L	233183	1	11/21/2016 06:15	JS
Zinc	311	5.00		mg/L	233183	500	11/22/2016 11:25	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232981	1	11/18/2016 03:12	SH
4,4´-DDE	BRL	0.00010		mg/L	232981	1	11/18/2016 03:12	SH
4,4´-DDT	BRL	0.00010		mg/L	232981	1	11/18/2016 03:12	SH
alpha-BHC	0.00029	0.000050		mg/L	232981	1	11/18/2016 03:12	SH
alpha-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 03:12	SH
beta-BHC	0.0019	0.00025		mg/L	232981	5	11/18/2016 02:54	SH
delta-BHC	0.000087	0.000050		mg/L	232981	1	11/18/2016 03:12	SH
Dieldrin	BRL	0.00010		mg/L	232981	1	11/18/2016 03:12	SH
gamma-BHC	0.00027	0.000050		mg/L	232981	1	11/18/2016 03:12	SH
gamma-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 03:12	SH
Heptachlor	BRL	0.000050		mg/L	232981	1	11/18/2016 03:12	SH
Methoxychlor	BRL	0.00050		mg/L	232981	1	11/18/2016 03:12	SH
Toxaphene	BRL	0.0030		mg/L	232981	1	11/17/2016 02:44	SH
Surr: Decachlorobiphenyl	65.5	15.3-120		%REC	232981	1	11/18/2016 03:12	SH
Surr: Tetrachloro-m-xylene	91.8	23.4-131		%REC	232981	1	11/18/2016 03:12	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-119
Project Name:	BFEL Atlanta	**Collection Date:**	11/11/2016 12:05:00 PM
Lab ID:	1611C42-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
1,4-Dioxane	BRL	0.15		mg/L	233089	1	11/16/2016 14:04	NP
2-Butanone	BRL	0.050		mg/L	233089	1	11/16/2016 14:04	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233089	1	11/16/2016 14:04	NP
Acetone	BRL	0.050		mg/L	233089	1	11/16/2016 14:04	NP
Benzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Carbon disulfide	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Chlorobenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Chloroethane	BRL	0.010		mg/L	233089	1	11/16/2016 14:04	NP
Chloroform	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Chloromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Cyclohexane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Ethylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233089	1	11/16/2016 14:04	NP
Isopropylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Methylene chloride	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Naphthalene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Styrene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Tetrachloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Tetrahydrofuran	BRL	0.010		mg/L	233089	1	11/16/2016 14:04	NP
Toluene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Trichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Vinyl chloride	BRL	0.0020		mg/L	233089	1	11/16/2016 14:04	NP
Xylenes, Total	BRL	0.0050		mg/L	233089	1	11/16/2016 14:04	NP
Surr: 4-Bromofluorobenzene	93.7	67-118		%REC	233089	1	11/16/2016 14:04	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	233089	1	11/16/2016 14:04	NP
Surr: Toluene-d8	101	82.5-122		%REC	233089	1	11/16/2016 14:04	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-119
Project Name:	BFEL Atlanta	**Collection Date:**	11/11/2016 12:05:00 PM
Lab ID:	1611C42-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232939	1	11/20/2016 20:45	JS
Copper	0.0737	0.00200		mg/L	232939	1	11/20/2016 20:45	JS
Lead	BRL	0.00100		mg/L	232939	1	11/20/2016 20:45	JS
Zinc	1.45	0.0100		mg/L	232939	1	11/21/2016 17:09	JS
ION SCAN SW9056A								
Nitrate	0.33	0.25		mg/L	R330131	1	11/12/2016 00:27	JW
Sulfate	140	20		mg/L	R330131	20	11/12/2016 12:57	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	233183	1	11/21/2016 06:21	JS
Copper	BRL	0.00200		mg/L	233183	1	11/23/2016 00:38	JS
Lead	BRL	0.00100		mg/L	233183	1	11/21/2016 06:21	JS
Zinc	1.27	0.0100		mg/L	233183	1	11/23/2016 00:38	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.00010		mg/L	232981	1	11/18/2016 03:31	SH
4,4´-DDE	BRL	0.00010		mg/L	232981	1	11/18/2016 03:31	SH
4,4´-DDT	BRL	0.00010		mg/L	232981	1	11/18/2016 03:31	SH
alpha-BHC	0.0012	0.000050		mg/L	232981	1	11/18/2016 03:31	SH
alpha-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 03:31	SH
beta-BHC	0.00090	0.000050		mg/L	232981	1	11/18/2016 03:31	SH
delta-BHC	0.0010	0.000050		mg/L	232981	1	11/18/2016 03:31	SH
Dieldrin	BRL	0.00010		mg/L	232981	1	11/18/2016 03:31	SH
gamma-BHC	0.00017	0.000050		mg/L	232981	1	11/18/2016 03:31	SH
gamma-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 03:31	SH
Heptachlor	BRL	0.000050		mg/L	232981	1	11/18/2016 03:31	SH
Methoxychlor	BRL	0.00050		mg/L	232981	1	11/18/2016 03:31	SH
Toxaphene	BRL	0.0030		mg/L	232981	1	11/17/2016 02:55	SH
Surr: Decachlorobiphenyl	53.1	15.3-120		%REC	232981	1	11/18/2016 03:31	SH
Surr: Tetrachloro-m-xylene	75.3	23.4-131		%REC	232981	1	11/18/2016 03:31	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-120
Project Name:	BFEL Atlanta	**Collection Date:**	11/11/2016 3:15:00 PM
Lab ID:	1611C42-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
1,4-Dioxane	BRL	0.15		mg/L	233089	1	11/16/2016 14:28	NP
2-Butanone	BRL	0.050		mg/L	233089	1	11/16/2016 14:28	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233089	1	11/16/2016 14:28	NP
Acetone	BRL	0.050		mg/L	233089	1	11/16/2016 14:28	NP
Benzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Carbon disulfide	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Chlorobenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Chloroethane	BRL	0.010		mg/L	233089	1	11/16/2016 14:28	NP
Chloroform	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Chloromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
cis-1,2-Dichloroethene	0.012	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Cyclohexane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Ethylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233089	1	11/16/2016 14:28	NP
Isopropylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Methylene chloride	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Naphthalene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Styrene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Tetrachloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Tetrahydrofuran	BRL	0.010		mg/L	233089	1	11/16/2016 14:28	NP
Toluene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Trichloroethene	0.0065	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Vinyl chloride	BRL	0.0020		mg/L	233089	1	11/16/2016 14:28	NP
Xylenes, Total	BRL	0.0050		mg/L	233089	1	11/16/2016 14:28	NP
Surr: 4-Bromofluorobenzene	93.7	67-118		%REC	233089	1	11/16/2016 14:28	NP
Surr: Dibromofluoromethane	101	81.7-124		%REC	233089	1	11/16/2016 14:28	NP
Surr: Toluene-d8	99.9	82.5-122		%REC	233089	1	11/16/2016 14:28	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-120
Project Name:	BFEL Atlanta	**Collection Date:**	11/11/2016 3:15:00 PM
Lab ID:	1611C42-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232939	1	11/20/2016 20:52	JS
Copper	0.0222	0.00200		mg/L	232939	1	11/20/2016 20:52	JS
Lead	0.00124	0.00100		mg/L	232939	1	11/20/2016 20:52	JS
Zinc	0.813	0.0100		mg/L	232939	1	11/21/2016 17:15	JS
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R330131	1	11/12/2016 00:42	JW
Sulfate	210	20		mg/L	R330131	20	11/12/2016 13:11	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233183	1	11/21/2016 06:27	JS
Copper	0.00577	0.00200		mg/L	233183	1	11/23/2016 00:50	JS
Lead	BRL	0.00100		mg/L	233183	1	11/21/2016 06:27	JS
Zinc	0.804	0.0100		mg/L	233183	1	11/21/2016 06:27	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232981	1	11/18/2016 05:58	SH
4,4´-DDE	BRL	0.00010		mg/L	232981	1	11/18/2016 05:58	SH
4,4´-DDT	BRL	0.00010		mg/L	232981	1	11/18/2016 05:58	SH
alpha-BHC	0.0013	0.000050		mg/L	232981	1	11/18/2016 05:58	SH
alpha-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 05:58	SH
beta-BHC	0.0012	0.000050		mg/L	232981	1	11/18/2016 05:58	SH
delta-BHC	0.0011	0.000050		mg/L	232981	1	11/18/2016 05:58	SH
Dieldrin	BRL	0.00010		mg/L	232981	1	11/18/2016 05:58	SH
gamma-BHC	0.000065	0.000050		mg/L	232981	1	11/18/2016 05:58	SH
gamma-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 05:58	SH
Heptachlor	BRL	0.000050		mg/L	232981	1	11/18/2016 05:58	SH
Methoxychlor	BRL	0.00050		mg/L	232981	1	11/18/2016 05:58	SH
Toxaphene	BRL	0.0030		mg/L	232981	1	11/17/2016 03:06	SH
Surr: Decachlorobiphenyl	47.9	15.3-120		%REC	232981	1	11/18/2016 05:58	SH
Surr: Tetrachloro-m-xylene	68	23.4-131		%REC	232981	1	11/18/2016 05:58	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-121
Project Name:	BFEL Atlanta	**Collection Date:**	11/11/2016 2:01:00 PM
Lab ID:	1611C42-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
1,4-Dioxane	BRL	0.15		mg/L	233089	1	11/16/2016 14:51	NP
2-Butanone	BRL	0.050		mg/L	233089	1	11/16/2016 14:51	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233089	1	11/16/2016 14:51	NP
Acetone	BRL	0.050		mg/L	233089	1	11/16/2016 14:51	NP
Benzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Carbon disulfide	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Chlorobenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Chloroethane	BRL	0.010		mg/L	233089	1	11/16/2016 14:51	NP
Chloroform	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Chloromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Cyclohexane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Ethylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233089	1	11/16/2016 14:51	NP
Isopropylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Methylene chloride	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Naphthalene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Styrene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Tetrachloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Tetrahydrofuran	BRL	0.010		mg/L	233089	1	11/16/2016 14:51	NP
Toluene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Trichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Vinyl chloride	BRL	0.0020		mg/L	233089	1	11/16/2016 14:51	NP
Xylenes, Total	BRL	0.0050		mg/L	233089	1	11/16/2016 14:51	NP
Surr: 4-Bromofluorobenzene	94.2	67-118		%REC	233089	1	11/16/2016 14:51	NP
Surr: Dibromofluoromethane	101	81.7-124		%REC	233089	1	11/16/2016 14:51	NP
Surr: Toluene-d8	99.9	82.5-122		%REC	233089	1	11/16/2016 14:51	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-121
Project Name:	BFEL Atlanta	**Collection Date:**	11/11/2016 2:01:00 PM
Lab ID:	1611C42-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232939	1	11/20/2016 20:58	JS
Copper	0.0491	0.00200		mg/L	232939	1	11/20/2016 20:58	JS
Lead	0.00346	0.00100		mg/L	232939	1	11/20/2016 20:58	JS
Zinc	1.14	0.0100		mg/L	232939	1	11/21/2016 17:22	JS
ION SCAN SW9056A								
Nitrate	0.46	0.25		mg/L	R330131	1	11/12/2016 00:56	JW
Sulfate	260	20		mg/L	R330131	20	11/12/2016 13:26	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233183	1	11/21/2016 06:34	JS
Copper	0.0278	0.00200		mg/L	233183	1	11/21/2016 06:34	JS
Lead	BRL	0.00100		mg/L	233183	1	11/21/2016 06:34	JS
Zinc	1.08	0.0100		mg/L	233183	1	11/21/2016 06:34	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232981	1	11/18/2016 06:35	SH
4,4´-DDE	BRL	0.00010		mg/L	232981	1	11/18/2016 06:35	SH
4,4´-DDT	BRL	0.00010		mg/L	232981	1	11/18/2016 06:35	SH
alpha-BHC	0.0050	0.00050		mg/L	232981	10	11/18/2016 06:16	SH
alpha-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 06:35	SH
beta-BHC	0.0019	0.00050		mg/L	232981	10	11/18/2016 06:16	SH
delta-BHC	0.0063	0.00050		mg/L	232981	10	11/18/2016 06:16	SH
Dieldrin	BRL	0.00010		mg/L	232981	1	11/18/2016 06:35	SH
gamma-BHC	0.0029	0.00050		mg/L	232981	10	11/18/2016 06:16	SH
gamma-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 06:35	SH
Heptachlor	BRL	0.000050		mg/L	232981	1	11/18/2016 06:35	SH
Methoxychlor	BRL	0.00050		mg/L	232981	1	11/18/2016 06:35	SH
Toxaphene	BRL	0.0030		mg/L	232981	1	11/17/2016 03:18	SH
Surr: Decachlorobiphenyl	52.6	15.3-120		%REC	232981	1	11/18/2016 06:35	SH
Surr: Tetrachloro-m-xylene	62.9	23.4-131		%REC	232981	1	11/18/2016 06:35	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	OW-1
Project Name:	BFEL Atlanta	**Collection Date:**	11/11/2016 4:10:00 PM
Lab ID:	1611C42-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
1,4-Dioxane	BRL	0.15		mg/L	233089	1	11/16/2016 15:15	NP
2-Butanone	BRL	0.050		mg/L	233089	1	11/16/2016 15:15	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233089	1	11/16/2016 15:15	NP
Acetone	BRL	0.050		mg/L	233089	1	11/16/2016 15:15	NP
Benzene	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Carbon disulfide	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Chlorobenzene	0.057	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Chloroethane	BRL	0.010		mg/L	233089	1	11/16/2016 15:15	NP
Chloroform	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Chloromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Cyclohexane	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Ethylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233089	1	11/16/2016 15:15	NP
Isopropylbenzene	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Methylene chloride	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Naphthalene	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Styrene	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Tetrachloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Tetrahydrofuran	BRL	0.010		mg/L	233089	1	11/16/2016 15:15	NP
Toluene	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Trichloroethene	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Vinyl chloride	BRL	0.0020		mg/L	233089	1	11/16/2016 15:15	NP
Xylenes, Total	BRL	0.0050		mg/L	233089	1	11/16/2016 15:15	NP
Surr: 4-Bromofluorobenzene	93.7	67-118		%REC	233089	1	11/16/2016 15:15	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	233089	1	11/16/2016 15:15	NP
Surr: Toluene-d8	100	82.5-122		%REC	233089	1	11/16/2016 15:15	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	OW-1
Project Name:	BFEL Atlanta	**Collection Date:**	11/11/2016 4:10:00 PM
Lab ID:	1611C42-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	0.0952	0.00500		mg/L	232939	1	11/20/2016 21:04	JS
Copper	0.486	0.00200		mg/L	232939	1	11/20/2016 21:04	JS
Lead	0.00103	0.00100		mg/L	232939	1	11/20/2016 21:04	JS
Zinc	14.8	0.500		mg/L	232939	50	11/21/2016 17:28	JS
ION SCAN SW9056A								
Nitrate	BRL	5.0		mg/L	R330131	20	11/12/2016 13:41	JW
Sulfate	240	20		mg/L	R330131	20	11/12/2016 13:41	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	0.0260	0.00500		mg/L	233183	1	11/21/2016 06:40	JS
Copper	0.162	0.00200		mg/L	233183	1	11/21/2016 06:40	JS
Lead	BRL	0.00100		mg/L	233183	1	11/21/2016 06:40	JS
Zinc	12.6	0.500		mg/L	233183	50	11/22/2016 11:31	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.0020		mg/L	232981	20	11/18/2016 06:53	SH
4,4´-DDE	BRL	0.0020		mg/L	232981	20	11/18/2016 06:53	SH
4,4´-DDT	BRL	0.0020		mg/L	232981	20	11/18/2016 06:53	SH
alpha-BHC	0.014	0.0010		mg/L	232981	20	11/18/2016 06:53	SH
alpha-Chlordane	BRL	0.0010		mg/L	232981	20	11/18/2016 06:53	SH
beta-BHC	0.0039	0.0010		mg/L	232981	20	11/18/2016 06:53	SH
delta-BHC	0.018	0.0010		mg/L	232981	20	11/18/2016 06:53	SH
Dieldrin	BRL	0.0020		mg/L	232981	20	11/18/2016 06:53	SH
gamma-BHC	0.0069	0.0010		mg/L	232981	20	11/18/2016 06:53	SH
gamma-Chlordane	BRL	0.0010		mg/L	232981	20	11/18/2016 06:53	SH
Heptachlor	BRL	0.0010		mg/L	232981	20	11/18/2016 06:53	SH
Methoxychlor	BRL	0.010		mg/L	232981	20	11/18/2016 06:53	SH
Toxaphene	BRL	0.0030		mg/L	232981	1	11/17/2016 03:29	SH
Surr: Decachlorobiphenyl	84.4	15.3-120		%REC	232981	20	11/18/2016 06:53	SH
Surr: Tetrachloro-m-xylene	94.6	23.4-131		%REC	232981	20	11/18/2016 06:53	SH

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client AMEC/Kennesaw Work Order Number 1011C42

Checklist completed by Pam Maced 11/11/16
Signature Date

Carrier name: FedEx __ UPS __ Courier ✓ Client __ US Mail __ Other _____

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

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

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 0.5° Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes __ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

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

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

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by PM

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611C42

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611C42-001A	TB-04	11/11/2016 9:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		11/16/2016 9:41:00 AM	11/16/2016
1611C42-002A	TW-6	11/11/2016 11:22:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/16/2016 9:41:00 AM	11/16/2016
1611C42-002B	TW-6	11/11/2016 11:22:00AM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/20/2016
1611C42-002B	TW-6	11/11/2016 11:22:00AM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/21/2016
1611C42-002C	TW-6	11/11/2016 11:22:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611C42-002C	TW-6	11/11/2016 11:22:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/23/2016
1611C42-002D	TW-6	11/11/2016 11:22:00AM	Groundwater	ION SCAN			11/12/2016
1611C42-002E	TW-6	11/11/2016 11:22:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611C42-002E	TW-6	11/11/2016 11:22:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611C42-003A	TW-7	11/11/2016 1:38:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/16/2016 9:41:00 AM	11/16/2016
1611C42-003B	TW-7	11/11/2016 1:38:00PM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/20/2016
1611C42-003B	TW-7	11/11/2016 1:38:00PM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/21/2016
1611C42-003C	TW-7	11/11/2016 1:38:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611C42-003C	TW-7	11/11/2016 1:38:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611C42-003D	TW-7	11/11/2016 1:38:00PM	Groundwater	ION SCAN			11/12/2016
1611C42-003E	TW-7	11/11/2016 1:38:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611C42-003E	TW-7	11/11/2016 1:38:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611C42-004A	MW-119	11/11/2016 12:05:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/16/2016 9:41:00 AM	11/16/2016
1611C42-004B	MW-119	11/11/2016 12:05:00PM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/20/2016
1611C42-004B	MW-119	11/11/2016 12:05:00PM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/21/2016
1611C42-004C	MW-119	11/11/2016 12:05:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611C42-004C	MW-119	11/11/2016 12:05:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/23/2016
1611C42-004D	MW-119	11/11/2016 12:05:00PM	Groundwater	ION SCAN			11/12/2016
1611C42-004E	MW-119	11/11/2016 12:05:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611C42-004E	MW-119	11/11/2016 12:05:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611C42-005A	MW-120	11/11/2016 3:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/16/2016 9:41:00 AM	11/16/2016
1611C42-005B	MW-120	11/11/2016 3:15:00PM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/20/2016
1611C42-005B	MW-120	11/11/2016 3:15:00PM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/21/2016
1611C42-005C	MW-120	11/11/2016 3:15:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611C42

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611C42-005C	MW-120	11/11/2016 3:15:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/23/2016
1611C42-005D	MW-120	11/11/2016 3:15:00PM	Groundwater	ION SCAN			11/12/2016
1611C42-005E	MW-120	11/11/2016 3:15:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611C42-005E	MW-120	11/11/2016 3:15:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611C42-006A	MW-121	11/11/2016 2:01:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/16/2016 9:41:00 AM	11/16/2016
1611C42-006B	MW-121	11/11/2016 2:01:00PM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/20/2016
1611C42-006B	MW-121	11/11/2016 2:01:00PM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/21/2016
1611C42-006C	MW-121	11/11/2016 2:01:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611C42-006D	MW-121	11/11/2016 2:01:00PM	Groundwater	ION SCAN			11/12/2016
1611C42-006E	MW-121	11/11/2016 2:01:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611C42-006E	MW-121	11/11/2016 2:01:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611C42-007A	OW-1	11/11/2016 4:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/16/2016 9:41:00 AM	11/16/2016
1611C42-007B	OW-1	11/11/2016 4:10:00PM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/20/2016
1611C42-007B	OW-1	11/11/2016 4:10:00PM	Groundwater	Total Metals by ICP/MS		11/15/2016 3:30:00 PM	11/21/2016
1611C42-007C	OW-1	11/11/2016 4:10:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611C42-007C	OW-1	11/11/2016 4:10:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611C42-007D	OW-1	11/11/2016 4:10:00PM	Groundwater	ION SCAN			11/12/2016
1611C42-007E	OW-1	11/11/2016 4:10:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611C42-007E	OW-1	11/11/2016 4:10:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611C42

ANALYTICAL QC SUMMARY REPORT

BatchID: 232939

Sample ID: **MB-232939**	Client ID:			Units: **mg/L**	Prep Date: **11/15/2016**	Run No: **330205**
SampleType: **MBLK**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **232939**	Analysis Date: **11/17/2016**	Seq No: **7176919**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.00500									
Copper	BRL	0.00200									
Lead	BRL	0.00100									

Sample ID: **MB-232939**	Client ID:			Units: **mg/L**	Prep Date: **11/15/2016**	Run No: **330205**
SampleType: **MBLK**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **232939**	Analysis Date: **11/18/2016**	Seq No: **7179907**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	BRL	0.0100									

Sample ID: **LCS-232939**	Client ID:			Units: **mg/L**	Prep Date: **11/15/2016**	Run No: **330205**
SampleType: **LCS**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **232939**	Analysis Date: **11/17/2016**	Seq No: **7176920**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09534	0.00500	0.1000	0.0004270	94.9	80	120				
Copper	0.09364	0.00200	0.1000	0.0005210	93.1	80	120				
Lead	0.1041	0.00100	0.1000	0.0004770	104	80	120				
Zinc	0.09737	0.0100	0.1000		97.4	80	120				

Sample ID: **1611914-005BMS**	Client ID:			Units: **mg/L**	Prep Date: **11/15/2016**	Run No: **330205**
SampleType: **MS**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **232939**	Analysis Date: **11/17/2016**	Seq No: **7176924**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09454	0.00500	0.1000		94.5	75	125				
Copper	0.09505	0.00200	0.1000	0.0007390	94.3	75	125				
Lead	0.1042	0.00100	0.1000	0.0008960	103	75	125				

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611C42

ANALYTICAL QC SUMMARY REPORT

BatchID: 232939

Sample ID: **1611914-005BMS**	Client ID:				Units: **mg/L**		Prep Date: **11/15/2016**		Run No: **330205**	
SampleType: **MS**	TestCode: **Total Metals by ICP/MS** **SW6020B**				BatchID: **232939**		Analysis Date: **11/18/2016**		Seq No: **7179908**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Zinc	0.1087	0.0100	0.1000	0.01561	93.1	75	125			

Sample ID: **1611914-005BMSD**	Client ID:				Units: **mg/L**		Prep Date: **11/15/2016**		Run No: **330205**	
SampleType: **MSD**	TestCode: **Total Metals by ICP/MS** **SW6020B**				BatchID: **232939**		Analysis Date: **11/17/2016**		Seq No: **7176925**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Arsenic	0.09205	0.00500	0.1000		92.0	75	125	0.09454	2.67	20
Copper	0.09270	0.00200	0.1000	0.0007390	92.0	75	125	0.09505	2.50	20
Lead	0.1018	0.00100	0.1000	0.0008960	101	75	125	0.1042	2.33	20

Sample ID: **1611914-005BMSD**	Client ID:				Units: **mg/L**		Prep Date: **11/15/2016**		Run No: **330205**	
SampleType: **MSD**	TestCode: **Total Metals by ICP/MS** **SW6020B**				BatchID: **232939**		Analysis Date: **11/18/2016**		Seq No: **7179909**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Zinc	0.1051	0.0100	0.1000	0.01561	89.5	75	125	0.1087	3.37	20

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611C42

ANALYTICAL QC SUMMARY REPORT

BatchID: 232981

Sample ID: **MB-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330257**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/16/2016** Seq No: **7178505**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	0.00010									
4,4´-DDE	BRL	0.00010									
4,4´-DDT	BRL	0.00010									
alpha-BHC	BRL	0.000050									
alpha-Chlordane	BRL	0.000050									
beta-BHC	BRL	0.000050									
delta-BHC	BRL	0.000050									
Dieldrin	BRL	0.00010									
gamma-BHC	BRL	0.000050									
gamma-Chlordane	BRL	0.000050									
Heptachlor	BRL	0.000050									
Methoxychlor	BRL	0.00050									
Toxaphene	BRL	0.0050									
Surr: Decachlorobiphenyl	0.000253	0	0.0005		50.5	15.3	120				
Surr: Tetrachloro-m-xylene	0.000505	0	0.0005		101	23.4	131				

Sample ID: **MB-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330272**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/17/2016** Seq No: **7178716**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	0.00010									
4,4´-DDE	BRL	0.00010									
4,4´-DDT	BRL	0.00010									
alpha-BHC	BRL	0.000050									
alpha-Chlordane	BRL	0.000050									
beta-BHC	BRL	0.000050									
delta-BHC	BRL	0.000050									
Dieldrin	BRL	0.00010									

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611C42

ANALYTICAL QC SUMMARY REPORT

BatchID: 232981

Sample ID: **MB-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330272**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/17/2016** Seq No: **7178716**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
gamma-BHC	BRL	0.000050									
gamma-Chlordane	BRL	0.000050									
Heptachlor	BRL	0.000050									
Methoxychlor	BRL	0.00050									
Surr: Decachlorobiphenyl	0.000238	0	0.0005		47.7	15.3	120				
Surr: Tetrachloro-m-xylene	0.000427	0	0.0005		85.4	23.4	131				

Sample ID: **LCS-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330257**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/16/2016** Seq No: **7178506**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001052	0.00010	0.0010		105	78.2	126				
Dieldrin	0.001030	0.00010	0.0010		103	74.4	125				
gamma-BHC	0.001099	0.000050	0.0010		110	65.6	131				
Heptachlor	0.000982	0.000050	0.0010		98.2	58.9	126				
Surr: Decachlorobiphenyl	0.000249	0	0.0005		49.8	15.3	120				
Surr: Tetrachloro-m-xylene	0.000490	0	0.0005		98.1	23.4	131				

Sample ID: **LCS-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330272**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/17/2016** Seq No: **7178717**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.000948	0.00010	0.0010		94.8	78.2	126				
Dieldrin	0.000884	0.00010	0.0010		88.4	74.4	125				
gamma-BHC	0.000917	0.000050	0.0010		91.7	65.6	131				
Heptachlor	0.000873	0.000050	0.0010		87.3	58.9	126				
Surr: Decachlorobiphenyl	0.000247	0	0.0005		49.4	15.3	120				
Surr: Tetrachloro-m-xylene	0.000441	0	0.0005		88.2	23.4	131				

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611C42

ANALYTICAL QC SUMMARY REPORT

BatchID: 232981

Sample ID: **1611E54-006BMS**	Client ID:			Units: **mg/L**		Prep Date: **11/16/2016**		Run No: **330285**	
SampleType: **MS**	TestCode: **CHLORINATED PESTICIDES, TCL SW8081B**			BatchID: **232981**		Analysis Date: **11/18/2016**		Seq No: **7179554**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001035	0.00010	0.0010		104	40.5	145				
Dieldrin	0.000985	0.00010	0.0010	0.00005550	92.9	47.8	143				
gamma-BHC	0.001273	0.000050	0.0010	0.0002514	102	52.5	146				
Heptachlor	0.001009	0.000050	0.0010		101	36.5	144				
Surr: Decachlorobiphenyl	0.000264	0	0.0005		52.8	15.3	120				
Surr: Tetrachloro-m-xylene	0.000448	0	0.0005		89.6	23.4	131				

Sample ID: **1611E54-006BMSD**	Client ID:			Units: **mg/L**		Prep Date: **11/16/2016**		Run No: **330308**	
SampleType: **MSD**	TestCode: **CHLORINATED PESTICIDES, TCL SW8081B**			BatchID: **232981**		Analysis Date: **11/18/2016**		Seq No: **7179948**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001199	0.00010	0.0010		120	40.5	145	0.001035	14.7	23.6	
Dieldrin	0.001154	0.00010	0.0010	0.00005550	110	47.8	143	0.0009847	15.8	20	
gamma-BHC	0.001439	0.000050	0.0010	0.0002514	119	52.5	146	0.001273	12.3	24.6	
Heptachlor	0.001169	0.000050	0.0010		117	36.5	144	0.001009	14.7	25.8	
Surr: Decachlorobiphenyl	0.000210	0	0.0005		42.1	15.3	120	0.0002640	0	0	
Surr: Tetrachloro-m-xylene	0.000454	0	0.0005		90.7	23.4	131	0.0004479	0	0	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611C42

ANALYTICAL QC SUMMARY REPORT

BatchID: 233089

Sample ID: **MB-233089** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330058**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **233089** Analysis Date: **11/16/2016** Seq No: **7172777**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	0.0050									
1,1,2,2-Tetrachloroethane	BRL	0.0050									
1,1,2-Trichloroethane	BRL	0.0050									
1,1-Dichloroethane	BRL	0.0050									
1,1-Dichloroethene	BRL	0.0050									
1,1-Dichloropropene	BRL	0.0050									
1,2,4-Trichlorobenzene	BRL	0.0050									
1,2-Dichloroethane	BRL	0.0050									
1,2-Dichloropropane	BRL	0.0050									
1,4-Dioxane	BRL	0.15									
2-Butanone	BRL	0.050									
4-Methyl-2-pentanone	BRL	0.010									
Acetone	BRL	0.050									
Benzene	BRL	0.0050									
Carbon disulfide	BRL	0.0050									
Carbon tetrachloride	BRL	0.0050									
Chlorobenzene	BRL	0.0050									
Chloroethane	BRL	0.010									
Chloroform	BRL	0.0050									
Chloromethane	BRL	0.010									
cis-1,2-Dichloroethene	BRL	0.0050									
Cyclohexane	BRL	0.0050									
Ethylbenzene	BRL	0.0050									
Isobutyl Alcohol	BRL	0.20									
Isopropylbenzene	BRL	0.0050									
Methylene chloride	BRL	0.0050									
Naphthalene	BRL	0.0050									

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611C42

ANALYTICAL QC SUMMARY REPORT

BatchID: 233089

Sample ID: **MB-233089** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330058**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **233089** Analysis Date: **11/16/2016** Seq No: **7172777**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Styrene	BRL	0.0050									
Tetrachloroethene	BRL	0.0050									
Tetrahydrofuran	BRL	0.010									
Toluene	BRL	0.0050									
trans-1,2-Dichloroethene	BRL	0.0050									
Trichloroethene	BRL	0.0050									
Trichlorofluoromethane	BRL	0.0050									
Vinyl chloride	BRL	0.0020									
Xylenes, Total	BRL	0.0050									
Surr: 4-Bromofluorobenzene	0.04712	0	0.0500		94.2	67	118				
Surr: Dibromofluoromethane	0.05059	0	0.0500		101	81.7	124				
Surr: Toluene-d8	0.05035	0	0.0500		101	82.5	122				

Sample ID: **LCS-233089** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330058**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **233089** Analysis Date: **11/16/2016** Seq No: **7172775**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.05167	0.0050	0.0500		103	65.3	137				
Benzene	0.04919	0.0050	0.0500		98.4	74.9	123				
Chlorobenzene	0.04591	0.0050	0.0500		91.8	73.9	124				
Toluene	0.04950	0.0050	0.0500		99.0	75	124				
Trichloroethene	0.04680	0.0050	0.0500		93.6	73.1	128				
Surr: 4-Bromofluorobenzene	0.04738	0	0.0500		94.8	67	118				
Surr: Dibromofluoromethane	0.05112	0	0.0500		102	81.7	124				
Surr: Toluene-d8	0.05013	0	0.0500		100	82.5	122				

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611C42

ANALYTICAL QC SUMMARY REPORT

BatchID: 233089

Sample ID: **1611C42-002AMS** Client ID: **TW-6** Units: **mg/L** Prep Date: **11/16/2016** Run No: **330058**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **233089** Analysis Date: **11/16/2016** Seq No: **7172898**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.05475	0.0050	0.0500		110	60	150				
Benzene	0.05153	0.0050	0.0500		103	70.1	132				
Chlorobenzene	0.04960	0.0050	0.0500		99.2	70.9	131				
Toluene	0.05260	0.0050	0.0500		105	70.1	133				
Trichloroethene	0.05056	0.0050	0.0500		101	70	136				
Surr: 4-Bromofluorobenzene	0.04625	0	0.0500		92.5	67	118				
Surr: Dibromofluoromethane	0.05020	0	0.0500		100	81.7	124				
Surr: Toluene-d8	0.04923	0	0.0500		98.5	82.5	122				

Sample ID: **1611C42-002AMSD** Client ID: **TW-6** Units: **mg/L** Prep Date: **11/16/2016** Run No: **330058**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **233089** Analysis Date: **11/16/2016** Seq No: **7172902**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.05419	0.0050	0.0500		108	60	150	0.05475	1.03	17.7	
Benzene	0.05087	0.0050	0.0500		102	70.1	132	0.05153	1.29	20	
Chlorobenzene	0.04794	0.0050	0.0500		95.9	70.9	131	0.04960	3.40	20	
Toluene	0.05175	0.0050	0.0500		104	70.1	133	0.05260	1.63	20	
Trichloroethene	0.04955	0.0050	0.0500		99.1	70	136	0.05056	2.02	20	
Surr: 4-Bromofluorobenzene	0.04705	0	0.0500		94.1	67	118	0.04625	0	0	
Surr: Dibromofluoromethane	0.05095	0	0.0500		102	81.7	124	0.05020	0	0	
Surr: Toluene-d8	0.05021	0	0.0500		100	82.5	122	0.04923	0	0	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611C42

ANALYTICAL QC SUMMARY REPORT

BatchID: 233183

Sample ID: **MB-233183** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330413**
SampleType: **MBLK** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **233183** Analysis Date: **11/22/2016** Seq No: **7187982**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.00500									
Copper	BRL	0.00200									
Lead	BRL	0.00100									
Zinc	BRL	0.0100									

Sample ID: **LCS-233183** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330413**
SampleType: **LCS** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **233183** Analysis Date: **11/20/2016** Seq No: **7182962**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09620	0.00500	0.1000		96.2	80	120				
Copper	0.09669	0.00200	0.1000	0.0003620	96.3	80	120				
Lead	0.09947	0.00100	0.1000		99.5	80	120				
Zinc	0.09744	0.0100	0.1000		97.4	80	120				

Sample ID: **1611A86-002CMS** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330413**
SampleType: **MS** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **233183** Analysis Date: **11/20/2016** Seq No: **7182964**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.08930	0.00500	0.1000	0.0005200	88.8	75	125				
Copper	0.3054	0.00200	0.1000	0.2171	88.3	75	125				
Lead	0.1359	0.00100	0.1000	0.03240	104	75	125				

Sample ID: **1611A86-002CMS** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330413**
SampleType: **MS** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **233183** Analysis Date: **11/21/2016** Seq No: **7183444**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	3.021	0.100	0.1000	2.997	24.0	75	125				S

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611C42

ANALYTICAL QC SUMMARY REPORT

BatchID: 233183

Sample ID: **1611A86-002CMSD**	Client ID:		Units: **mg/L**	Prep Date: **11/18/2016**	Run No: **330413**
SampleType: **MSD**	TestCode: **Dissolved Metals by ICP/MS SW6020B**		BatchID: **233183**	Analysis Date: **11/20/2016**	Seq No: **7182965**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.08863	0.00500	0.1000	0.0005200	88.1	75	125	0.08930	0.753	20	
Copper	0.3010	0.00200	0.1000	0.2171	83.9	75	125	0.3054	1.45	20	
Lead	0.1367	0.00100	0.1000	0.03240	104	75	125	0.1359	0.587	20	

Sample ID: **1611A86-002CMSD**	Client ID:		Units: **mg/L**	Prep Date: **11/18/2016**	Run No: **330413**
SampleType: **MSD**	TestCode: **Dissolved Metals by ICP/MS SW6020B**		BatchID: **233183**	Analysis Date: **11/21/2016**	Seq No: **7183445**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	3.198	0.100	0.1000	2.997	201	75	125	3.021	5.69	20	S

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611C42

ANALYTICAL QC SUMMARY REPORT

BatchID: R330131

Sample ID: **MB-R330131** Client ID: Units: **mg/L** Prep Date: Run No: **330131**
SampleType: **MBLK** TestCode: **ION SCAN SW9056A** BatchID: **R330131** Analysis Date: **11/11/2016** Seq No: **7174697**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R330131** Client ID: Units: **mg/L** Prep Date: Run No: **330131**
SampleType: **LCS** TestCode: **ION SCAN SW9056A** BatchID: **R330131** Analysis Date: **11/11/2016** Seq No: **7174696**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.065	0.25	5.000		101	90	110				
Sulfate	24.63	1.0	25.00		98.5	90	110				

Sample ID: **1611C40-004CMS** Client ID: Units: **mg/L** Prep Date: Run No: **330131**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R330131** Analysis Date: **11/12/2016** Seq No: **7174738**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.532	0.25	5.000	0.4076	102	90	110				
Sulfate	29.13	1.0	25.00	4.754	97.5	90	110				

Sample ID: **1611C40-005CMS** Client ID: Units: **mg/L** Prep Date: Run No: **330131**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R330131** Analysis Date: **11/12/2016** Seq No: **7174740**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.360	0.25	5.000	0.2256	103	90	110				
Sulfate	24.93	1.0	25.00	0.4019	98.1	90	110				

Sample ID: **1611C40-004CMSD** Client ID: Units: **mg/L** Prep Date: Run No: **330131**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R330131** Analysis Date: **11/12/2016** Seq No: **7174739**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.566	0.25	5.000	0.4076	103	90	110	5.532	0.621	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611C42

ANALYTICAL QC SUMMARY REPORT

BatchID: R330131

Sample ID: **1611C40-004CMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date: Run No: **330131**
BatchID: **R330131** Analysis Date: **11/12/2016** Seq No: **7174739**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	29.45	1.0	25.00	4.754	98.8	90	110	29.13	1.10	20	

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 25, 2016

Rhonda Quinn
AMEC E&I, Inc. -Kennesaw
1075 Big Shanty Rd NW
Kennesaw GA 30144

TEL: (770) 421-3400
FAX: (770) 421-3486

RE: BFEL Atlanta

Dear Rhonda Quinn: Order No: 1611D49

Analytical Environmental Services, Inc. received 6 samples on 11/14/2016 4:48:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1611D49

Date: 11/14/16 Page 1 of 1

COMPANY:	ADDRESS:
Amec Foster Wheeler	1075 Big Shanty Rd, Ste 100 Kennesaw, GA 30144
PHONE: 770-421-3400	FAX: 770-421-3486
SAMPLED BY: D Howard, N McMillan, D Morris	SIGNATURE: Daniel L Howard

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	* ANALYSIS REQUESTED: VOC list 8260	Total metals list 6020	Diss metals list 6020	Pest 8081A	N, nitrate, sulfate 9056	PRESERVATION (See codes)	REMARKS	No # of Containers
1	TB-05	11/14/16	0900	X		W	2					H		2
2	TW-8		1012	X		GW	2	1	1	2	1	I		7
3	TW-9		1209	X		GW	2	1	1	2	1	I		7
4	TW-10		1357	X		GW	2	1	1	2	1	I		7
5	OW-2		1056	X		GW	2	1	1	2	1	I		7
6	OW-3		1155	X		GW	2	1	1	2	1	I		7
7	Temp Blank													
8														
9														
10														
11														
12														
13														
14														

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Daniel L Howard	11/14/16/1615	1: [signature]	Nov-14-16 1615
2: [signature]	Nov-14-2016 1648	2: Jenn Mills	11/14/16 1648 pm
3:		3:	

PROJECT INFORMATION

PROJECT NAME: BFEL Atlanta
PROJECT #: 612208015422
SITE ADDRESS: 1525 Pine St Atlanta, GA
SEND REPORT TO: Rhonda Quinn
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT

Total # of Containers

Turnaround Time Request
- (●) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:
* Diss metals will be Filtered by the lab

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL (COURIER)
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.
SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

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

White Copy - Original; Yellow Copy - Client

Client: AMEC E&I, Inc. -Kennesaw
Project: BFEL Atlanta
Lab ID: 1611D49

Case Narrative

Ion Chromotography Analysis by Method 9056A:

Due to sample matrix, sample(s) 1611D49-002E,-003E,-004E,-005E,-006E required dilution during preparation and/or analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TB-05
Project Name:	BFEL Atlanta	**Collection Date:**	11/14/2016 9:00:00 AM
Lab ID:	1611D49-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
1,4-Dioxane	BRL	0.15		mg/L	233089	1	11/18/2016 09:56	NP
2-Butanone	BRL	0.050		mg/L	233089	1	11/18/2016 09:56	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233089	1	11/18/2016 09:56	NP
Acetone	BRL	0.050		mg/L	233089	1	11/18/2016 09:56	NP
Benzene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Carbon disulfide	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Chlorobenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Chloroethane	BRL	0.010		mg/L	233089	1	11/18/2016 09:56	NP
Chloroform	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Chloromethane	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Cyclohexane	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Ethylbenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233089	1	11/18/2016 09:56	NP
Isopropylbenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Methylene chloride	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Naphthalene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Styrene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Tetrachloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Tetrahydrofuran	BRL	0.010		mg/L	233089	1	11/18/2016 09:56	NP
Toluene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Trichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Vinyl chloride	BRL	0.0020		mg/L	233089	1	11/18/2016 09:56	NP
Xylenes, Total	BRL	0.0050		mg/L	233089	1	11/18/2016 09:56	NP
Surr: 4-Bromofluorobenzene	91.2	66.1-129		%REC	233089	1	11/18/2016 09:56	NP
Surr: Dibromofluoromethane	102	83.6-123		%REC	233089	1	11/18/2016 09:56	NP
Surr: Toluene-d8	100	81.8-118		%REC	233089	1	11/18/2016 09:56	NP

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-8
Project Name:	BFEL Atlanta	**Collection Date:**	11/14/2016 10:12:00 AM
Lab ID:	1611D49-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
1,4-Dioxane	BRL	0.15		mg/L	233089	1	11/18/2016 11:07	NP
2-Butanone	BRL	0.050		mg/L	233089	1	11/18/2016 11:07	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233089	1	11/18/2016 11:07	NP
Acetone	BRL	0.050		mg/L	233089	1	11/18/2016 11:07	NP
Benzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Carbon disulfide	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Chlorobenzene	0.080	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Chloroethane	BRL	0.010		mg/L	233089	1	11/18/2016 11:07	NP
Chloroform	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Chloromethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Cyclohexane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Ethylbenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233089	1	11/18/2016 11:07	NP
Isopropylbenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Methylene chloride	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Naphthalene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Styrene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Tetrachloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Tetrahydrofuran	BRL	0.010		mg/L	233089	1	11/18/2016 11:07	NP
Toluene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Trichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Vinyl chloride	BRL	0.0020		mg/L	233089	1	11/18/2016 11:07	NP
Xylenes, Total	BRL	0.0050		mg/L	233089	1	11/18/2016 11:07	NP
Surr: 4-Bromofluorobenzene	91.3	66.1-129		%REC	233089	1	11/18/2016 11:07	NP
Surr: Dibromofluoromethane	101	83.6-123		%REC	233089	1	11/18/2016 11:07	NP
Surr: Toluene-d8	100	81.8-118		%REC	233089	1	11/18/2016 11:07	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-8
Project Name:	BFEL Atlanta	**Collection Date:**	11/14/2016 10:12:00 AM
Lab ID:	1611D49-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	0.108	0.00500		mg/L	233165	1	11/21/2016 11:50	JS
Copper	0.0233	0.00200		mg/L	233165	1	11/21/2016 11:50	JS
Lead	BRL	0.00100		mg/L	233165	1	11/21/2016 11:50	JS
Zinc	4.79	0.500		mg/L	233165	50	11/23/2016 01:59	JS
ION SCAN SW9056A								
Nitrate	BRL	2.5		mg/L	R330240	10	11/15/2016 11:37	JW
Sulfate	670	10		mg/L	R330240	10	11/15/2016 11:37	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	0.0784	0.00500		mg/L	233303	1	11/22/2016 17:39	JS
Copper	0.0178	0.00200		mg/L	233303	1	11/22/2016 17:39	JS
Lead	BRL	0.00100		mg/L	233303	1	11/21/2016 07:49	JS
Zinc	4.23	0.0500		mg/L	233303	5	11/23/2016 14:20	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.0020		mg/L	232981	20	11/18/2016 07:12	SH
4,4´-DDE	BRL	0.0020		mg/L	232981	20	11/18/2016 07:12	SH
4,4´-DDT	BRL	0.0020		mg/L	232981	20	11/18/2016 07:12	SH
alpha-BHC	0.26	0.010		mg/L	232981	200	11/18/2016 16:48	SH
alpha-Chlordane	BRL	0.0010		mg/L	232981	20	11/18/2016 07:12	SH
beta-BHC	0.034	0.010		mg/L	232981	200	11/18/2016 16:48	SH
delta-BHC	0.076	0.010		mg/L	232981	200	11/18/2016 16:48	SH
Dieldrin	BRL	0.0020		mg/L	232981	20	11/18/2016 07:12	SH
gamma-BHC	0.086	0.010		mg/L	232981	200	11/18/2016 16:48	SH
gamma-Chlordane	BRL	0.0010		mg/L	232981	20	11/18/2016 07:12	SH
Heptachlor	BRL	0.0010		mg/L	232981	20	11/18/2016 07:12	SH
Methoxychlor	BRL	0.010		mg/L	232981	20	11/18/2016 07:12	SH
Toxaphene	BRL	0.0030		mg/L	232981	1	11/17/2016 03:40	SH
Surr: Decachlorobiphenyl	55.8	15.3-120		%REC	232981	20	11/18/2016 07:12	SH
Surr: Tetrachloro-m-xylene	100	23.4-131		%REC	232981	20	11/18/2016 07:12	SH

Qualifiers:

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- BRL Below reporting limit
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- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-9
Project Name:	BFEL Atlanta	**Collection Date:**	11/14/2016 12:09:00 PM
Lab ID:	1611D49-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
1,4-Dioxane	BRL	0.15		mg/L	233089	1	11/18/2016 11:31	NP
2-Butanone	BRL	0.050		mg/L	233089	1	11/18/2016 11:31	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233089	1	11/18/2016 11:31	NP
Acetone	BRL	0.050		mg/L	233089	1	11/18/2016 11:31	NP
Benzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Carbon disulfide	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Chlorobenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Chloroethane	BRL	0.010		mg/L	233089	1	11/18/2016 11:31	NP
Chloroform	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Chloromethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Cyclohexane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Ethylbenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233089	1	11/18/2016 11:31	NP
Isopropylbenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Methylene chloride	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Naphthalene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Styrene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Tetrachloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Tetrahydrofuran	BRL	0.010		mg/L	233089	1	11/18/2016 11:31	NP
Toluene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Trichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Vinyl chloride	BRL	0.0020		mg/L	233089	1	11/18/2016 11:31	NP
Xylenes, Total	BRL	0.0050		mg/L	233089	1	11/18/2016 11:31	NP
Surr: 4-Bromofluorobenzene	88.4	66.1-129		%REC	233089	1	11/18/2016 11:31	NP
Surr: Dibromofluoromethane	99.8	83.6-123		%REC	233089	1	11/18/2016 11:31	NP
Surr: Toluene-d8	98.2	81.8-118		%REC	233089	1	11/18/2016 11:31	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-9
Project Name:	BFEL Atlanta	**Collection Date:**	11/14/2016 12:09:00 PM
Lab ID:	1611D49-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	0.0237	0.00500		mg/L	233165	1	11/21/2016 11:56	JS
Copper	0.191	0.00200		mg/L	233165	1	11/21/2016 11:56	JS
Lead	BRL	0.00100		mg/L	233165	1	11/21/2016 11:56	JS
Zinc	4.04	0.500		mg/L	233165	50	11/23/2016 02:05	JS
ION SCAN SW9056A								
Nitrate	BRL	2.5		mg/L	R330240	10	11/15/2016 11:52	JW
Sulfate	230	10		mg/L	R330240	10	11/15/2016 11:52	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233303	10	11/23/2016 14:26	JS
Copper	0.182	0.00200		mg/L	233303	1	11/21/2016 07:55	JS
Lead	BRL	0.00100		mg/L	233303	1	11/21/2016 07:55	JS
Zinc	4.01	0.100		mg/L	233303	10	11/23/2016 14:26	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232981	1	11/18/2016 07:49	SH
4,4´-DDE	BRL	0.00010		mg/L	232981	1	11/18/2016 07:49	SH
4,4´-DDT	BRL	0.00010		mg/L	232981	1	11/18/2016 07:49	SH
alpha-BHC	0.0067	0.00050		mg/L	232981	10	11/18/2016 07:30	SH
alpha-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 07:49	SH
beta-BHC	0.0030	0.00050		mg/L	232981	10	11/18/2016 07:30	SH
delta-BHC	0.0037	0.00050		mg/L	232981	10	11/18/2016 07:30	SH
Dieldrin	BRL	0.00010		mg/L	232981	1	11/18/2016 07:49	SH
gamma-BHC	0.00088	0.000050		mg/L	232981	1	11/18/2016 07:49	SH
gamma-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 07:49	SH
Heptachlor	BRL	0.000050		mg/L	232981	1	11/18/2016 07:49	SH
Methoxychlor	BRL	0.00050		mg/L	232981	1	11/18/2016 07:49	SH
Toxaphene	BRL	0.0030		mg/L	232981	1	11/17/2016 03:51	SH
Surr: Decachlorobiphenyl	51.5	15.3-120		%REC	232981	1	11/18/2016 07:49	SH
Surr: Tetrachloro-m-xylene	69.5	23.4-131		%REC	232981	1	11/18/2016 07:49	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-10
Project Name:	BFEL Atlanta	**Collection Date:**	11/14/2016 1:57:00 PM
Lab ID:	1611D49-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
1,4-Dioxane	BRL	0.15		mg/L	233089	1	11/18/2016 11:54	NP
2-Butanone	BRL	0.050		mg/L	233089	1	11/18/2016 11:54	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233089	1	11/18/2016 11:54	NP
Acetone	BRL	0.050		mg/L	233089	1	11/18/2016 11:54	NP
Benzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Carbon disulfide	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Chlorobenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Chloroethane	BRL	0.010		mg/L	233089	1	11/18/2016 11:54	NP
Chloroform	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Chloromethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Cyclohexane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Ethylbenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233089	1	11/18/2016 11:54	NP
Isopropylbenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Methylene chloride	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Naphthalene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Styrene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Tetrachloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Tetrahydrofuran	BRL	0.010		mg/L	233089	1	11/18/2016 11:54	NP
Toluene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Trichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Vinyl chloride	BRL	0.0020		mg/L	233089	1	11/18/2016 11:54	NP
Xylenes, Total	BRL	0.0050		mg/L	233089	1	11/18/2016 11:54	NP
Surr: 4-Bromofluorobenzene	92.6	66.1-129		%REC	233089	1	11/18/2016 11:54	NP
Surr: Dibromofluoromethane	102	83.6-123		%REC	233089	1	11/18/2016 11:54	NP
Surr: Toluene-d8	101	81.8-118		%REC	233089	1	11/18/2016 11:54	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-10
Project Name:	BFEL Atlanta	**Collection Date:**	11/14/2016 1:57:00 PM
Lab ID:	1611D49-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233165	1	11/21/2016 12:02	JS
Copper	20.0	0.100		mg/L	233165	50	11/23/2016 02:12	JS
Lead	BRL	0.00100		mg/L	233165	1	11/21/2016 12:02	JS
Zinc	20.0	0.500		mg/L	233165	50	11/23/2016 02:12	JS
ION SCAN SW9056A								
Nitrate	BRL	2.5		mg/L	R330240	10	11/15/2016 12:07	JW
Sulfate	830	10		mg/L	R330240	10	11/15/2016 12:07	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233303	1	11/21/2016 08:02	JS
Copper	10.3	0.0100		mg/L	233303	5	11/22/2016 17:45	JS
Lead	BRL	0.00100		mg/L	233303	1	11/21/2016 08:02	JS
Zinc	17.9	0.100		mg/L	233303	10	11/23/2016 14:49	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232981	1	11/18/2016 08:07	SH
4,4´-DDE	BRL	0.00010		mg/L	232981	1	11/18/2016 08:07	SH
4,4´-DDT	BRL	0.00010		mg/L	232981	1	11/18/2016 08:07	SH
alpha-BHC	0.000099	0.000050		mg/L	232981	1	11/18/2016 08:07	SH
alpha-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 08:07	SH
beta-BHC	BRL	0.000050		mg/L	232981	1	11/18/2016 08:07	SH
delta-BHC	BRL	0.000050		mg/L	232981	1	11/18/2016 08:07	SH
Dieldrin	BRL	0.00010		mg/L	232981	1	11/18/2016 08:07	SH
gamma-BHC	BRL	0.000050		mg/L	232981	1	11/18/2016 08:07	SH
gamma-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 08:07	SH
Heptachlor	BRL	0.000050		mg/L	232981	1	11/18/2016 08:07	SH
Methoxychlor	BRL	0.00050		mg/L	232981	1	11/18/2016 08:07	SH
Toxaphene	BRL	0.0030		mg/L	232981	1	11/17/2016 04:02	SH
Surr: Decachlorobiphenyl	63.6	15.3-120		%REC	232981	1	11/18/2016 08:07	SH
Surr: Tetrachloro-m-xylene	67.8	23.4-131		%REC	232981	1	11/18/2016 08:07	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	OW-2
Project Name:	BFEL Atlanta	**Collection Date:**	11/14/2016 10:56:00 AM
Lab ID:	1611D49-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
1,2,4-Trichlorobenzene	0.0068	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
1,4-Dioxane	BRL	0.15		mg/L	233089	1	11/18/2016 12:18	NP
2-Butanone	BRL	0.050		mg/L	233089	1	11/18/2016 12:18	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233089	1	11/18/2016 12:18	NP
Acetone	BRL	0.050		mg/L	233089	1	11/18/2016 12:18	NP
Benzene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Carbon disulfide	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Chlorobenzene	0.22	0.050		mg/L	233089	10	11/18/2016 13:06	NP
Chloroethane	BRL	0.010		mg/L	233089	1	11/18/2016 12:18	NP
Chloroform	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Chloromethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Cyclohexane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Ethylbenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233089	1	11/18/2016 12:18	NP
Isopropylbenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Methylene chloride	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Naphthalene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Styrene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Tetrachloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Tetrahydrofuran	BRL	0.010		mg/L	233089	1	11/18/2016 12:18	NP
Toluene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Trichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Vinyl chloride	BRL	0.0020		mg/L	233089	1	11/18/2016 12:18	NP
Xylenes, Total	BRL	0.0050		mg/L	233089	1	11/18/2016 12:18	NP
Surr: 4-Bromofluorobenzene	91.8	66.1-129		%REC	233089	1	11/18/2016 12:18	NP
Surr: 4-Bromofluorobenzene	89.1	66.1-129		%REC	233089	10	11/18/2016 13:06	NP
Surr: Dibromofluoromethane	102	83.6-123		%REC	233089	1	11/18/2016 12:18	NP
Surr: Dibromofluoromethane	101	83.6-123		%REC	233089	10	11/18/2016 13:06	NP
Surr: Toluene-d8	100	81.8-118		%REC	233089	1	11/18/2016 12:18	NP

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	OW-2
Project Name:	BFEL Atlanta	**Collection Date:**	11/14/2016 10:56:00 AM
Lab ID:	1611D49-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Surr: Toluene-d8	100	81.8-118		%REC	233089	10	11/18/2016 13:06	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	0.0431	0.00500		mg/L	233165	1	11/21/2016 12:28	JS
Copper	BRL	0.100		mg/L	233165	50	11/23/2016 02:18	JS
Lead	BRL	0.00100		mg/L	233165	1	11/21/2016 12:28	JS
Zinc	3.87	0.500		mg/L	233165	50	11/23/2016 02:18	JS
ION SCAN SW9056A								
Nitrate	BRL	2.5		mg/L	R330240	10	11/15/2016 12:22	JW
Sulfate	630	10		mg/L	R330240	10	11/15/2016 12:22	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	0.0339	0.00500		mg/L	233303	1	11/21/2016 08:08	JS
Copper	0.0493	0.0200		mg/L	233303	10	11/23/2016 14:56	JS
Lead	BRL	0.00100		mg/L	233303	1	11/21/2016 08:08	JS
Zinc	3.78	0.100		mg/L	233303	10	11/23/2016 14:56	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.0020		mg/L	232981	20	11/18/2016 08:25	SH
4,4´-DDE	BRL	0.0020		mg/L	232981	20	11/18/2016 08:25	SH
4,4´-DDT	BRL	0.0020		mg/L	232981	20	11/18/2016 08:25	SH
alpha-BHC	0.052	0.010		mg/L	232981	200	11/18/2016 17:06	SH
alpha-Chlordane	BRL	0.0010		mg/L	232981	20	11/18/2016 08:25	SH
beta-BHC	0.0086	0.0010		mg/L	232981	20	11/18/2016 08:25	SH
delta-BHC	0.18	0.010		mg/L	232981	200	11/18/2016 17:06	SH
Dieldrin	BRL	0.0020		mg/L	232981	20	11/18/2016 08:25	SH
gamma-BHC	0.056	0.010		mg/L	232981	200	11/18/2016 17:06	SH
gamma-Chlordane	BRL	0.0010		mg/L	232981	20	11/18/2016 08:25	SH
Heptachlor	BRL	0.0010		mg/L	232981	20	11/18/2016 08:25	SH
Methoxychlor	BRL	0.010		mg/L	232981	20	11/18/2016 08:25	SH
Toxaphene	BRL	0.0030		mg/L	232981	1	11/17/2016 04:13	SH
Surr: Decachlorobiphenyl	63.3	15.3-120		%REC	232981	20	11/18/2016 08:25	SH
Surr: Tetrachloro-m-xylene	100	23.4-131		%REC	232981	20	11/18/2016 08:25	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	OW-3
Project Name:	BFEL Atlanta	**Collection Date:**	11/14/2016 11:55:00 AM
Lab ID:	1611D49-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
1,4-Dioxane	BRL	0.15		mg/L	233089	1	11/18/2016 12:42	NP
2-Butanone	BRL	0.050		mg/L	233089	1	11/18/2016 12:42	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	233089	1	11/18/2016 12:42	NP
Acetone	BRL	0.050		mg/L	233089	1	11/18/2016 12:42	NP
Benzene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Carbon disulfide	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Carbon tetrachloride	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Chlorobenzene	0.018	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Chloroethane	BRL	0.010		mg/L	233089	1	11/18/2016 12:42	NP
Chloroform	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Chloromethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Cyclohexane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Ethylbenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Isobutyl Alcohol	BRL	0.20		mg/L	233089	1	11/18/2016 12:42	NP
Isopropylbenzene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Methylene chloride	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Naphthalene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Styrene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Tetrachloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Tetrahydrofuran	BRL	0.010		mg/L	233089	1	11/18/2016 12:42	NP
Toluene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Trichloroethene	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Vinyl chloride	BRL	0.0020		mg/L	233089	1	11/18/2016 12:42	NP
Xylenes, Total	BRL	0.0050		mg/L	233089	1	11/18/2016 12:42	NP
Surr: 4-Bromofluorobenzene	91.7	66.1-129		%REC	233089	1	11/18/2016 12:42	NP
Surr: Dibromofluoromethane	102	83.6-123		%REC	233089	1	11/18/2016 12:42	NP
Surr: Toluene-d8	98.7	81.8-118		%REC	233089	1	11/18/2016 12:42	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	OW-3
Project Name:	BFEL Atlanta	**Collection Date:**	11/14/2016 11:55:00 AM
Lab ID:	1611D49-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233165	1	11/21/2016 15:41	JS
Copper	0.579	0.00200		mg/L	233165	1	11/21/2016 15:41	JS
Lead	BRL	0.00100		mg/L	233165	1	11/21/2016 15:41	JS
Zinc	5.22	0.500		mg/L	233165	50	11/23/2016 02:24	JS
ION SCAN SW9056A								
Nitrate	BRL	2.5		mg/L	R330240	10	11/15/2016 12:36	JW
Sulfate	560	10		mg/L	R330240	10	11/15/2016 12:36	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	233303	1	11/21/2016 08:14	JS
Copper	0.559	0.00200		mg/L	233303	1	11/21/2016 08:14	JS
Lead	BRL	0.00100		mg/L	233303	1	11/21/2016 08:14	JS
Zinc	5.31	0.100		mg/L	233303	10	11/23/2016 15:02	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232981	1	11/18/2016 09:02	SH
4,4´-DDE	BRL	0.00010		mg/L	232981	1	11/18/2016 09:02	SH
4,4´-DDT	BRL	0.00010		mg/L	232981	1	11/18/2016 09:02	SH
alpha-BHC	0.0041	0.00050		mg/L	232981	10	11/18/2016 08:44	SH
alpha-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 09:02	SH
beta-BHC	0.0022	0.00050		mg/L	232981	10	11/18/2016 08:44	SH
delta-BHC	0.0093	0.00050		mg/L	232981	10	11/18/2016 08:44	SH
Dieldrin	BRL	0.00010		mg/L	232981	1	11/18/2016 09:02	SH
gamma-BHC	0.0020	0.00050		mg/L	232981	10	11/18/2016 08:44	SH
gamma-Chlordane	BRL	0.000050		mg/L	232981	1	11/18/2016 09:02	SH
Heptachlor	BRL	0.000050		mg/L	232981	1	11/18/2016 09:02	SH
Methoxychlor	BRL	0.00050		mg/L	232981	1	11/18/2016 09:02	SH
Toxaphene	BRL	0.0030		mg/L	232981	1	11/17/2016 04:24	SH
Surr: Decachlorobiphenyl	45.3	15.3-120		%REC	232981	1	11/18/2016 09:02	SH
Surr: Tetrachloro-m-xylene	90.2	23.4-131		%REC	232981	1	11/18/2016 09:02	SH

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ANEC Work Order Number 1611D49

Checklist completed by _____ 11/14/16
Signature Date

Carrier name: FedEx __ UPS __ Courier ✓ Client __ US Mail __ Other _____

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

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

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 0.2 Cooler #2 0.8 Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

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

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

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611D49

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611D49-001A	TB-05	11/14/2016 9:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		11/16/2016 9:41:00 AM	11/18/2016
1611D49-002A	TW-8	11/14/2016 10:12:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/16/2016 9:41:00 AM	11/18/2016
1611D49-002B	TW-8	11/14/2016 10:12:00AM	Groundwater	Total Metals by ICP/MS		11/17/2016 5:54:00 PM	11/21/2016
1611D49-002B	TW-8	11/14/2016 10:12:00AM	Groundwater	Total Metals by ICP/MS		11/17/2016 5:54:00 PM	11/23/2016
1611D49-002C	TW-8	11/14/2016 10:12:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611D49-002C	TW-8	11/14/2016 10:12:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611D49-002C	TW-8	11/14/2016 10:12:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/23/2016
1611D49-002D	TW-8	11/14/2016 10:12:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611D49-002D	TW-8	11/14/2016 10:12:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611D49-002E	TW-8	11/14/2016 10:12:00AM	Groundwater	ION SCAN			11/15/2016
1611D49-003A	TW-9	11/14/2016 12:09:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/16/2016 9:41:00 AM	11/18/2016
1611D49-003B	TW-9	11/14/2016 12:09:00PM	Groundwater	Total Metals by ICP/MS		11/17/2016 5:54:00 PM	11/21/2016
1611D49-003B	TW-9	11/14/2016 12:09:00PM	Groundwater	Total Metals by ICP/MS		11/17/2016 5:54:00 PM	11/23/2016
1611D49-003C	TW-9	11/14/2016 12:09:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611D49-003C	TW-9	11/14/2016 12:09:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/23/2016
1611D49-003D	TW-9	11/14/2016 12:09:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611D49-003D	TW-9	11/14/2016 12:09:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611D49-003E	TW-9	11/14/2016 12:09:00PM	Groundwater	ION SCAN			11/15/2016
1611D49-004A	TW-10	11/14/2016 1:57:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/16/2016 9:41:00 AM	11/18/2016
1611D49-004B	TW-10	11/14/2016 1:57:00PM	Groundwater	Total Metals by ICP/MS		11/17/2016 5:54:00 PM	11/21/2016
1611D49-004B	TW-10	11/14/2016 1:57:00PM	Groundwater	Total Metals by ICP/MS		11/17/2016 5:54:00 PM	11/23/2016
1611D49-004C	TW-10	11/14/2016 1:57:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611D49-004C	TW-10	11/14/2016 1:57:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611D49-004C	TW-10	11/14/2016 1:57:00PM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/23/2016
1611D49-004D	TW-10	11/14/2016 1:57:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611D49-004D	TW-10	11/14/2016 1:57:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611D49-004E	TW-10	11/14/2016 1:57:00PM	Groundwater	ION SCAN			11/15/2016
1611D49-005A	OW-2	11/14/2016 10:56:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/16/2016 9:41:00 AM	11/18/2016
1611D49-005B	OW-2	11/14/2016 10:56:00AM	Groundwater	Total Metals by ICP/MS		11/17/2016 5:54:00 PM	11/21/2016

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611D49

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611D49-005B	OW-2	11/14/2016 10:56:00AM	Groundwater	Total Metals by ICP/MS		11/17/2016 5:54:00 PM	11/23/2016
1611D49-005C	OW-2	11/14/2016 10:56:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611D49-005C	OW-2	11/14/2016 10:56:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/23/2016
1611D49-005D	OW-2	11/14/2016 10:56:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611D49-005D	OW-2	11/14/2016 10:56:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611D49-005E	OW-2	11/14/2016 10:56:00AM	Groundwater	ION SCAN			11/15/2016
1611D49-006A	OW-3	11/14/2016 11:55:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/16/2016 9:41:00 AM	11/18/2016
1611D49-006B	OW-3	11/14/2016 11:55:00AM	Groundwater	Total Metals by ICP/MS		11/17/2016 5:54:00 PM	11/21/2016
1611D49-006B	OW-3	11/14/2016 11:55:00AM	Groundwater	Total Metals by ICP/MS		11/17/2016 5:54:00 PM	11/23/2016
1611D49-006C	OW-3	11/14/2016 11:55:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611D49-006C	OW-3	11/14/2016 11:55:00AM	Groundwater	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/23/2016
1611D49-006D	OW-3	11/14/2016 11:55:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611D49-006D	OW-3	11/14/2016 11:55:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611D49-006E	OW-3	11/14/2016 11:55:00AM	Groundwater	ION SCAN			11/15/2016

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611D49

ANALYTICAL QC SUMMARY REPORT

BatchID: 232981

Sample ID: **MB-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330257**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/16/2016** Seq No: **7178505**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	0.00010									
4,4´-DDE	BRL	0.00010									
4,4´-DDT	BRL	0.00010									
alpha-BHC	BRL	0.000050									
alpha-Chlordane	BRL	0.000050									
beta-BHC	BRL	0.000050									
delta-BHC	BRL	0.000050									
Dieldrin	BRL	0.00010									
gamma-BHC	BRL	0.000050									
gamma-Chlordane	BRL	0.000050									
Heptachlor	BRL	0.000050									
Methoxychlor	BRL	0.00050									
Toxaphene	BRL	0.0050									
Surr: Decachlorobiphenyl	0.000253	0	0.0005		50.5	15.3	120				
Surr: Tetrachloro-m-xylene	0.000505	0	0.0005		101	23.4	131				

Sample ID: **MB-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330272**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/17/2016** Seq No: **7178716**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	0.00010									
4,4´-DDE	BRL	0.00010									
4,4´-DDT	BRL	0.00010									
alpha-BHC	BRL	0.000050									
alpha-Chlordane	BRL	0.000050									
beta-BHC	BRL	0.000050									
delta-BHC	BRL	0.000050									

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611D49

ANALYTICAL QC SUMMARY REPORT

BatchID: 232981

Sample ID: **MB-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330272**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/17/2016** Seq No: **7178716**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	BRL	0.00010									
gamma-BHC	BRL	0.000050									
gamma-Chlordane	BRL	0.000050									
Heptachlor	BRL	0.000050									
Methoxychlor	BRL	0.00050									
Surr: Decachlorobiphenyl	0.000238	0	0.0005		47.7	15.3	120				
Surr: Tetrachloro-m-xylene	0.000427	0	0.0005		85.4	23.4	131				

Sample ID: **LCS-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330257**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/16/2016** Seq No: **7178506**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001052	0.00010	0.0010		105	78.2	126				
Dieldrin	0.001030	0.00010	0.0010		103	74.4	125				
gamma-BHC	0.001099	0.000050	0.0010		110	65.6	131				
Heptachlor	0.000982	0.000050	0.0010		98.2	58.9	126				
Surr: Decachlorobiphenyl	0.000249	0	0.0005		49.8	15.3	120				
Surr: Tetrachloro-m-xylene	0.000490	0	0.0005		98.1	23.4	131				

Sample ID: **LCS-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330272**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/17/2016** Seq No: **7178717**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.000948	0.00010	0.0010		94.8	78.2	126				
Dieldrin	0.000884	0.00010	0.0010		88.4	74.4	125				
gamma-BHC	0.000917	0.000050	0.0010		91.7	65.6	131				
Heptachlor	0.000873	0.000050	0.0010		87.3	58.9	126				
Surr: Decachlorobiphenyl	0.000247	0	0.0005		49.4	15.3	120				

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611D49

ANALYTICAL QC SUMMARY REPORT

BatchID: 232981

Sample ID: **LCS-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330272**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/17/2016** Seq No: **7178717**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Tetrachloro-m-xylene	0.000441	0	0.0005		88.2	23.4	131				

Sample ID: **1611E54-006BMS** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330285**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/18/2016** Seq No: **7179554**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001035	0.00010	0.0010		104	40.5	145				
Dieldrin	0.000985	0.00010	0.0010	0.00005550	92.9	47.8	143				
gamma-BHC	0.001273	0.000050	0.0010	0.0002514	102	52.5	146				
Heptachlor	0.001009	0.000050	0.0010		101	36.5	144				
Surr: Decachlorobiphenyl	0.000264	0	0.0005		52.8	15.3	120				
Surr: Tetrachloro-m-xylene	0.000448	0	0.0005		89.6	23.4	131				

Sample ID: **1611E54-006BMSD** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330308**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/18/2016** Seq No: **7179948**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001199	0.00010	0.0010		120	40.5	145	0.001035	14.7	23.6	
Dieldrin	0.001154	0.00010	0.0010	0.00005550	110	47.8	143	0.0009847	15.8	20	
gamma-BHC	0.001439	0.000050	0.0010	0.0002514	119	52.5	146	0.001273	12.3	24.6	
Heptachlor	0.001169	0.000050	0.0010		117	36.5	144	0.001009	14.7	25.8	
Surr: Decachlorobiphenyl	0.000210	0	0.0005		42.1	15.3	120	0.0002640	0	0	
Surr: Tetrachloro-m-xylene	0.000454	0	0.0005		90.7	23.4	131	0.0004479	0	0	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611D49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233089

Sample ID: **MB-233089** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330058**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **233089** Analysis Date: **11/16/2016** Seq No: **7172777**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	0.0050									
1,1,2,2-Tetrachloroethane	BRL	0.0050									
1,1,2-Trichloroethane	BRL	0.0050									
1,1-Dichloroethane	BRL	0.0050									
1,1-Dichloroethene	BRL	0.0050									
1,1-Dichloropropene	BRL	0.0050									
1,2,4-Trichlorobenzene	BRL	0.0050									
1,2-Dichloroethane	BRL	0.0050									
1,2-Dichloropropane	BRL	0.0050									
1,4-Dioxane	BRL	0.15									
2-Butanone	BRL	0.050									
4-Methyl-2-pentanone	BRL	0.010									
Acetone	BRL	0.050									
Benzene	BRL	0.0050									
Carbon disulfide	BRL	0.0050									
Carbon tetrachloride	BRL	0.0050									
Chlorobenzene	BRL	0.0050									
Chloroethane	BRL	0.010									
Chloroform	BRL	0.0050									
Chloromethane	BRL	0.010									
cis-1,2-Dichloroethene	BRL	0.0050									
Cyclohexane	BRL	0.0050									
Ethylbenzene	BRL	0.0050									
Isobutyl Alcohol	BRL	0.20									
Isopropylbenzene	BRL	0.0050									
Methylene chloride	BRL	0.0050									
Naphthalene	BRL	0.0050									

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611D49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233089

Sample ID: **MB-233089** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330058**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **233089** Analysis Date: **11/16/2016** Seq No: **7172777**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Styrene	BRL	0.0050									
Tetrachloroethene	BRL	0.0050									
Tetrahydrofuran	BRL	0.010									
Toluene	BRL	0.0050									
trans-1,2-Dichloroethene	BRL	0.0050									
Trichloroethene	BRL	0.0050									
Trichlorofluoromethane	BRL	0.0050									
Vinyl chloride	BRL	0.0020									
Xylenes, Total	BRL	0.0050									
Surr: 4-Bromofluorobenzene	0.04712	0	0.0500		94.2	67	118				
Surr: Dibromofluoromethane	0.05059	0	0.0500		101	81.7	124				
Surr: Toluene-d8	0.05035	0	0.0500		101	82.5	122				

Sample ID: **LCS-233089** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330058**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **233089** Analysis Date: **11/16/2016** Seq No: **7172775**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.05167	0.0050	0.0500		103	65.3	137				
Benzene	0.04919	0.0050	0.0500		98.4	74.9	123				
Chlorobenzene	0.04591	0.0050	0.0500		91.8	73.9	124				
Toluene	0.04950	0.0050	0.0500		99.0	75	124				
Trichloroethene	0.04680	0.0050	0.0500		93.6	73.1	128				
Surr: 4-Bromofluorobenzene	0.04738	0	0.0500		94.8	67	118				
Surr: Dibromofluoromethane	0.05112	0	0.0500		102	81.7	124				
Surr: Toluene-d8	0.05013	0	0.0500		100	82.5	122				

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611D49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233089

Sample ID: **1611C42-002AMS** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330058**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **233089** Analysis Date: **11/16/2016** Seq No: **7172898**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.05475	0.0050	0.0500		110	60	150				
Benzene	0.05153	0.0050	0.0500		103	70.1	132				
Chlorobenzene	0.04960	0.0050	0.0500		99.2	70.9	131				
Toluene	0.05260	0.0050	0.0500		105	70.1	133				
Trichloroethene	0.05056	0.0050	0.0500		101	70	136				
Surr: 4-Bromofluorobenzene	0.04625	0	0.0500		92.5	67	118				
Surr: Dibromofluoromethane	0.05020	0	0.0500		100	81.7	124				
Surr: Toluene-d8	0.04923	0	0.0500		98.5	82.5	122				

Sample ID: **1611C42-002AMSD** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330058**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **233089** Analysis Date: **11/16/2016** Seq No: **7172902**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.05419	0.0050	0.0500		108	60	150	0.05475	1.03	17.7	
Benzene	0.05087	0.0050	0.0500		102	70.1	132	0.05153	1.29	20	
Chlorobenzene	0.04794	0.0050	0.0500		95.9	70.9	131	0.04960	3.40	20	
Toluene	0.05175	0.0050	0.0500		104	70.1	133	0.05260	1.63	20	
Trichloroethene	0.04955	0.0050	0.0500		99.1	70	136	0.05056	2.02	20	
Surr: 4-Bromofluorobenzene	0.04705	0	0.0500		94.1	67	118	0.04625	0	0	
Surr: Dibromofluoromethane	0.05095	0	0.0500		102	81.7	124	0.05020	0	0	
Surr: Toluene-d8	0.05021	0	0.0500		100	82.5	122	0.04923	0	0	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611D49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233165

Sample ID: **MB-233165**	Client ID:			Units: **mg/L**	Prep Date: **11/17/2016**	Run No: **330416**
SampleType: **MBLK**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **233165**	Analysis Date: **11/21/2016**	Seq No: **7183102**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	BRL	0.00100									

Sample ID: **MB-233165**	Client ID:			Units: **mg/L**	Prep Date: **11/17/2016**	Run No: **330416**
SampleType: **MBLK**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **233165**	Analysis Date: **11/23/2016**	Seq No: **7189067**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.00500									
Copper	BRL	0.00200									
Zinc	BRL	0.0100									

Sample ID: **LCS-233165**	Client ID:			Units: **mg/L**	Prep Date: **11/17/2016**	Run No: **330416**
SampleType: **LCS**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **233165**	Analysis Date: **11/21/2016**	Seq No: **7183103**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.1080	0.00500	0.1000		108	80	120				
Copper	0.1068	0.00200	0.1000		107	80	120				
Lead	0.1114	0.00100	0.1000		111	80	120				
Zinc	0.1114	0.0100	0.1000		111	80	120				

Sample ID: **1611C67-001AMS**	Client ID:			Units: **mg/L**	Prep Date: **11/17/2016**	Run No: **330416**
SampleType: **MS**	TestCode: **Total Metals by ICP/MS** **SW6020B**			BatchID: **233165**	Analysis Date: **11/21/2016**	Seq No: **7183105**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.1024	0.00500	0.1000	0.0005770	102	75	125				
Copper	0.1003	0.00200	0.1000	0.003873	96.4	75	125				
Lead	0.1088	0.00100	0.1000	0.0008720	108	75	125				
Zinc	0.1093	0.0100	0.1000	0.01353	95.8	75	125				

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611D49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233165

Sample ID: **1611C67-001AMSD** Client ID:
SampleType: **MSD** TestCode: **Total Metals by ICP/MS SW6020B**
Units: **mg/L** Prep Date: **11/17/2016** Run No: **330416**
BatchID: **233165** Analysis Date: **11/21/2016** Seq No: **7183108**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09985	0.00500	0.1000	0.0005770	99.3	75	125	0.1024	2.52	20	
Copper	0.09818	0.00200	0.1000	0.003873	94.3	75	125	0.1003	2.14	20	
Lead	0.1067	0.00100	0.1000	0.0008720	106	75	125	0.1088	1.95	20	
Zinc	0.1082	0.0100	0.1000	0.01353	94.7	75	125	0.1093	1.01	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611D49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233303

Sample ID: **MB-233303** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330415**
SampleType: **MBLK** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **233303** Analysis Date: **11/22/2016** Seq No: **7188089**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.00500									
Copper	BRL	0.00200									
Lead	BRL	0.00100									
Zinc	BRL	0.0100									

Sample ID: **LCS-233303** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330415**
SampleType: **LCS** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **233303** Analysis Date: **11/21/2016** Seq No: **7183061**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.1001	0.00500	0.1000		100	80	120				
Copper	0.1010	0.00200	0.1000	0.0004870	101	80	120				
Lead	0.1028	0.00100	0.1000		103	80	120				
Zinc	0.1117	0.0100	0.1000		112	80	120				

Sample ID: **1611E54-001AMS** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330415**
SampleType: **MS** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **233303** Analysis Date: **11/21/2016** Seq No: **7183063**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09675	0.00500	0.1000	0.001141	95.6	75	125				
Copper	0.1085	0.00200	0.1000	0.01795	90.6	75	125				
Lead	0.1022	0.00100	0.1000	0.0003820	102	75	125				
Zinc	1.346	0.0100	0.1000	1.249	97.0	75	125				

Sample ID: **1611E54-001AMSD** Client ID: Units: **mg/L** Prep Date: **11/18/2016** Run No: **330415**
SampleType: **MSD** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **233303** Analysis Date: **11/21/2016** Seq No: **7183066**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09946	0.00500	0.1000	0.001141	98.3	75	125	0.09675	2.76	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611D49

ANALYTICAL QC SUMMARY REPORT

BatchID: 233303

Sample ID: **1611E54-001AMSD** Client ID:
SampleType: **MSD** TestCode: **Dissolved Metals by ICP/MS SW6020B**
Units: **mg/L** Prep Date: **11/18/2016** Run No: **330415**
BatchID: **233303** Analysis Date: **11/21/2016** Seq No: **7183066**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Copper	0.1121	0.00200	0.1000	0.01795	94.2	75	125	0.1085	3.26	20	
Lead	0.1047	0.00100	0.1000	0.0003820	104	75	125	0.1022	2.42	20	
Zinc	1.359	0.0100	0.1000	1.249	110	75	125	1.346	0.961	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611D49

ANALYTICAL QC SUMMARY REPORT

BatchID: R330240

Sample ID: **MB-R330240** Client ID: Units: **mg/L** Prep Date: Run No: **330240**
SampleType: **MBLK** TestCode: **ION SCAN SW9056A** BatchID: **R330240** Analysis Date: **11/15/2016** Seq No: **7178027**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R330240** Client ID: Units: **mg/L** Prep Date: Run No: **330240**
SampleType: **LCS** TestCode: **ION SCAN SW9056A** BatchID: **R330240** Analysis Date: **11/15/2016** Seq No: **7178026**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	4.968	0.25	5.000		99.4	90	110				
Sulfate	24.72	1.0	25.00		98.9	90	110				

Sample ID: **1611E30-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **330240**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R330240** Analysis Date: **11/15/2016** Seq No: **7178036**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	77.27	2.5	50.00	23.68	107	90	110				
Sulfate	279.4	10	250.0	36.10	97.3	90	110				

Sample ID: **1611E30-002BMSD** Client ID: Units: **mg/L** Prep Date: Run No: **330240**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R330240** Analysis Date: **11/15/2016** Seq No: **7178037**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	77.77	2.5	50.00	23.68	108	90	110	77.27	0.654	20	
Sulfate	281.0	10	250.0	36.10	98.0	90	110	279.4	0.572	20	

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 25, 2016

Rhonda Quinn
AMEC E&I, Inc. -Kennesaw
1075 Big Shanty Rd NW
Kennesaw GA 30144

TEL: (770) 421-3400
FAX: (770) 421-3486

RE: BFEL Atlanta

Dear Rhonda Quinn: Order No: 1611E54

Analytical Environmental Services, Inc. received 9 samples on 11/15/2016 1:30:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1611E54

Date: 11/15/16 Page 1 of 1

COMPANY: Amec Foster Wheeler

ADDRESS: 1075 Big Shanty Rd Ste 100 Kennesaw, GA

PHONE: 770-421-3400

FAX: 770-421-3486

SAMPLED BY: D Howard, N McMillan, D Morris

SIGNATURE: Daniel L Howard

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	* ANALYSIS REQUESTED: Diss Metals list 6020	Dest 8081A	Nitrate, Sulfate 9056	Hardness	PRESERVATION (See codes) H	I	I	N	REMARKS	No # of Containers
1	SW-2010-17	11/15/16	0955	X		SW	1	2	1							4
2	SW-2010-15		1009	X		SW	1	2	1	1						5
3	SW-2010-14		1023	X		SW	1	2	1							4
4	SW-2010-11		1050	X		SW	1	2	1							4
5	DUP-3		1200	X		SW	1	2	1							4
6	SW-2014-20		1100	X		SW	1	2	1	1						5
7	SW-2010-10		1110	X		SW	1	2	1	1						5
8	SW-2014-21		1122	X		SW	1	2	1							4
9	SW-2010-5		1145	X		SW	1	2	1							4
10	Temp Blank															
11																
12																
13																
14																

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Daniel L Howard	11/15/16/1330	1: Parvo Masoudi	11/15/16
2:		2:	13:30
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:
* Diss metals will be Filtered by the lab

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION
PROJECT NAME: BFEL Atlanta
PROJECT #: 6122080154.22
SITE ADDRESS: 1525 Pine St Atlanta, GA
SEND REPORT TO: Rhonda Quinn
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #:_____ PO#:_____

RECEIPT
Total # of Containers

Turnaround Time Request
- (●) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.
SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

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

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project: BFEL Atlanta
Lab ID: 1611E54

Case Narrative

Ion Chromotography Analysis by Method 9056A:

Due to sample matrix, sample(s) 1611E54-001C/-002C/-003C/-007C/-009C required dilution during preparation and/or analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	SW-2010-17
Project Name:	BFEL Atlanta	**Collection Date:**	11/15/2016 9:55:00 AM
Lab ID:	1611E54-001	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
ION SCAN SW9056A									
Nitrate	2.0	J	0.24	2.5	mg/L	R330366	10	11/16/2016 10:17	JW
Sulfate	160		1.0	10	mg/L	R330366	10	11/16/2016 10:17	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**				
Arsenic	0.00114	J	0.000125	0.00500	mg/L	233303	1	11/21/2016 06:59	JS
Copper	0.0165		0.000228	0.00200	mg/L	233303	1	11/22/2016 17:32	JS
Lead	0.000382	J	0.000143	0.00100	mg/L	233303	1	11/21/2016 06:59	JS
Zinc	1.20		0.00392	0.0100	mg/L	233303	1	11/22/2016 17:32	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**				
4,4´-DDD	BRL		0.000002	0.00010	mg/L	232981	1	11/18/2016 09:20	SH
4,4´-DDE	BRL		0.000001	0.00010	mg/L	232981	1	11/18/2016 09:20	SH
4,4´-DDT	BRL		0.000023	0.00010	mg/L	232981	1	11/18/2016 09:20	SH
alpha-BHC	0.00047		0.000004	0.000050	mg/L	232981	1	11/18/2016 09:20	SH
alpha-Chlordane	0.0000045	J	0.000002	0.000050	mg/L	232981	1	11/18/2016 09:20	SH
beta-BHC	0.00047		0.000007	0.000050	mg/L	232981	1	11/18/2016 09:20	SH
delta-BHC	0.00027		0.000005	0.000050	mg/L	232981	1	11/18/2016 09:20	SH
Dieldrin	0.000011	J	0.000002	0.00010	mg/L	232981	1	11/18/2016 09:20	SH
gamma-BHC	0.00012		0.000005	0.000050	mg/L	232981	1	11/18/2016 09:20	SH
gamma-Chlordane	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 09:20	SH
Heptachlor	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 09:20	SH
Methoxychlor	BRL		0.000027	0.00050	mg/L	232981	1	11/18/2016 09:20	SH
Toxaphene	BRL		0.000040	0.0030	mg/L	232981	1	11/17/2016 05:31	SH
Surr: Decachlorobiphenyl	59.7		0	15.3-120	%REC	232981	1	11/18/2016 09:20	SH
Surr: Tetrachloro-m-xylene	95.1		0	23.4-131	%REC	232981	1	11/18/2016 09:20	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	SW-2010-15
Project Name:	BFEL Atlanta	**Collection Date:**	11/15/2016 10:09:00 AM
Lab ID:	1611E54-002	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
ION SCAN SW9056A									
Nitrate	2.2	J	0.24	2.5	mg/L	R330366	10	11/16/2016 10:32	JW
Sulfate	170		1.0	10	mg/L	R330366	10	11/16/2016 10:32	JW
HARDNESS SM2340 B					**(SM2340B)**				
Hardness, Calcium (As CaCO3)	175		0.0200	1.00	mg/L CaCO3	233364	1	11/21/2016 21:36	JL
Hardness, Calcium/Magnesium (As CaCO3)	239		0.0400	1.00	mg/L CaCO3	233364	1	11/21/2016 21:36	JL
Hardness, Magnesium	64.0		0.0200	1.00	mg/L CaCO3	233364	1	11/21/2016 21:36	JL
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**				
Arsenic	0.000886	J	0.000125	0.00500	mg/L	233303	1	11/21/2016 08:20	JS
Copper	0.0276		0.000228	0.00200	mg/L	233303	1	11/22/2016 17:57	JS
Lead	0.000220	J	0.000143	0.00100	mg/L	233303	1	11/21/2016 08:20	JS
Zinc	1.43		0.00392	0.0100	mg/L	233303	1	11/22/2016 17:57	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**				
4,4´-DDD	BRL		0.000002	0.00010	mg/L	232981	1	11/18/2016 09:39	SH
4,4´-DDE	BRL		0.000001	0.00010	mg/L	232981	1	11/18/2016 09:39	SH
4,4´-DDT	BRL		0.000023	0.00010	mg/L	232981	1	11/18/2016 09:39	SH
alpha-BHC	0.00037		0.000004	0.000050	mg/L	232981	1	11/18/2016 09:39	SH
alpha-Chlordane	BRL		0.000002	0.000050	mg/L	232981	1	11/18/2016 09:39	SH
beta-BHC	0.00051		0.000007	0.000050	mg/L	232981	1	11/18/2016 09:39	SH
delta-BHC	0.00025		0.000005	0.000050	mg/L	232981	1	11/18/2016 09:39	SH
Dieldrin	0.000012	J	0.000002	0.00010	mg/L	232981	1	11/18/2016 09:39	SH
gamma-BHC	0.000087		0.000005	0.000050	mg/L	232981	1	11/18/2016 09:39	SH
gamma-Chlordane	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 09:39	SH
Heptachlor	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 09:39	SH
Methoxychlor	BRL		0.000027	0.00050	mg/L	232981	1	11/18/2016 09:39	SH
Toxaphene	BRL		0.000040	0.0030	mg/L	232981	1	11/17/2016 05:42	SH
Surr: Decachlorobiphenyl	59.3		0	15.3-120	%REC	232981	1	11/18/2016 09:39	SH
Surr: Tetrachloro-m-xylene	95		0	23.4-131	%REC	232981	1	11/18/2016 09:39	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	SW-2010-14
Project Name:	BFEL Atlanta	**Collection Date:**	11/15/2016 10:23:00 AM
Lab ID:	1611E54-003	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
ION SCAN SW9056A									
Nitrate	2.1	J	0.24	2.5	mg/L	R330366	10	11/16/2016 10:47	JW
Sulfate	160		1.0	10	mg/L	R330366	10	11/16/2016 10:47	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**				
Arsenic	0.00100	J	0.000125	0.00500	mg/L	233303	1	11/21/2016 08:27	JS
Copper	0.0484		0.000228	0.00200	mg/L	233303	1	11/22/2016 18:04	JS
Lead	0.000375	J	0.000143	0.00100	mg/L	233303	1	11/21/2016 08:27	JS
Zinc	1.38		0.00392	0.0100	mg/L	233303	1	11/22/2016 18:04	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**				
4,4´-DDD	0.0000075	J	0.000002	0.00010	mg/L	232981	1	11/18/2016 10:34	SH
4,4´-DDE	BRL		0.000001	0.00010	mg/L	232981	1	11/18/2016 10:34	SH
4,4´-DDT	BRL		0.000023	0.00010	mg/L	232981	1	11/18/2016 10:34	SH
alpha-BHC	0.00041		0.000004	0.000050	mg/L	232981	1	11/18/2016 10:34	SH
alpha-Chlordane	BRL		0.000002	0.000050	mg/L	232981	1	11/18/2016 10:34	SH
beta-BHC	0.00057		0.000007	0.000050	mg/L	232981	1	11/18/2016 10:34	SH
delta-BHC	0.00030		0.000005	0.000050	mg/L	232981	1	11/18/2016 10:34	SH
Dieldrin	0.000014	J	0.000002	0.00010	mg/L	232981	1	11/18/2016 10:34	SH
gamma-BHC	0.00010		0.000005	0.000050	mg/L	232981	1	11/18/2016 10:34	SH
gamma-Chlordane	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 10:34	SH
Heptachlor	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 10:34	SH
Methoxychlor	BRL		0.000027	0.00050	mg/L	232981	1	11/18/2016 10:34	SH
Toxaphene	BRL		0.000040	0.0030	mg/L	232981	1	11/17/2016 05:53	SH
Surr: Decachlorobiphenyl	59.7		0	15.3-120	%REC	232981	1	11/18/2016 10:34	SH
Surr: Tetrachloro-m-xylene	92.6		0	23.4-131	%REC	232981	1	11/18/2016 10:34	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	SW-2010-11
Project Name:	BFEL Atlanta	**Collection Date:**	11/15/2016 10:50:00 AM
Lab ID:	1611E54-004	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
ION SCAN SW9056A									
Nitrate	5.4		0.24	2.5	mg/L	R330366	10	11/16/2016 11:01	JW
Sulfate	240		1.0	10	mg/L	R330366	10	11/16/2016 11:01	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**				
Arsenic	0.000646	J	0.000125	0.00500	mg/L	233303	1	11/21/2016 08:52	JS
Copper	0.256		0.000228	0.00200	mg/L	233303	1	11/21/2016 08:52	JS
Lead	BRL		0.000143	0.00100	mg/L	233303	1	11/21/2016 08:52	JS
Zinc	5.92		0.0392	0.100	mg/L	233303	10	11/23/2016 15:08	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**				
4,4´-DDD	BRL		0.000002	0.00010	mg/L	232981	1	11/18/2016 10:52	SH
4,4´-DDE	BRL		0.000001	0.00010	mg/L	232981	1	11/18/2016 10:52	SH
4,4´-DDT	BRL		0.000023	0.00010	mg/L	232981	1	11/18/2016 10:52	SH
alpha-BHC	0.00035		0.000004	0.000050	mg/L	232981	1	11/18/2016 10:52	SH
alpha-Chlordane	BRL		0.000002	0.000050	mg/L	232981	1	11/18/2016 10:52	SH
beta-BHC	0.0011		0.000007	0.000050	mg/L	232981	1	11/18/2016 10:52	SH
delta-BHC	0.00016		0.000005	0.000050	mg/L	232981	1	11/18/2016 10:52	SH
Dieldrin	0.000022	J	0.000002	0.00010	mg/L	232981	1	11/18/2016 10:52	SH
gamma-BHC	0.00015		0.000005	0.000050	mg/L	232981	1	11/18/2016 10:52	SH
gamma-Chlordane	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 10:52	SH
Heptachlor	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 10:52	SH
Methoxychlor	BRL		0.000027	0.00050	mg/L	232981	1	11/18/2016 10:52	SH
Toxaphene	BRL		0.000040	0.0030	mg/L	232981	1	11/17/2016 06:05	SH
Surr: Decachlorobiphenyl	50.6		0	15.3-120	%REC	232981	1	11/18/2016 10:52	SH
Surr: Tetrachloro-m-xylene	80.8		0	23.4-131	%REC	232981	1	11/18/2016 10:52	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	DUP-3
Project Name:	BFEL Atlanta	**Collection Date:**	11/15/2016 12:00:00 PM
Lab ID:	1611E54-005	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
ION SCAN SW9056A									
Nitrate	5.1		0.24	2.5	mg/L	R330366	10	11/16/2016 11:16	JW
Sulfate	230		1.0	10	mg/L	R330366	10	11/16/2016 11:16	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**				
Arsenic	0.000662	J	0.000125	0.00500	mg/L	233303	1	11/21/2016 08:58	JS
Copper	0.281		0.000228	0.00200	mg/L	233303	1	11/21/2016 08:58	JS
Lead	0.000156	J	0.000143	0.00100	mg/L	233303	1	11/21/2016 08:58	JS
Zinc	6.62		0.0392	0.100	mg/L	233303	10	11/23/2016 15:14	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**				
4,4´-DDD	0.0000044	J	0.000002	0.00010	mg/L	232981	1	11/18/2016 11:11	SH
4,4´-DDE	BRL		0.000001	0.00010	mg/L	232981	1	11/18/2016 11:11	SH
4,4´-DDT	BRL		0.000023	0.00010	mg/L	232981	1	11/18/2016 11:11	SH
alpha-BHC	0.00038		0.000004	0.000050	mg/L	232981	1	11/18/2016 11:11	SH
alpha-Chlordane	BRL		0.000002	0.000050	mg/L	232981	1	11/18/2016 11:11	SH
beta-BHC	0.0012		0.000007	0.000050	mg/L	232981	1	11/18/2016 11:11	SH
delta-BHC	0.00018		0.000005	0.000050	mg/L	232981	1	11/18/2016 11:11	SH
Dieldrin	0.000028	J	0.000002	0.00010	mg/L	232981	1	11/18/2016 11:11	SH
gamma-BHC	0.00016		0.000005	0.000050	mg/L	232981	1	11/18/2016 11:11	SH
gamma-Chlordane	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 11:11	SH
Heptachlor	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 11:11	SH
Methoxychlor	BRL		0.000027	0.00050	mg/L	232981	1	11/18/2016 11:11	SH
Toxaphene	BRL		0.000040	0.0030	mg/L	232981	1	11/17/2016 06:16	SH
Surr: Decachlorobiphenyl	62.7		0	15.3-120	%REC	232981	1	11/18/2016 11:11	SH
Surr: Tetrachloro-m-xylene	87.3		0	23.4-131	%REC	232981	1	11/18/2016 11:11	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	SW-2014-20
Project Name:	BFEL Atlanta	**Collection Date:**	11/15/2016 11:00:00 AM
Lab ID:	1611E54-006	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
ION SCAN SW9056A									
Nitrate	11		0.24	2.5	mg/L	R330366	10	11/16/2016 11:31	JW
Sulfate	420		1.0	10	mg/L	R330366	10	11/16/2016 11:31	JW
HARDNESS SM2340 B					**(SM2340B)**				
Hardness, Calcium (As CaCO3)	258		0.0200	1.00	mg/L CaCO3	233364	1	11/21/2016 21:59	JL
Hardness, Calcium/Magnesium (As CaCO3)	339		0.0400	1.00	mg/L CaCO3	233364	1	11/21/2016 21:59	JL
Hardness, Magnesium	81.2		0.0200	1.00	mg/L CaCO3	233364	1	11/21/2016 21:59	JL
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**				
Arsenic	0.000316	J	0.000125	0.00500	mg/L	233303	1	11/21/2016 09:04	JS
Copper	0.641		0.000228	0.00200	mg/L	233303	1	11/21/2016 09:04	JS
Lead	0.000388	J	0.000143	0.00100	mg/L	233303	1	11/21/2016 09:04	JS
Zinc	11.8		0.0392	0.100	mg/L	233303	10	11/23/2016 15:21	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**				
4,4´-DDD	BRL		0.000002	0.00010	mg/L	232981	1	11/18/2016 11:48	SH
4,4´-DDE	BRL		0.000001	0.00010	mg/L	232981	1	11/18/2016 11:48	SH
4,4´-DDT	BRL		0.000023	0.00010	mg/L	232981	1	11/18/2016 11:48	SH
alpha-BHC	0.00054		0.000004	0.000050	mg/L	232981	1	11/18/2016 11:48	SH
alpha-Chlordane	BRL		0.000002	0.000050	mg/L	232981	1	11/18/2016 11:48	SH
beta-BHC	0.0030		0.000034	0.00025	mg/L	232981	5	11/18/2016 11:29	SH
delta-BHC	0.00028		0.000005	0.000050	mg/L	232981	1	11/18/2016 11:48	SH
Dieldrin	0.000056	J	0.000002	0.00010	mg/L	232981	1	11/18/2016 11:48	SH
gamma-BHC	0.00025		0.000005	0.000050	mg/L	232981	1	11/18/2016 11:48	SH
gamma-Chlordane	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 11:48	SH
Heptachlor	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 11:48	SH
Methoxychlor	0.000032	J	0.000027	0.00050	mg/L	232981	1	11/18/2016 11:48	SH
Toxaphene	BRL		0.000040	0.0030	mg/L	232981	1	11/17/2016 06:27	SH
Surr: Decachlorobiphenyl	55		0	15.3-120	%REC	232981	1	11/18/2016 11:48	SH
Surr: Tetrachloro-m-xylene	86.9		0	23.4-131	%REC	232981	1	11/18/2016 11:48	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	SW-2010-10
Project Name:	BFEL Atlanta	**Collection Date:**	11/15/2016 11:10:00 AM
Lab ID:	1611E54-007	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
ION SCAN SW9056A									
Nitrate	1.1	J	0.24	2.5	mg/L	R330366	10	11/16/2016 11:45	JW
Sulfate	100		1.0	10	mg/L	R330366	10	11/16/2016 11:45	JW
HARDNESS SM2340 B (SM2340B)									
Hardness, Calcium (As CaCO3)	125		0.0200	1.00	mg/L CaCO3	233364	1	11/21/2016 22:03	JL
Hardness, Calcium/Magnesium (As CaCO3)	173		0.0400	1.00	mg/L CaCO3	233364	1	11/21/2016 22:03	JL
Hardness, Magnesium	48.0		0.0200	1.00	mg/L CaCO3	233364	1	11/21/2016 22:03	JL
Dissolved Metals by ICP/MS SW6020B (SW3005A)									
Arsenic	0.00121	J	0.000125	0.00500	mg/L	233303	1	11/21/2016 09:11	JS
Copper	0.00659		0.000228	0.00200	mg/L	233303	1	11/22/2016 18:10	JS
Lead	0.000782	J	0.000143	0.00100	mg/L	233303	1	11/21/2016 09:11	JS
Zinc	0.557		0.00392	0.0100	mg/L	233303	1	11/22/2016 18:10	JS
CHLORINATED PESTICIDES, TCL SW8081B (SW3510C)									
4,4´-DDD	0.000011	J	0.000002	0.00010	mg/L	232981	1	11/18/2016 15:34	SH
4,4´-DDE	BRL		0.000001	0.00010	mg/L	232981	1	11/18/2016 15:34	SH
4,4´-DDT	BRL		0.000023	0.00010	mg/L	232981	1	11/18/2016 15:34	SH
alpha-BHC	0.00023		0.000004	0.000050	mg/L	232981	1	11/18/2016 15:34	SH
alpha-Chlordane	BRL		0.000002	0.000050	mg/L	232981	1	11/18/2016 15:34	SH
beta-BHC	0.000099		0.000007	0.000050	mg/L	232981	1	11/18/2016 15:34	SH
delta-BHC	0.00011		0.000005	0.000050	mg/L	232981	1	11/18/2016 15:34	SH
Dieldrin	0.0000098	J	0.000002	0.00010	mg/L	232981	1	11/18/2016 15:34	SH
gamma-BHC	0.000075		0.000005	0.000050	mg/L	232981	1	11/18/2016 15:34	SH
gamma-Chlordane	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 15:34	SH
Heptachlor	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 15:34	SH
Methoxychlor	BRL		0.000027	0.00050	mg/L	232981	1	11/18/2016 15:34	SH
Toxaphene	BRL		0.000040	0.0030	mg/L	232981	1	11/17/2016 07:00	SH
Surr: Decachlorobiphenyl	68.2		0	15.3-120	%REC	232981	1	11/18/2016 15:34	SH
Surr: Tetrachloro-m-xylene	88.7		0	23.4-131	%REC	232981	1	11/18/2016 15:34	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	SW-2014-21
Project Name:	BFEL Atlanta	**Collection Date:**	11/15/2016 11:22:00 AM
Lab ID:	1611E54-008	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
ION SCAN SW9056A									
Nitrate	11		0.24	2.5	mg/L	R330366	10	11/16/2016 12:00	JW
Sulfate	410		1.0	10	mg/L	R330366	10	11/16/2016 12:00	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**				
Arsenic	0.000312	J	0.000125	0.00500	mg/L	233303	1	11/21/2016 09:17	JS
Copper	0.901		0.000228	0.00200	mg/L	233303	1	11/21/2016 09:17	JS
Lead	0.000530	J	0.000143	0.00100	mg/L	233303	1	11/21/2016 09:17	JS
Zinc	12.4		0.0392	0.100	mg/L	233303	10	11/23/2016 15:27	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**				
4,4´-DDD	BRL		0.000002	0.00010	mg/L	232981	1	11/18/2016 16:11	SH
4,4´-DDE	BRL		0.000001	0.00010	mg/L	232981	1	11/18/2016 16:11	SH
4,4´-DDT	BRL		0.000023	0.00010	mg/L	232981	1	11/18/2016 16:11	SH
alpha-BHC	0.00038		0.000004	0.000050	mg/L	232981	1	11/18/2016 16:11	SH
alpha-Chlordane	BRL		0.000002	0.000050	mg/L	232981	1	11/18/2016 16:11	SH
beta-BHC	0.0039		0.000069	0.00050	mg/L	232981	10	11/18/2016 15:53	SH
delta-BHC	0.00027		0.000005	0.000050	mg/L	232981	1	11/18/2016 16:11	SH
Dieldrin	0.000066	J	0.000002	0.00010	mg/L	232981	1	11/18/2016 16:11	SH
gamma-BHC	0.00018		0.000005	0.000050	mg/L	232981	1	11/18/2016 16:11	SH
gamma-Chlordane	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 16:11	SH
Heptachlor	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 16:11	SH
Methoxychlor	BRL		0.000027	0.00050	mg/L	232981	1	11/18/2016 16:11	SH
Toxaphene	BRL		0.000040	0.0030	mg/L	232981	1	11/17/2016 07:11	SH
Surr: Decachlorobiphenyl	75.8		0	15.3-120	%REC	232981	1	11/18/2016 16:11	SH
Surr: Tetrachloro-m-xylene	98.1		0	23.4-131	%REC	232981	1	11/18/2016 16:11	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	SW-2010-5
Project Name:	BFEL Atlanta	**Collection Date:**	11/15/2016 11:45:00 AM
Lab ID:	1611E54-009	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
ION SCAN SW9056A									
Nitrate	0.90	J	0.24	2.5	mg/L	R330366	10	11/16/2016 12:15	JW
Sulfate	97		1.0	10	mg/L	R330366	10	11/16/2016 12:15	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**				
Arsenic	0.00148	J	0.000125	0.00500	mg/L	233303	1	11/21/2016 09:23	JS
Copper	0.00706		0.000228	0.00200	mg/L	233303	1	11/23/2016 01:03	JS
Lead	BRL		0.000143	0.00100	mg/L	233303	1	11/21/2016 09:23	JS
Zinc	0.789		0.00392	0.0100	mg/L	233303	1	11/23/2016 01:03	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**				
4,4´-DDD	BRL		0.000002	0.00010	mg/L	232981	1	11/18/2016 16:29	SH
4,4´-DDE	BRL		0.000001	0.00010	mg/L	232981	1	11/18/2016 16:29	SH
4,4´-DDT	BRL		0.000023	0.00010	mg/L	232981	1	11/18/2016 16:29	SH
alpha-BHC	0.00020		0.000004	0.000050	mg/L	232981	1	11/18/2016 16:29	SH
alpha-Chlordane	BRL		0.000002	0.000050	mg/L	232981	1	11/18/2016 16:29	SH
beta-BHC	0.000083		0.000007	0.000050	mg/L	232981	1	11/18/2016 16:29	SH
delta-BHC	0.000041	J	0.000005	0.000050	mg/L	232981	1	11/18/2016 16:29	SH
Dieldrin	0.0000085	J	0.000002	0.00010	mg/L	232981	1	11/18/2016 16:29	SH
gamma-BHC	0.000021	J	0.000005	0.000050	mg/L	232981	1	11/18/2016 16:29	SH
gamma-Chlordane	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 16:29	SH
Heptachlor	BRL		0.000001	0.000050	mg/L	232981	1	11/18/2016 16:29	SH
Methoxychlor	BRL		0.000027	0.00050	mg/L	232981	1	11/18/2016 16:29	SH
Toxaphene	BRL		0.000040	0.0030	mg/L	232981	1	11/17/2016 07:22	SH
Surr: Decachlorobiphenyl	70.5		0	15.3-120	%REC	232981	1	11/18/2016 16:29	SH
Surr: Tetrachloro-m-xylene	91.7		0	23.4-131	%REC	232981	1	11/18/2016 16:29	SH

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client AMEC/Kennebunk Work Order Number 1611E54

Checklist completed by Alicia Judge 11/15/2016
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

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

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

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 1.6°C Cooler #2 0.5°C Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

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

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

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by AJ

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611E54

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611E54-001A	SW-2010-17	11/15/2016 9:55:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611E54-001A	SW-2010-17	11/15/2016 9:55:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611E54-001B	SW-2010-17	11/15/2016 9:55:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611E54-001B	SW-2010-17	11/15/2016 9:55:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611E54-001C	SW-2010-17	11/15/2016 9:55:00AM	Surface Water	ION SCAN			11/16/2016
1611E54-002A	SW-2010-15	11/15/2016 10:09:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611E54-002A	SW-2010-15	11/15/2016 10:09:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611E54-002B	SW-2010-15	11/15/2016 10:09:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611E54-002B	SW-2010-15	11/15/2016 10:09:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611E54-002C	SW-2010-15	11/15/2016 10:09:00AM	Surface Water	ION SCAN			11/16/2016
1611E54-002D	SW-2010-15	11/15/2016 10:09:00AM	Surface Water	Hardness		11/21/2016 1:46:00 PM	11/21/2016
1611E54-003A	SW-2010-14	11/15/2016 10:23:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611E54-003A	SW-2010-14	11/15/2016 10:23:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611E54-003B	SW-2010-14	11/15/2016 10:23:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611E54-003B	SW-2010-14	11/15/2016 10:23:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611E54-003C	SW-2010-14	11/15/2016 10:23:00AM	Surface Water	ION SCAN			11/16/2016
1611E54-004A	SW-2010-11	11/15/2016 10:50:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611E54-004A	SW-2010-11	11/15/2016 10:50:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/23/2016
1611E54-004B	SW-2010-11	11/15/2016 10:50:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611E54-004B	SW-2010-11	11/15/2016 10:50:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611E54-004C	SW-2010-11	11/15/2016 10:50:00AM	Surface Water	ION SCAN			11/16/2016
1611E54-005A	DUP-3	11/15/2016 12:00:00PM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611E54-005A	DUP-3	11/15/2016 12:00:00PM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/23/2016
1611E54-005B	DUP-3	11/15/2016 12:00:00PM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611E54-005B	DUP-3	11/15/2016 12:00:00PM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611E54-005C	DUP-3	11/15/2016 12:00:00PM	Surface Water	ION SCAN			11/16/2016
1611E54-006A	SW-2014-20	11/15/2016 11:00:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611E54-006A	SW-2014-20	11/15/2016 11:00:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/23/2016
1611E54-006B	SW-2014-20	11/15/2016 11:00:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611E54

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611E54-006B	SW-2014-20	11/15/2016 11:00:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611E54-006C	SW-2014-20	11/15/2016 11:00:00AM	Surface Water	ION SCAN			11/16/2016
1611E54-006D	SW-2014-20	11/15/2016 11:00:00AM	Surface Water	Hardness		11/21/2016 1:46:00 PM	11/21/2016
1611E54-007A	SW-2010-10	11/15/2016 11:10:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611E54-007A	SW-2010-10	11/15/2016 11:10:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/22/2016
1611E54-007B	SW-2010-10	11/15/2016 11:10:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611E54-007B	SW-2010-10	11/15/2016 11:10:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611E54-007C	SW-2010-10	11/15/2016 11:10:00AM	Surface Water	ION SCAN			11/16/2016
1611E54-007D	SW-2010-10	11/15/2016 11:10:00AM	Surface Water	Hardness		11/21/2016 1:46:00 PM	11/21/2016
1611E54-008A	SW-2014-21	11/15/2016 11:22:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611E54-008A	SW-2014-21	11/15/2016 11:22:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/23/2016
1611E54-008B	SW-2014-21	11/15/2016 11:22:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611E54-008B	SW-2014-21	11/15/2016 11:22:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611E54-008C	SW-2014-21	11/15/2016 11:22:00AM	Surface Water	ION SCAN			11/16/2016
1611E54-009A	SW-2010-5	11/15/2016 11:45:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/21/2016
1611E54-009A	SW-2010-5	11/15/2016 11:45:00AM	Surface Water	Dissolved Metals by ICP/MS		11/18/2016 4:55:00 PM	11/23/2016
1611E54-009B	SW-2010-5	11/15/2016 11:45:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/17/2016
1611E54-009B	SW-2010-5	11/15/2016 11:45:00AM	Surface Water	TCL-CHLORINATED PESTICIDES		11/16/2016 12:00:00 PM	11/18/2016
1611E54-009C	SW-2010-5	11/15/2016 11:45:00AM	Surface Water	ION SCAN			11/16/2016

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611E54

ANALYTICAL QC SUMMARY REPORT

BatchID: 232981

Sample ID: **MB-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330257**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/16/2016** Seq No: **7178505**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	0.00010									
4,4´-DDE	BRL	0.00010									
4,4´-DDT	BRL	0.00010									
alpha-BHC	BRL	0.000050									
alpha-Chlordane	BRL	0.000050									
beta-BHC	BRL	0.000050									
delta-BHC	BRL	0.000050									
Dieldrin	BRL	0.00010									
gamma-BHC	BRL	0.000050									
gamma-Chlordane	BRL	0.000050									
Heptachlor	BRL	0.000050									
Methoxychlor	BRL	0.00050									
Toxaphene	BRL	0.0050									
Surr: Decachlorobiphenyl	0.000253	0	0.0005		50.5	15.3	120				
Surr: Tetrachloro-m-xylene	0.000505	0	0.0005		101	23.4	131				

Sample ID: **MB-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330272**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/17/2016** Seq No: **7178716**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	0.00010									
4,4´-DDE	BRL	0.00010									
4,4´-DDT	BRL	0.00010									
alpha-BHC	BRL	0.000050									
alpha-Chlordane	BRL	0.000050									
beta-BHC	BRL	0.000050									
delta-BHC	BRL	0.000050									

Qualifiers:

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

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611E54

ANALYTICAL QC SUMMARY REPORT

BatchID: 232981

Sample ID: **MB-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330272**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/17/2016** Seq No: **7178716**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	BRL	0.00010									
gamma-BHC	BRL	0.000050									
gamma-Chlordane	BRL	0.000050									
Heptachlor	BRL	0.000050									
Methoxychlor	BRL	0.00050									
Surr: Decachlorobiphenyl	0.000238	0	0.0005		47.7	15.3	120				
Surr: Tetrachloro-m-xylene	0.000427	0	0.0005		85.4	23.4	131				

Sample ID: **LCS-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330257**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/16/2016** Seq No: **7178506**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001052	0.00010	0.0010		105	78.2	126				
Dieldrin	0.001030	0.00010	0.0010		103	74.4	125				
gamma-BHC	0.001099	0.000050	0.0010		110	65.6	131				
Heptachlor	0.000982	0.000050	0.0010		98.2	58.9	126				
Surr: Decachlorobiphenyl	0.000249	0	0.0005		49.8	15.3	120				
Surr: Tetrachloro-m-xylene	0.000490	0	0.0005		98.1	23.4	131				

Sample ID: **LCS-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330272**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/17/2016** Seq No: **7178717**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.000948	0.00010	0.0010		94.8	78.2	126				
Dieldrin	0.000884	0.00010	0.0010		88.4	74.4	125				
gamma-BHC	0.000917	0.000050	0.0010		91.7	65.6	131				
Heptachlor	0.000873	0.000050	0.0010		87.3	58.9	126				
Surr: Decachlorobiphenyl	0.000247	0	0.0005		49.4	15.3	120				

Qualifiers:

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

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611E54

ANALYTICAL QC SUMMARY REPORT

BatchID: 232981

Sample ID: **LCS-232981** Client ID: Units: **mg/L** Prep Date: **11/16/2016** Run No: **330272**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/17/2016** Seq No: **7178717**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Tetrachloro-m-xylene	0.000441	0	0.0005		88.2	23.4	131				

Sample ID: **1611E54-006BMS** Client ID: **SW-2014-20** Units: **mg/L** Prep Date: **11/16/2016** Run No: **330285**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/18/2016** Seq No: **7179554**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001035	0.00010	0.0010		104	40.5	145				
Dieldrin	0.000985	0.00010	0.0010	0.00005550	92.9	47.8	143				
gamma-BHC	0.001273	0.000050	0.0010	0.0002514	102	52.5	146				
Heptachlor	0.001009	0.000050	0.0010		101	36.5	144				
Surr: Decachlorobiphenyl	0.000264	0	0.0005		52.8	15.3	120				
Surr: Tetrachloro-m-xylene	0.000448	0	0.0005		89.6	23.4	131				

Sample ID: **1611E54-006BMSD** Client ID: **SW-2014-20** Units: **mg/L** Prep Date: **11/16/2016** Run No: **330308**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232981** Analysis Date: **11/18/2016** Seq No: **7179948**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001199	0.00010	0.0010		120	40.5	145	0.001035	14.7	23.6	
Dieldrin	0.001154	0.00010	0.0010	0.00005550	110	47.8	143	0.0009847	15.8	20	
gamma-BHC	0.001439	0.000050	0.0010	0.0002514	119	52.5	146	0.001273	12.3	24.6	
Heptachlor	0.001169	0.000050	0.0010		117	36.5	144	0.001009	14.7	25.8	
Surr: Decachlorobiphenyl	0.000210	0	0.0005		42.1	15.3	120	0.0002640	0	0	
Surr: Tetrachloro-m-xylene	0.000454	0	0.0005		90.7	23.4	131	0.0004479	0	0	

Qualifiers:

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

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611E54

ANALYTICAL QC SUMMARY REPORT

BatchID: 233303

Sample ID: **MB-233303**	Client ID:			Units: **mg/L**	Prep Date: **11/18/2016**	Run No: **330415**
SampleType: **MBLK**	TestCode: **Dissolved Metals by ICP/MS SW6020B**			BatchID: **233303**	Analysis Date: **11/22/2016**	Seq No: **7188089**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.00500									
Copper	0.000487	0.00200									J
Lead	BRL	0.00100									
Zinc	BRL	0.0100									

Sample ID: **LCS-233303**	Client ID:			Units: **mg/L**	Prep Date: **11/18/2016**	Run No: **330415**
SampleType: **LCS**	TestCode: **Dissolved Metals by ICP/MS SW6020B**			BatchID: **233303**	Analysis Date: **11/21/2016**	Seq No: **7183061**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.1001	0.00500	0.1000		100	80	120				
Copper	0.1010	0.00200	0.1000	0.0004870	101	80	120				
Lead	0.1028	0.00100	0.1000		103	80	120				
Zinc	0.1117	0.0100	0.1000		112	80	120				

Sample ID: **1611E54-001AMS**	Client ID: **SW-2010-17**			Units: **mg/L**	Prep Date: **11/18/2016**	Run No: **330415**
SampleType: **MS**	TestCode: **Dissolved Metals by ICP/MS SW6020B**			BatchID: **233303**	Analysis Date: **11/21/2016**	Seq No: **7183063**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09675	0.00500	0.1000	0.001141	95.6	75	125				
Copper	0.1085	0.00200	0.1000	0.01795	90.6	75	125				
Lead	0.1022	0.00100	0.1000	0.0003820	102	75	125				
Zinc	1.346	0.0100	0.1000	1.249	97.0	75	125				

Sample ID: **1611E54-001AMSD**	Client ID: **SW-2010-17**			Units: **mg/L**	Prep Date: **11/18/2016**	Run No: **330415**
SampleType: **MSD**	TestCode: **Dissolved Metals by ICP/MS SW6020B**			BatchID: **233303**	Analysis Date: **11/21/2016**	Seq No: **7183066**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09946	0.00500	0.1000	0.001141	98.3	75	125	0.09675	2.76	20	

Qualifiers:

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

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611E54

ANALYTICAL QC SUMMARY REPORT

BatchID: 233303

Sample ID: **1611E54-001AMSD** Client ID: **SW-2010-17** Units: **mg/L** Prep Date: **11/18/2016** Run No: **330415**
SampleType: **MSD** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **233303** Analysis Date: **11/21/2016** Seq No: **7183066**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Copper	0.1121	0.00200	0.1000	0.01795	94.2	75	125	0.1085	3.26	20	
Lead	0.1047	0.00100	0.1000	0.0003820	104	75	125	0.1022	2.42	20	
Zinc	1.359	0.0100	0.1000	1.249	110	75	125	1.346	0.961	20	

Qualifiers:

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

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611E54

ANALYTICAL QC SUMMARY REPORT

BatchID: R330366

Sample ID: **MB-R330366**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **330366**
SampleType: **MBLK**	TestCode: **ION SCAN SW9056A**			BatchID: **R330366**	Analysis Date: **11/16/2016**		Seq No: **7181839**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R330366**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **330366**
SampleType: **LCS**	TestCode: **ION SCAN SW9056A**			BatchID: **R330366**	Analysis Date: **11/16/2016**		Seq No: **7181838**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.058	0.25	5.000		101	90	110				
Sulfate	25.52	1.0	25.00		102	90	110				

Sample ID: **1611E55-001AMS**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **330366**
SampleType: **MS**	TestCode: **ION SCAN SW9056A**			BatchID: **R330366**	Analysis Date: **11/16/2016**		Seq No: **7181856**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.155	0.25	5.000		103	90	110				
Sulfate	27.83	1.0	25.00	3.691	96.5	90	110				

Sample ID: **1611E55-002AMS**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **330366**
SampleType: **MS**	TestCode: **ION SCAN SW9056A**			BatchID: **R330366**	Analysis Date: **11/16/2016**		Seq No: **7181858**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.045	0.25	5.000		101	90	110				
Sulfate	28.30	1.0	25.00	3.565	98.9	90	110				

Sample ID: **1611E55-001AMSD**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **330366**
SampleType: **MSD**	TestCode: **ION SCAN SW9056A**			BatchID: **R330366**	Analysis Date: **11/16/2016**		Seq No: **7181857**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.195	0.25	5.000		104	90	110	5.155	0.767	20	

Qualifiers:

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

Analytical Environmental Services, Inc

Date: 25-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611E54

ANALYTICAL QC SUMMARY REPORT

BatchID: R330366

Sample ID: **1611E55-001AMSD** Client ID: Units: **mg/L** Prep Date: Run No: **330366**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R330366** Analysis Date: **11/16/2016** Seq No: **7181857**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	28.15	1.0	25.00	3.691	97.8	90	110	27.83	1.15	20	

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 18, 2016

Rhonda Quinn
AMEC E&I, Inc. -Kennesaw
1075 Big Shanty Rd NW
Kennesaw GA 30144

TEL: (770) 421-3400
FAX: (770) 421-3486

RE: BFEL Atlanta

Dear Rhonda Quinn: Order No: 1611755

Analytical Environmental Services, Inc. received 11 samples on 11/8/2016 5:45:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1611755

Date: 11/8/16 Page 1 of 1

COMPANY:	ADDRESS:
Amec Foster Wheeler	1075 Big Shanty Rd, Ste 100 Kennesaw, GA 30144
PHONE: 770-421-3400	FAX: 770-421-3486
SAMPLED BY: DHoward, EGuillen, DMorris, NMcMillan	SIGNATURE: Daniel Howard

* ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC list 8260	Tot metals list 6020	Diss metals list 6020	Pest 8081A	Nitrate+Sulfate 9056	PRESERVATION (See codes)	REMARKS	No # of Containers
1	TB-01	11/8/16	0930	X			2	*				H+I		2
2	EB-1		0940	X			2	1		2	1	N		6
3	EB-2		0950	X			2	1		2	1	I		6
4	TW-11		1318	X				1	1	2	1	I		5
5	TW-12		1548	X				1	1	2	1	I		5
6	MW-102		1400	X			2	1	1	2	1			7
7	MW-105		1620	X				1	1	2	1			5
8	MW-1B		1245	X			2	1	1	2	1			7
9	MW-101		1445	X			2	1	1	2	1			7
10	MW-104A		1520	X			2	1	1	2	1			7
11	MW-22	↓	1230	X			2	1	1	2	1			7
12	Temp Blank													
13														
14														

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Daniel Howard	11/8/16 1703	1:	Nov-8-16 5:04pm
2:	Nov-8-2016 5:45	2: Mary Jane	11/8/16 5:45pm
3:		3:	

PROJECT INFORMATION

PROJECT NAME: MBFEL Atlanta
PROJECT #: 61220801S4.22
SITE ADDRESS: 1525 Pine St Atlanta GA
SEND REPORT TO: Rhonda Quinn
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT

Total # of Containers

Turnaround Time Request
- (●) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:
* Diss metals will be Filtered by the lab

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL (COURIER)
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.
SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

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

White Copy - Original; Yellow Copy - Client

Client: AMEC E&I, Inc. -Kennesaw
Project: BFEL Atlanta
Lab ID: 1611755

Case Narrative

IC Analysis by Method 9056A:

Due to sample matrix, sample(s) 1611755-004C, -006D, -007C, -010D, and -011D required dilution during preparation and/or analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TB-01
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 9:30:00 AM
Lab ID:	1611755-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/15/2016 19:41	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/15/2016 19:41	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/15/2016 19:41	NP
Acetone	BRL	0.050		mg/L	232977	1	11/15/2016 19:41	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/15/2016 19:41	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/15/2016 19:41	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/15/2016 19:41	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/15/2016 19:41	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/15/2016 19:41	NP
Surr: 4-Bromofluorobenzene	93.1	67-118		%REC	232977	1	11/15/2016 19:41	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	232977	1	11/15/2016 19:41	NP
Surr: Toluene-d8	100	82.5-122		%REC	232977	1	11/15/2016 19:41	NP

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	EB-1
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 9:40:00 AM
Lab ID:	1611755-002	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/15/2016 20:05	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/15/2016 20:05	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/15/2016 20:05	NP
Acetone	BRL	0.050		mg/L	232977	1	11/15/2016 20:05	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/15/2016 20:05	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/15/2016 20:05	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/15/2016 20:05	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/15/2016 20:05	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/15/2016 20:05	NP
Surr: 4-Bromofluorobenzene	92	67-118		%REC	232977	1	11/15/2016 20:05	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	232977	1	11/15/2016 20:05	NP
Surr: Toluene-d8	100	82.5-122		%REC	232977	1	11/15/2016 20:05	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	EB-1
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 9:40:00 AM
Lab ID:	1611755-002	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232677	1	11/12/2016 17:35	JS
Copper	BRL	0.00200		mg/L	232677	1	11/12/2016 17:35	JS
Lead	BRL	0.00100		mg/L	232677	1	11/12/2016 17:35	JS
Zinc	BRL	0.0100		mg/L	232677	1	11/12/2016 17:35	JS
ION SCAN SW9056A								
Nitrate	0.32	0.25		mg/L	R329797	1	11/09/2016 14:22	JW
Sulfate	1.3	1.0		mg/L	R329797	1	11/09/2016 14:22	JW
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.00010		mg/L	232688	1	11/12/2016 12:01	SH
4,4´-DDE	BRL	0.00010		mg/L	232688	1	11/12/2016 12:01	SH
4,4´-DDT	BRL	0.00010		mg/L	232688	1	11/12/2016 12:01	SH
alpha-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:01	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 12:01	SH
beta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:01	SH
delta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:01	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/12/2016 12:01	SH
gamma-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:01	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 12:01	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/12/2016 12:01	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/12/2016 12:01	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/11/2016 22:02	SH
Surr: Decachlorobiphenyl	37.4	15.3-120		%REC	232688	1	11/12/2016 12:01	SH
Surr: Tetrachloro-m-xylene	123	23.4-131		%REC	232688	1	11/12/2016 12:01	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	EB-2
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 9:50:00 AM
Lab ID:	1611755-003	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/15/2016 20:28	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/15/2016 20:28	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/15/2016 20:28	NP
Acetone	BRL	0.050		mg/L	232977	1	11/15/2016 20:28	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/15/2016 20:28	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/15/2016 20:28	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/15/2016 20:28	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/15/2016 20:28	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/15/2016 20:28	NP
Surr: 4-Bromofluorobenzene	93.7	67-118		%REC	232977	1	11/15/2016 20:28	NP
Surr: Dibromofluoromethane	101	81.7-124		%REC	232977	1	11/15/2016 20:28	NP
Surr: Toluene-d8	99.8	82.5-122		%REC	232977	1	11/15/2016 20:28	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	EB-2
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 9:50:00 AM
Lab ID:	1611755-003	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232677	1	11/12/2016 17:41	JS
Copper	BRL	0.00200		mg/L	232677	1	11/12/2016 17:41	JS
Lead	BRL	0.00100		mg/L	232677	1	11/12/2016 17:41	JS
Zinc	BRL	0.0100		mg/L	232677	1	11/12/2016 17:41	JS
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R329797	1	11/09/2016 14:37	JW
Sulfate	BRL	1.0		mg/L	R329797	1	11/09/2016 14:37	JW
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232688	1	11/12/2016 12:35	SH
4,4´-DDE	BRL	0.00010		mg/L	232688	1	11/12/2016 12:35	SH
4,4´-DDT	BRL	0.00010		mg/L	232688	1	11/12/2016 12:35	SH
alpha-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:35	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 12:35	SH
beta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:35	SH
delta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:35	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/12/2016 12:35	SH
gamma-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:35	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 12:35	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/12/2016 12:35	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/12/2016 12:35	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/11/2016 22:36	SH
Surr: Decachlorobiphenyl	43.2	15.3-120		%REC	232688	1	11/12/2016 12:35	SH
Surr: Tetrachloro-m-xylene	107	23.4-131		%REC	232688	1	11/12/2016 12:35	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-11
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 1:18:00 PM
Lab ID:	1611755-004	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232677	1	11/12/2016 17:47	JS
Copper	0.203	0.00200		mg/L	232677	1	11/12/2016 17:47	JS
Lead	0.00159	0.00100		mg/L	232677	1	11/12/2016 17:47	JS
Zinc	0.847	0.0100		mg/L	232677	1	11/12/2016 17:47	JS
ION SCAN SW9056A								
Nitrate	BRL	12		mg/L	R329797	50	11/09/2016 11:11	JW
Sulfate	280	50		mg/L	R329797	50	11/09/2016 11:11	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232877	1	11/15/2016 03:14	JS
Copper	0.180	0.00200		mg/L	232877	1	11/15/2016 03:14	JS
Lead	0.00116	0.00100		mg/L	232877	1	11/15/2016 03:14	JS
Zinc	0.736	0.0100		mg/L	232877	1	11/15/2016 03:14	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232688	1	11/12/2016 12:46	SH
4,4´-DDE	BRL	0.00010		mg/L	232688	1	11/12/2016 12:46	SH
4,4´-DDT	BRL	0.00010		mg/L	232688	1	11/12/2016 12:46	SH
alpha-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:46	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 12:46	SH
beta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:46	SH
delta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:46	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/12/2016 12:46	SH
gamma-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:46	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 12:46	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/12/2016 12:46	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/12/2016 12:46	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/11/2016 22:47	SH
Surr: Decachlorobiphenyl	88.3	15.3-120		%REC	232688	1	11/12/2016 12:46	SH
Surr: Tetrachloro-m-xylene	117	23.4-131		%REC	232688	1	11/12/2016 12:46	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-12
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 3:48:00 PM
Lab ID:	1611755-005	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232677	1	11/12/2016 17:53	JS
Copper	0.00448	0.00200		mg/L	232677	1	11/12/2016 17:53	JS
Lead	BRL	0.00100		mg/L	232677	1	11/12/2016 17:53	JS
Zinc	0.212	0.0100		mg/L	232677	1	11/12/2016 17:53	JS
ION SCAN SW9056A								
Nitrate	1.5	0.25		mg/L	R329797	1	11/09/2016 14:51	JW
Sulfate	70	1.0		mg/L	R329797	1	11/09/2016 14:51	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232877	1	11/15/2016 03:45	JS
Copper	0.00297	0.00200		mg/L	232877	1	11/15/2016 03:45	JS
Lead	BRL	0.00100		mg/L	232877	1	11/15/2016 03:45	JS
Zinc	0.186	0.0100		mg/L	232877	1	11/15/2016 03:45	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232688	1	11/12/2016 12:57	SH
4,4´-DDE	BRL	0.00010		mg/L	232688	1	11/12/2016 12:57	SH
4,4´-DDT	BRL	0.00010		mg/L	232688	1	11/12/2016 12:57	SH
alpha-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:57	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 12:57	SH
beta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:57	SH
delta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:57	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/12/2016 12:57	SH
gamma-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 12:57	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 12:57	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/12/2016 12:57	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/12/2016 12:57	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/11/2016 22:58	SH
Surr: Decachlorobiphenyl	92.2	15.3-120		%REC	232688	1	11/12/2016 12:57	SH
Surr: Tetrachloro-m-xylene	121	23.4-131		%REC	232688	1	11/12/2016 12:57	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-102
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 2:00:00 PM
Lab ID:	1611755-006	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/15/2016 21:39	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/15/2016 21:39	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/15/2016 21:39	NP
Acetone	BRL	0.050		mg/L	232977	1	11/15/2016 21:39	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/15/2016 21:39	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/15/2016 21:39	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/15/2016 21:39	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/15/2016 21:39	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/15/2016 21:39	NP
Surr: 4-Bromofluorobenzene	95.4	67-118		%REC	232977	1	11/15/2016 21:39	NP
Surr: Dibromofluoromethane	104	81.7-124		%REC	232977	1	11/15/2016 21:39	NP
Surr: Toluene-d8	101	82.5-122		%REC	232977	1	11/15/2016 21:39	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-102
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 2:00:00 PM
Lab ID:	1611755-006	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232677	1	11/12/2016 18:00	JS
Copper	0.0259	0.00200		mg/L	232677	1	11/12/2016 18:00	JS
Lead	BRL	0.00100		mg/L	232677	1	11/12/2016 18:00	JS
Zinc	0.0702	0.0100		mg/L	232677	1	11/12/2016 18:00	JS
ION SCAN SW9056A								
Nitrate	BRL	12		mg/L	R329797	50	11/09/2016 11:40	JW
Sulfate	210	50		mg/L	R329797	50	11/09/2016 11:40	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232877	1	11/15/2016 03:51	JS
Copper	0.00337	0.00200		mg/L	232877	1	11/15/2016 03:51	JS
Lead	BRL	0.00100		mg/L	232877	1	11/15/2016 03:51	JS
Zinc	0.0337	0.0100		mg/L	232877	1	11/15/2016 03:51	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.00010		mg/L	232688	1	11/12/2016 13:08	SH
4,4´-DDE	BRL	0.00010		mg/L	232688	1	11/12/2016 13:08	SH
4,4´-DDT	BRL	0.00010		mg/L	232688	1	11/12/2016 13:08	SH
alpha-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 13:08	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 13:08	SH
beta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 13:08	SH
delta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 13:08	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/12/2016 13:08	SH
gamma-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 13:08	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 13:08	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/12/2016 13:08	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/12/2016 13:08	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/11/2016 23:09	SH
Surr: Decachlorobiphenyl	91.5	15.3-120		%REC	232688	1	11/12/2016 13:08	SH
Surr: Tetrachloro-m-xylene	121	23.4-131		%REC	232688	1	11/12/2016 13:08	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-105
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 4:20:00 PM
Lab ID:	1611755-007	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232677	1	11/12/2016 18:06	JS
Copper	0.00754	0.00200		mg/L	232677	1	11/12/2016 18:06	JS
Lead	0.00103	0.00100		mg/L	232677	1	11/12/2016 18:06	JS
Zinc	0.0244	0.0100		mg/L	232677	1	11/12/2016 18:06	JS
ION SCAN SW9056A								
Nitrate	BRL	12		mg/L	R329797	50	11/09/2016 11:55	JW
Sulfate	140	50		mg/L	R329797	50	11/09/2016 11:55	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232877	1	11/15/2016 03:57	JS
Copper	0.00645	0.00200		mg/L	232877	1	11/15/2016 03:57	JS
Lead	BRL	0.00100		mg/L	232877	1	11/15/2016 03:57	JS
Zinc	0.0284	0.0100		mg/L	233092	1	11/16/2016 20:10	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.00010		mg/L	232688	1	11/12/2016 13:19	SH
4,4´-DDE	BRL	0.00010		mg/L	232688	1	11/12/2016 13:19	SH
4,4´-DDT	BRL	0.00010		mg/L	232688	1	11/12/2016 13:19	SH
alpha-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 13:19	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 13:19	SH
beta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 13:19	SH
delta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 13:19	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/12/2016 13:19	SH
gamma-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 13:19	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 13:19	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/12/2016 13:19	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/12/2016 13:19	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/11/2016 23:20	SH
Surr: Decachlorobiphenyl	77.4	15.3-120		%REC	232688	1	11/12/2016 13:19	SH
Surr: Tetrachloro-m-xylene	128	23.4-131		%REC	232688	1	11/12/2016 13:19	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-1B
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 12:45:00 PM
Lab ID:	1611755-008	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/15/2016 22:03	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/15/2016 22:03	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/15/2016 22:03	NP
Acetone	BRL	0.050		mg/L	232977	1	11/15/2016 22:03	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/15/2016 22:03	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/15/2016 22:03	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/15/2016 22:03	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/15/2016 22:03	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/15/2016 22:03	NP
Surr: 4-Bromofluorobenzene	94.6	67-118		%REC	232977	1	11/15/2016 22:03	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	232977	1	11/15/2016 22:03	NP
Surr: Toluene-d8	101	82.5-122		%REC	232977	1	11/15/2016 22:03	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-1B
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 12:45:00 PM
Lab ID:	1611755-008	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232814	1	11/14/2016 17:43	JS
Copper	0.00323	0.00200		mg/L	232814	1	11/14/2016 17:43	JS
Lead	BRL	0.00100		mg/L	232814	1	11/14/2016 17:43	JS
Zinc	0.0206	0.0100		mg/L	232814	1	11/14/2016 17:43	JS
ION SCAN SW9056A								
Nitrate	5.9	0.25		mg/L	R329797	1	11/09/2016 15:06	JW
Sulfate	38	1.0		mg/L	R329797	1	11/09/2016 15:06	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232877	1	11/15/2016 04:22	JS
Copper	BRL	0.00200		mg/L	232877	1	11/15/2016 04:22	JS
Lead	BRL	0.00100		mg/L	232877	1	11/15/2016 04:22	JS
Zinc	BRL	0.0100		mg/L	232877	1	11/15/2016 04:22	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.00010		mg/L	232688	1	11/12/2016 13:30	SH
4,4´-DDE	BRL	0.00010		mg/L	232688	1	11/12/2016 13:30	SH
4,4´-DDT	BRL	0.00010		mg/L	232688	1	11/12/2016 13:30	SH
alpha-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 13:30	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 13:30	SH
beta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 13:30	SH
delta-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 13:30	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/12/2016 13:30	SH
gamma-BHC	BRL	0.000050		mg/L	232688	1	11/12/2016 13:30	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/12/2016 13:30	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/12/2016 13:30	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/12/2016 13:30	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/11/2016 23:31	SH
Surr: Decachlorobiphenyl	76.1	15.3-120		%REC	232688	1	11/12/2016 13:30	SH
Surr: Tetrachloro-m-xylene	117	23.4-131		%REC	232688	1	11/12/2016 13:30	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-101
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 2:45:00 PM
Lab ID:	1611755-009	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/15/2016 22:26	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/15/2016 22:26	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/15/2016 22:26	NP
Acetone	BRL	0.050		mg/L	232977	1	11/15/2016 22:26	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/15/2016 22:26	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/15/2016 22:26	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/15/2016 22:26	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/15/2016 22:26	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/15/2016 22:26	NP
Surr: 4-Bromofluorobenzene	95.7	67-118		%REC	232977	1	11/15/2016 22:26	NP
Surr: Dibromofluoromethane	103	81.7-124		%REC	232977	1	11/15/2016 22:26	NP
Surr: Toluene-d8	101	82.5-122		%REC	232977	1	11/15/2016 22:26	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-101
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 2:45:00 PM
Lab ID:	1611755-009	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232814	1	11/14/2016 17:50	JS
Copper	0.00963	0.00200		mg/L	232814	1	11/14/2016 17:50	JS
Lead	0.00163	0.00100		mg/L	232814	1	11/14/2016 17:50	JS
Zinc	0.194	0.0100		mg/L	232814	1	11/14/2016 17:50	JS
ION SCAN SW9056A								
Nitrate	4.7	0.25		mg/L	R329797	1	11/09/2016 15:21	JW
Sulfate	75	1.0		mg/L	R329797	1	11/09/2016 15:21	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232877	1	11/15/2016 04:29	JS
Copper	0.00750	0.00200		mg/L	232877	1	11/15/2016 04:29	JS
Lead	0.00112	0.00100		mg/L	232877	1	11/15/2016 04:29	JS
Zinc	0.174	0.0100		mg/L	232877	1	11/15/2016 04:29	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.00010		mg/L	232688	1	11/15/2016 13:17	SH
4,4´-DDE	BRL	0.00010		mg/L	232688	1	11/15/2016 13:17	SH
4,4´-DDT	BRL	0.00010		mg/L	232688	1	11/15/2016 13:17	SH
alpha-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 13:17	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 13:17	SH
beta-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 13:17	SH
delta-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 13:17	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/15/2016 13:17	SH
gamma-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 13:17	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 13:17	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/15/2016 13:17	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/15/2016 13:17	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/15/2016 13:17	SH
Surr: Decachlorobiphenyl	80.6	15.3-120		%REC	232688	1	11/15/2016 13:17	SH
Surr: Tetrachloro-m-xylene	85.8	23.4-131		%REC	232688	1	11/15/2016 13:17	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-104A
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 3:20:00 PM
Lab ID:	1611755-010	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/15/2016 22:50	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/15/2016 22:50	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/15/2016 22:50	NP
Acetone	BRL	0.050		mg/L	232977	1	11/15/2016 22:50	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/15/2016 22:50	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/15/2016 22:50	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/15/2016 22:50	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/15/2016 22:50	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/15/2016 22:50	NP
Surr: 4-Bromofluorobenzene	96	67-118		%REC	232977	1	11/15/2016 22:50	NP
Surr: Dibromofluoromethane	104	81.7-124		%REC	232977	1	11/15/2016 22:50	NP
Surr: Toluene-d8	102	82.5-122		%REC	232977	1	11/15/2016 22:50	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-104A
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 3:20:00 PM
Lab ID:	1611755-010	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232814	1	11/14/2016 17:56	JS
Copper	BRL	0.00200		mg/L	232814	1	11/14/2016 17:56	JS
Lead	BRL	0.00100		mg/L	232814	1	11/14/2016 17:56	JS
Zinc	BRL	0.0100		mg/L	232814	1	11/14/2016 17:56	JS
ION SCAN SW9056A								
Nitrate	BRL	12		mg/L	R329797	50	11/09/2016 12:39	JW
Sulfate	98	50		mg/L	R329797	50	11/09/2016 12:39	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232877	1	11/15/2016 04:35	JS
Copper	BRL	0.00200		mg/L	232877	1	11/15/2016 04:35	JS
Lead	BRL	0.00100		mg/L	232877	1	11/15/2016 04:35	JS
Zinc	BRL	0.0100		mg/L	232877	1	11/15/2016 04:35	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232688	1	11/15/2016 13:35	SH
4,4´-DDE	BRL	0.00010		mg/L	232688	1	11/15/2016 13:35	SH
4,4´-DDT	BRL	0.00010		mg/L	232688	1	11/15/2016 13:35	SH
alpha-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 13:35	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 13:35	SH
beta-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 13:35	SH
delta-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 13:35	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/15/2016 13:35	SH
gamma-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 13:35	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 13:35	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/15/2016 13:35	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/15/2016 13:35	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/15/2016 13:35	SH
Surr: Decachlorobiphenyl	79.3	15.3-120		%REC	232688	1	11/15/2016 13:35	SH
Surr: Tetrachloro-m-xylene	82.1	23.4-131		%REC	232688	1	11/15/2016 13:35	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-22
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 12:30:00 PM
Lab ID:	1611755-011	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/15/2016 23:13	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/15/2016 23:13	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/15/2016 23:13	NP
Acetone	BRL	0.050		mg/L	232977	1	11/15/2016 23:13	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/15/2016 23:13	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/15/2016 23:13	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/15/2016 23:13	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/15/2016 23:13	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/15/2016 23:13	NP
Surr: 4-Bromofluorobenzene	94.4	67-118		%REC	232977	1	11/15/2016 23:13	NP
Surr: Dibromofluoromethane	103	81.7-124		%REC	232977	1	11/15/2016 23:13	NP
Surr: Toluene-d8	102	82.5-122		%REC	232977	1	11/15/2016 23:13	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-22
Project Name:	BFEL Atlanta	**Collection Date:**	11/8/2016 12:30:00 PM
Lab ID:	1611755-011	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232814	1	11/16/2016 15:17	JS
Copper	1.64	0.00200		mg/L	232814	1	11/14/2016 18:21	JS
Lead	0.00413	0.00100		mg/L	232814	1	11/14/2016 18:21	JS
Zinc	3.13	0.0100		mg/L	232814	1	11/14/2016 18:21	JS
ION SCAN SW9056A								
Nitrate	BRL	12		mg/L	R329797	50	11/09/2016 12:54	JW
Sulfate	430	50		mg/L	R329797	50	11/09/2016 12:54	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232877	1	11/15/2016 04:41	JS
Copper	1.51	0.00200		mg/L	232877	1	11/15/2016 04:41	JS
Lead	0.00349	0.00100		mg/L	232877	1	11/15/2016 04:41	JS
Zinc	3.04	0.0100		mg/L	232877	1	11/15/2016 04:41	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.00010		mg/L	232688	1	11/15/2016 13:54	SH
4,4´-DDE	BRL	0.00010		mg/L	232688	1	11/15/2016 13:54	SH
4,4´-DDT	BRL	0.00010		mg/L	232688	1	11/15/2016 13:54	SH
alpha-BHC	0.00028	0.000050		mg/L	232688	1	11/15/2016 13:54	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 13:54	SH
beta-BHC	0.00039	0.000050		mg/L	232688	1	11/15/2016 13:54	SH
delta-BHC	0.000075	0.000050		mg/L	232688	1	11/15/2016 13:54	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/15/2016 13:54	SH
gamma-BHC	0.00025	0.000050		mg/L	232688	1	11/15/2016 13:54	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 13:54	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/15/2016 13:54	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/15/2016 13:54	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/15/2016 13:54	SH
Surr: Decachlorobiphenyl	73.6	15.3-120		%REC	232688	1	11/15/2016 13:54	SH
Surr: Tetrachloro-m-xylene	83	23.4-131		%REC	232688	1	11/15/2016 13:54	SH

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client AMEC Work Order Number 1611755

Checklist completed by _____ 11/8/16
Signature Date

Carrier name: FedEx __ UPS __ Courier ✓ Client __ US Mail __ Other _____

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

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

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 1.3° Cooler #2 1.2° Cooler #3 1.5° Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

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

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

Water - pH acceptable upon receipt? Yes __ ✓ No __ Not Applicable __

Adjusted? _____ Checked by MS

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 18-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611755

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611755-001A	TB-01	11/8/2016 9:30:00AM	Aqueous	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/15/2016
1611755-002A	EB-1	11/8/2016 9:40:00AM	Aqueous	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/15/2016
1611755-002B	EB-1	11/8/2016 9:40:00AM	Aqueous	Total Metals by ICP/MS		11/10/2016 4:33:00 PM	11/12/2016
1611755-002C	EB-1	11/8/2016 9:40:00AM	Aqueous	ION SCAN			11/09/2016
1611755-002D	EB-1	11/8/2016 9:40:00AM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/11/2016
1611755-002D	EB-1	11/8/2016 9:40:00AM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/12/2016
1611755-003A	EB-2	11/8/2016 9:50:00AM	Aqueous	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/15/2016
1611755-003B	EB-2	11/8/2016 9:50:00AM	Aqueous	Total Metals by ICP/MS		11/10/2016 4:33:00 PM	11/12/2016
1611755-003C	EB-2	11/8/2016 9:50:00AM	Aqueous	ION SCAN			11/09/2016
1611755-003D	EB-2	11/8/2016 9:50:00AM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/11/2016
1611755-003D	EB-2	11/8/2016 9:50:00AM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/12/2016
1611755-004A	TW-11	11/8/2016 1:18:00PM	Aqueous	Total Metals by ICP/MS		11/10/2016 4:33:00 PM	11/12/2016
1611755-004B	TW-11	11/8/2016 1:18:00PM	Aqueous	Dissolved Metals by ICP/MS		11/14/2016 5:11:00 PM	11/15/2016
1611755-004C	TW-11	11/8/2016 1:18:00PM	Aqueous	ION SCAN			11/09/2016
1611755-004D	TW-11	11/8/2016 1:18:00PM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/11/2016
1611755-004D	TW-11	11/8/2016 1:18:00PM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/12/2016
1611755-005A	TW-12	11/8/2016 3:48:00PM	Aqueous	Total Metals by ICP/MS		11/10/2016 4:33:00 PM	11/12/2016
1611755-005B	TW-12	11/8/2016 3:48:00PM	Aqueous	Dissolved Metals by ICP/MS		11/14/2016 5:11:00 PM	11/15/2016
1611755-005C	TW-12	11/8/2016 3:48:00PM	Aqueous	ION SCAN			11/09/2016
1611755-005D	TW-12	11/8/2016 3:48:00PM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/11/2016
1611755-005D	TW-12	11/8/2016 3:48:00PM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/12/2016
1611755-006A	MW-102	11/8/2016 2:00:00PM	Aqueous	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/15/2016
1611755-006B	MW-102	11/8/2016 2:00:00PM	Aqueous	Total Metals by ICP/MS		11/10/2016 4:33:00 PM	11/12/2016
1611755-006C	MW-102	11/8/2016 2:00:00PM	Aqueous	Dissolved Metals by ICP/MS		11/14/2016 5:11:00 PM	11/15/2016
1611755-006D	MW-102	11/8/2016 2:00:00PM	Aqueous	ION SCAN			11/09/2016
1611755-006E	MW-102	11/8/2016 2:00:00PM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/11/2016
1611755-006E	MW-102	11/8/2016 2:00:00PM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/12/2016
1611755-007A	MW-105	11/8/2016 4:20:00PM	Aqueous	Total Metals by ICP/MS		11/10/2016 4:33:00 PM	11/12/2016
1611755-007B	MW-105	11/8/2016 4:20:00PM	Aqueous	Dissolved Metals by ICP/MS		11/14/2016 5:11:00 PM	11/15/2016

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611755

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611755-007B	MW-105	11/8/2016 4:20:00PM	Aqueous	Dissolved Metals by ICP/MS		11/16/2016 6:12:00 PM	11/16/2016
1611755-007C	MW-105	11/8/2016 4:20:00PM	Aqueous	ION SCAN			11/09/2016
1611755-007D	MW-105	11/8/2016 4:20:00PM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/11/2016
1611755-007D	MW-105	11/8/2016 4:20:00PM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/12/2016
1611755-008A	MW-1B	11/8/2016 12:45:00PM	Aqueous	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/15/2016
1611755-008B	MW-1B	11/8/2016 12:45:00PM	Aqueous	Total Metals by ICP/MS		11/12/2016 8:55:00 AM	11/14/2016
1611755-008C	MW-1B	11/8/2016 12:45:00PM	Aqueous	Dissolved Metals by ICP/MS		11/14/2016 5:11:00 PM	11/15/2016
1611755-008D	MW-1B	11/8/2016 12:45:00PM	Aqueous	ION SCAN			11/09/2016
1611755-008E	MW-1B	11/8/2016 12:45:00PM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/11/2016
1611755-008E	MW-1B	11/8/2016 12:45:00PM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/12/2016
1611755-009A	MW-101	11/8/2016 2:45:00PM	Aqueous	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/15/2016
1611755-009B	MW-101	11/8/2016 2:45:00PM	Aqueous	Total Metals by ICP/MS		11/12/2016 8:55:00 AM	11/14/2016
1611755-009C	MW-101	11/8/2016 2:45:00PM	Aqueous	Dissolved Metals by ICP/MS		11/14/2016 5:11:00 PM	11/15/2016
1611755-009D	MW-101	11/8/2016 2:45:00PM	Aqueous	ION SCAN			11/09/2016
1611755-009E	MW-101	11/8/2016 2:45:00PM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/15/2016
1611755-010A	MW-104A	11/8/2016 3:20:00PM	Aqueous	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/15/2016
1611755-010B	MW-104A	11/8/2016 3:20:00PM	Aqueous	Total Metals by ICP/MS		11/12/2016 8:55:00 AM	11/14/2016
1611755-010C	MW-104A	11/8/2016 3:20:00PM	Aqueous	Dissolved Metals by ICP/MS		11/14/2016 5:11:00 PM	11/15/2016
1611755-010D	MW-104A	11/8/2016 3:20:00PM	Aqueous	ION SCAN			11/09/2016
1611755-010E	MW-104A	11/8/2016 3:20:00PM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/15/2016
1611755-011A	MW-22	11/8/2016 12:30:00PM	Aqueous	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/15/2016
1611755-011B	MW-22	11/8/2016 12:30:00PM	Aqueous	Total Metals by ICP/MS		11/12/2016 8:55:00 AM	11/14/2016
1611755-011B	MW-22	11/8/2016 12:30:00PM	Aqueous	Total Metals by ICP/MS		11/12/2016 8:55:00 AM	11/16/2016
1611755-011C	MW-22	11/8/2016 12:30:00PM	Aqueous	Dissolved Metals by ICP/MS		11/14/2016 5:11:00 PM	11/15/2016
1611755-011D	MW-22	11/8/2016 12:30:00PM	Aqueous	ION SCAN			11/09/2016
1611755-011E	MW-22	11/8/2016 12:30:00PM	Aqueous	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/15/2016

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: 232677

Sample ID: **MB-232677** Client ID: Units: **mg/L** Prep Date: **11/10/2016** Run No: **329703**
SampleType: **MBLK** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232677** Analysis Date: **11/11/2016** Seq No: **7162998**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.00500									
Copper	BRL	0.00200									
Lead	BRL	0.00100									
Zinc	BRL	0.0100									

Sample ID: **LCS-232677** Client ID: Units: **mg/L** Prep Date: **11/10/2016** Run No: **329703**
SampleType: **LCS** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232677** Analysis Date: **11/11/2016** Seq No: **7162999**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09899	0.00500	0.1000		99.0	80	120				
Copper	0.09996	0.00200	0.1000		100.0	80	120				
Lead	0.1028	0.00100	0.1000		103	80	120				
Zinc	0.09203	0.0100	0.1000		92.0	80	120				

Sample ID: **1611502-003BMS** Client ID: Units: **mg/L** Prep Date: **11/10/2016** Run No: **329703**
SampleType: **MS** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232677** Analysis Date: **11/11/2016** Seq No: **7163001**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.1032	0.00500	0.1000	0.004016	99.2	75	125				
Copper	0.1012	0.00200	0.1000	0.007382	93.8	75	125				
Lead	0.1066	0.00100	0.1000	0.002675	104	75	125				
Zinc	0.1412	0.0100	0.1000	0.06615	75.0	75	125				

Sample ID: **1611502-003BMSD** Client ID: Units: **mg/L** Prep Date: **11/10/2016** Run No: **329703**
SampleType: **MSD** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232677** Analysis Date: **11/11/2016** Seq No: **7163002**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.1024	0.00500	0.1000	0.004016	98.4	75	125	0.1032	0.778	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: 232677

Sample ID: **1611502-003BMSD** Client ID:
SampleType: **MSD** TestCode: **Total Metals by ICP/MS SW6020B**
Units: **mg/L** Prep Date: **11/10/2016** Run No: **329703**
BatchID: **232677** Analysis Date: **11/11/2016** Seq No: **7163002**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Copper	0.09941	0.00200	0.1000	0.007382	92.0	75	125	0.1012	1.78	20	
Lead	0.1070	0.00100	0.1000	0.002675	104	75	125	0.1066	0.375	20	
Zinc	0.1457	0.0100	0.1000	0.06615	79.6	75	125	0.1412	3.14	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: 232688

Sample ID: **MB-232688** Client ID: Units: **mg/L** Prep Date: **11/11/2016** Run No: **329934**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232688** Analysis Date: **11/12/2016** Seq No: **7170084**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	0.00010									
4,4´-DDE	BRL	0.00010									
4,4´-DDT	BRL	0.00010									
alpha-BHC	BRL	0.000050									
alpha-Chlordane	BRL	0.000050									
beta-BHC	BRL	0.000050									
delta-BHC	BRL	0.000050									
Dieldrin	BRL	0.000020									
gamma-BHC	BRL	0.000050									
gamma-Chlordane	BRL	0.000050									
Heptachlor	BRL	0.000050									
Methoxychlor	BRL	0.00050									
Surr: Decachlorobiphenyl	0.000309	0	0.0005		61.8	15.3	120				
Surr: Tetrachloro-m-xylene	0.000550	0	0.0005		110	23.4	131				

Sample ID: **MB-232688** Client ID: Units: **mg/L** Prep Date: **11/11/2016** Run No: **329694**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232688** Analysis Date: **11/11/2016** Seq No: **7171250**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toxaphene	BRL	0.0050									

Sample ID: **LCS-232688** Client ID: Units: **mg/L** Prep Date: **11/11/2016** Run No: **329934**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232688** Analysis Date: **11/12/2016** Seq No: **7170085**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001169	0.00010	0.0010		117	78.2	126				
Dieldrin	0.001172	0.00010	0.0010		117	74.4	125				
gamma-BHC	0.001201	0.000050	0.0010		120	65.6	131				

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: 232688

Sample ID: **LCS-232688** Client ID: Units: **mg/L** Prep Date: **11/11/2016** Run No: **329934**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232688** Analysis Date: **11/12/2016** Seq No: **7170085**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Heptachlor	0.001132	0.000050	0.0010		113	58.9	126				
Surr: Decachlorobiphenyl	0.000363	0	0.0005		72.5	15.3	120				
Surr: Tetrachloro-m-xylene	0.000591	0	0.0005		118	23.4	131				

Sample ID: **1611755-002DMS** Client ID: **EB-1** Units: **mg/L** Prep Date: **11/11/2016** Run No: **329934**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232688** Analysis Date: **11/12/2016** Seq No: **7170087**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001128	0.00010	0.0010		113	40.5	145				
Dieldrin	0.001198	0.00010	0.0010		120	47.8	143				
gamma-BHC	0.001219	0.000050	0.0010		122	52.5	146				
Heptachlor	0.001135	0.000050	0.0010		113	36.5	144				
Surr: Decachlorobiphenyl	0.000181	0	0.0005		36.2	15.3	120				
Surr: Tetrachloro-m-xylene	0.000563	0	0.0005		113	23.4	131				

Sample ID: **1611755-002DMSD** Client ID: **EB-1** Units: **mg/L** Prep Date: **11/11/2016** Run No: **329934**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232688** Analysis Date: **11/12/2016** Seq No: **7170088**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001088	0.00010	0.0010		109	40.5	145	0.001128	3.60	23.6	
Dieldrin	0.001188	0.00010	0.0010		119	47.8	143	0.001198	0.831	20	
gamma-BHC	0.001184	0.000050	0.0010		118	52.5	146	0.001219	2.91	24.6	
Heptachlor	0.001086	0.000050	0.0010		109	36.5	144	0.001135	4.42	25.8	
Surr: Decachlorobiphenyl	0.000169	0	0.0005		33.8	15.3	120	0.0001811	0	0	
Surr: Tetrachloro-m-xylene	0.000570	0	0.0005		114	23.4	131	0.0005633	0	0	

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: 232814

Sample ID: **MB-232814** Client ID: Units: **mg/L** Prep Date: **11/12/2016** Run No: **329955**
SampleType: **MBLK** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232814** Analysis Date: **11/14/2016** Seq No: **7170052**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.00500									
Copper	BRL	0.00200									
Lead	BRL	0.00100									
Zinc	BRL	0.0100									

Sample ID: **LCS-232814** Client ID: Units: **mg/L** Prep Date: **11/12/2016** Run No: **329955**
SampleType: **LCS** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232814** Analysis Date: **11/14/2016** Seq No: **7170053**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.1045	0.00500	0.1000		104	80	120				
Copper	0.1102	0.00200	0.1000	0.0002480	110	80	120				
Lead	0.1097	0.00100	0.1000	0.0007790	109	80	120				
Zinc	0.1029	0.0100	0.1000		103	80	120				

Sample ID: **1611B63-001FMS** Client ID: Units: **mg/L** Prep Date: **11/12/2016** Run No: **329955**
SampleType: **MS** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232814** Analysis Date: **11/14/2016** Seq No: **7170055**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09586	0.00500	0.1000	0.0001820	95.7	75	125				
Copper	0.1045	0.00200	0.1000	0.004135	100	75	125				
Lead	0.1070	0.00100	0.1000	0.0009050	106	75	125				
Zinc	0.1262	0.0100	0.1000	0.03958	86.6	75	125				

Sample ID: **1611B63-001FMSD** Client ID: Units: **mg/L** Prep Date: **11/12/2016** Run No: **329955**
SampleType: **MSD** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232814** Analysis Date: **11/14/2016** Seq No: **7170056**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09854	0.00500	0.1000	0.0001820	98.4	75	125	0.09586	2.76	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: 232814

Sample ID: **1611B63-001FMSD** Client ID:
SampleType: **MSD** TestCode: **Total Metals by ICP/MS SW6020B**
Units: **mg/L** Prep Date: **11/12/2016** Run No: **329955**
BatchID: **232814** Analysis Date: **11/14/2016** Seq No: **7170056**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Copper	0.1086	0.00200	0.1000	0.004135	104	75	125	0.1045	3.85	20	
Lead	0.1064	0.00100	0.1000	0.0009050	105	75	125	0.1070	0.562	20	
Zinc	0.1293	0.0100	0.1000	0.03958	89.7	75	125	0.1262	2.43	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: 232877

Sample ID: **MB-232877** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **329878**
SampleType: **MBLK** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **232877** Analysis Date: **11/15/2016** Seq No: **7169380**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.00500									
Copper	BRL	0.00200									
Lead	BRL	0.00100									
Zinc	BRL	0.0100									

Sample ID: **LCS-232877** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **329878**
SampleType: **LCS** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **232877** Analysis Date: **11/15/2016** Seq No: **7169381**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09341	0.00500	0.1000		93.4	80	120				
Copper	0.09457	0.00200	0.1000		94.6	80	120				
Lead	0.09638	0.00100	0.1000		96.4	80	120				
Zinc	0.09216	0.0100	0.1000		92.2	80	120				

Sample ID: **1611755-004BMS** Client ID: **TW-11** Units: **mg/L** Prep Date: **11/14/2016** Run No: **329878**
SampleType: **MS** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **232877** Analysis Date: **11/15/2016** Seq No: **7169383**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.08652	0.00500	0.1000	0.0004480	86.1	75	125				
Copper	0.2581	0.00200	0.1000	0.1798	78.3	75	125				
Lead	0.1013	0.00100	0.1000	0.001162	100	75	125				
Zinc	0.8024	0.0100	0.1000	0.7360	66.4	75	125				S

Sample ID: **1611755-004BMSD** Client ID: **TW-11** Units: **mg/L** Prep Date: **11/14/2016** Run No: **329878**
SampleType: **MSD** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **232877** Analysis Date: **11/15/2016** Seq No: **7169384**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.08474	0.00500	0.1000	0.0004480	84.3	75	125	0.08652	2.08	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: 232877

Sample ID: **1611755-004BMSD** Client ID: **TW-11** Units: **mg/L** Prep Date: **11/14/2016** Run No: **329878**
SampleType: **MSD** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **232877** Analysis Date: **11/15/2016** Seq No: **7169384**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Copper	0.2619	0.00200	0.1000	0.1798	82.1	75	125	0.2581	1.46	20	
Lead	0.09951	0.00100	0.1000	0.001162	98.3	75	125	0.1013	1.78	20	
Zinc	0.8101	0.0100	0.1000	0.7360	74.1	75	125	0.8024	0.955	20	S

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: 232977

Sample ID: **MB-232977** Client ID: Units: **mg/L** Prep Date: **11/15/2016** Run No: **329940**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232977** Analysis Date: **11/15/2016** Seq No: **7169722**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	0.0050									
1,1,2,2-Tetrachloroethane	BRL	0.0050									
1,1,2-Trichloroethane	BRL	0.0050									
1,1-Dichloroethane	BRL	0.0050									
1,1-Dichloroethene	BRL	0.0050									
1,1-Dichloropropene	BRL	0.0050									
1,2,4-Trichlorobenzene	BRL	0.0050									
1,2-Dichloroethane	BRL	0.0050									
1,2-Dichloropropane	BRL	0.0050									
1,4-Dioxane	BRL	0.15									
2-Butanone	BRL	0.050									
4-Methyl-2-pentanone	BRL	0.010									
Acetone	BRL	0.050									
Benzene	BRL	0.0050									
Carbon disulfide	BRL	0.0050									
Carbon tetrachloride	BRL	0.0050									
Chlorobenzene	BRL	0.0050									
Chloroethane	BRL	0.010									
Chloroform	BRL	0.0050									
Chloromethane	BRL	0.010									
cis-1,2-Dichloroethene	BRL	0.0050									
Cyclohexane	BRL	0.0050									
Ethylbenzene	BRL	0.0050									
Isobutyl Alcohol	BRL	0.20									
Isopropylbenzene	BRL	0.0050									
Methylene chloride	BRL	0.0050									
Naphthalene	BRL	0.0050									

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: 232977

Sample ID: **MB-232977** Client ID: Units: **mg/L** Prep Date: **11/15/2016** Run No: **329940**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232977** Analysis Date: **11/15/2016** Seq No: **7169722**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Styrene	BRL	0.0050									
Tetrachloroethene	BRL	0.0050									
Tetrahydrofuran	BRL	0.010									
Toluene	BRL	0.0050									
trans-1,2-Dichloroethene	BRL	0.0050									
Trichloroethene	BRL	0.0050									
Trichlorofluoromethane	BRL	0.0050									
Vinyl chloride	BRL	0.0020									
Xylenes, Total	BRL	0.0050									
Surr: 4-Bromofluorobenzene	0.04703	0	0.0500		94.1	67	118				
Surr: Dibromofluoromethane	0.04991	0	0.0500		99.8	81.7	124				
Surr: Toluene-d8	0.04983	0	0.0500		99.7	82.5	122				

Sample ID: **LCS-232977** Client ID: Units: **mg/L** Prep Date: **11/15/2016** Run No: **329940**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232977** Analysis Date: **11/15/2016** Seq No: **7169717**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.04278	0.0050	0.0500		85.6	65.3	137				
Benzene	0.04922	0.0050	0.0500		98.4	74.9	123				
Chlorobenzene	0.04750	0.0050	0.0500		95.0	73.9	124				
Toluene	0.05045	0.0050	0.0500		101	75	124				
Trichloroethene	0.04553	0.0050	0.0500		91.1	73.1	128				
Surr: 4-Bromofluorobenzene	0.04698	0	0.0500		94.0	67	118				
Surr: Dibromofluoromethane	0.05091	0	0.0500		102	81.7	124				
Surr: Toluene-d8	0.05085	0	0.0500		102	82.5	122				

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: 232977

Sample ID: **1611903-005AMS** Client ID: Units: **mg/L** Prep Date: **11/15/2016** Run No: **329940**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232977** Analysis Date: **11/15/2016** Seq No: **7170944**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	46.76	5.0	50.00		93.5	60	150				
Benzene	49.02	5.0	50.00	0.2900	97.5	70.1	132				
Chlorobenzene	48.27	5.0	50.00		96.5	70.9	131				
Toluene	125.5	5.0	50.00	69.40	112	70.1	133				
Trichloroethene	46.11	5.0	50.00		92.2	70	136				
Surr: 4-Bromofluorobenzene	47.46	0	50.00		94.9	67	118				
Surr: Dibromofluoromethane	50.38	0	50.00		101	81.7	124				
Surr: Toluene-d8	50.29	0	50.00		101	82.5	122				

Sample ID: **1611903-005AMSD** Client ID: Units: **mg/L** Prep Date: **11/15/2016** Run No: **329940**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232977** Analysis Date: **11/15/2016** Seq No: **7170945**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	44.20	5.0	50.00		88.4	60	150	46.76	5.63	17.7	
Benzene	47.48	5.0	50.00	0.2900	94.4	70.1	132	49.02	3.19	20	
Chlorobenzene	46.37	5.0	50.00		92.7	70.9	131	48.27	4.02	20	
Toluene	122.1	5.0	50.00	69.40	105	70.1	133	125.5	2.79	20	
Trichloroethene	44.92	5.0	50.00		89.8	70	136	46.11	2.61	20	
Surr: 4-Bromofluorobenzene	47.82	0	50.00		95.6	67	118	47.46	0	0	
Surr: Dibromofluoromethane	51.03	0	50.00		102	81.7	124	50.38	0	0	
Surr: Toluene-d8	50.98	0	50.00		102	82.5	122	50.29	0	0	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: 233092

Sample ID: **MB-233092**	Client ID:			Units: **mg/L**	Prep Date: **11/16/2016**	Run No: **330113**
SampleType: **MBLK**	TestCode: **Dissolved Metals by ICP/MS SW6020B**			BatchID: **233092**	Analysis Date: **11/16/2016**	Seq No: **7174279**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	BRL	0.0100									

Sample ID: **LCS-233092**	Client ID:			Units: **mg/L**	Prep Date: **11/16/2016**	Run No: **330113**
SampleType: **LCS**	TestCode: **Dissolved Metals by ICP/MS SW6020B**			BatchID: **233092**	Analysis Date: **11/16/2016**	Seq No: **7174280**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	0.09488	0.0100	0.1000		94.9	80	120				

Sample ID: **1611755-007BMS**	Client ID: **MW-105**			Units: **mg/L**	Prep Date: **11/16/2016**	Run No: **330113**
SampleType: **MS**	TestCode: **Dissolved Metals by ICP/MS SW6020B**			BatchID: **233092**	Analysis Date: **11/16/2016**	Seq No: **7174282**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	0.1225	0.0100	0.1000	0.02838	94.1	75	125				

Sample ID: **1611755-007BMSD**	Client ID: **MW-105**			Units: **mg/L**	Prep Date: **11/16/2016**	Run No: **330113**
SampleType: **MSD**	TestCode: **Dissolved Metals by ICP/MS SW6020B**			BatchID: **233092**	Analysis Date: **11/16/2016**	Seq No: **7174288**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	0.1189	0.0100	0.1000	0.02838	90.5	75	125	0.1225	2.98	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: R329797

Sample ID: **MB-R329797** Client ID: Units: **mg/L** Prep Date: Run No: **329797**
SampleType: **MBLK** TestCode: **ION SCAN SW9056A** BatchID: **R329797** Analysis Date: **11/09/2016** Seq No: **7165168**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R329797** Client ID: Units: **mg/L** Prep Date: Run No: **329797**
SampleType: **LCS** TestCode: **ION SCAN SW9056A** BatchID: **R329797** Analysis Date: **11/09/2016** Seq No: **7165167**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	4.976	0.25	5.000		99.5	90	110				
Sulfate	24.81	1.0	25.00		99.2	90	110				

Sample ID: **1611827-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **329797**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R329797** Analysis Date: **11/09/2016** Seq No: **7165190**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	57.75	2.5	50.00	5.401	105	90	110				
Sulfate	285.9	10	250.0	37.43	99.4	90	110				

Sample ID: **1611828-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **329797**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R329797** Analysis Date: **11/09/2016** Seq No: **7165194**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	75.69	2.5	50.00	23.40	105	90	110				
Sulfate	285.2	10	250.0	37.10	99.2	90	110				

Sample ID: **1611827-002BMSD** Client ID: Units: **mg/L** Prep Date: Run No: **329797**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R329797** Analysis Date: **11/09/2016** Seq No: **7165191**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	57.79	2.5	50.00	5.401	105	90	110	57.75	0.064	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611755

ANALYTICAL QC SUMMARY REPORT

BatchID: R329797

Sample ID: **1611827-002BMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date: Run No: **329797**
BatchID: **R329797** Analysis Date: **11/09/2016** Seq No: **7165191**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	285.6	10	250.0	37.43	99.3	90	110	285.9	0.124	20	

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 23, 2016

Rhonda Quinn
AMEC E&I, Inc. -Kennesaw
1075 Big Shanty Rd NW
Kennesaw GA 30144

TEL: (770) 421-3400
FAX: (770) 421-3486

RE: BFEL Atlanta

Dear Rhonda Quinn: Order No: 1611903

Analytical Environmental Services, Inc. received 10 samples on 11/9/2016 5:20:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

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

CHAIN OF CUSTODY

Work Order: 1611903

Date: 11/9/16 Page ____ of ____

COMPANY: Amec Foster Wheeler

ADDRESS: 1075 Big Shanty Rd, Ste 100 Kennesaw, GA 30144

PHONE: 770-421-3408

FAX: 770-421-3486

SAMPLED BY: DHoward, EGuillen, NMcMillan, DMorris

SIGNATURE: Daniel K Howard

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	* ANALYSIS REQUESTED: VOC list 8260B	Tot metals list 6020	Diss metals list 6020	Pest 8081A	Nitrate+Sulfate 9056	PRESERVATION (See codes)	REMARKS	No # of Containers
1	TB-02	11/9/16	0930	X		W	2					H		2
2	TW-1		1142	X		GW	2	1	1	2	1	H N I I I		7
3	TW-2		1412	X		GW	2	1	1	2	1	H N I I I		7
4	TW-4		1552	X		GW	2	1	1	2	1	H N I I I		7
5	MW-104D		1500	X		GW	2	1	1	2	1	H N I I I		
6	DUP-1		1200	X		GW	2					H		
7	MW-106D		1615	X		GW	2	1	1	2	1	H N I I I		
8	MW-107D		1235	X		GW	2	1	1	2	1	H N I I I		
9	MW-112		1328	X		GW	2	1	1	2	1	H N I I I		
10	MW-26		1107	X		GW	2	1	1	2	1	H N I I I		
11	Temp Blank													
12														
13														
14														

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Daniel K Howard	11/9/16/1653	1:	11/9/16 16:53
2:	11/9/16 5:20	2: Jimmi Mills	11/9/16 5:20 pm
3:		3:	

PROJECT INFORMATION

PROJECT NAME: BFEL Atlanta

PROJECT #: 612208015 4.22

SITE ADDRESS: 1525 Pine St Atlanta, GA

SEND REPORT TO: Rhonda Quinn

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: ____ PO#: ____

RECEIPT

Total # of Containers

Turnaround Time Request

- (●) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other ____

STATE PROGRAM (if any): ____

E-mail? Y / N; Fax? Y / N

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

* Diss metals will be Filtered by the lab

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL (COURIER)

GREYHOUND OTHER____

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.
SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: AMEC E&I, Inc. -Kennesaw
Project: BFEL Atlanta
Lab ID: 1611903

Case Narrative

Ion Chromotography Analysis by Method 9056A:

Due to sample matrix, sample(s) 1611903-005D and -007D required dilution during preparation and/or analysis resulting in elevated reporting limits.

Volatiles Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1611903-005A, & -006A required dilution during preparation and/or analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TB-02
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 9:30:00 AM
Lab ID:	1611903-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/15/2016 20:52	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/15/2016 20:52	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/15/2016 20:52	NP
Acetone	BRL	0.050		mg/L	232977	1	11/15/2016 20:52	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/15/2016 20:52	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/15/2016 20:52	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/15/2016 20:52	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/15/2016 20:52	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/15/2016 20:52	NP
Surr: 4-Bromofluorobenzene	95	67-118		%REC	232977	1	11/15/2016 20:52	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	232977	1	11/15/2016 20:52	NP
Surr: Toluene-d8	101	82.5-122		%REC	232977	1	11/15/2016 20:52	NP

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-1
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 11:42:00 AM
Lab ID:	1611903-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
1,1,1-Trichloroethane	0.0066	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
1,1-Dichloroethene	0.0060	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/15/2016 23:36	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/15/2016 23:36	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/15/2016 23:36	NP
Acetone	BRL	0.050		mg/L	232977	1	11/15/2016 23:36	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/15/2016 23:36	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
cis-1,2-Dichloroethene	0.88	0.050		mg/L	232977	10	11/15/2016 23:59	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/15/2016 23:36	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Tetrachloroethene	0.0078	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/15/2016 23:36	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Trichloroethene	1.2	0.050		mg/L	232977	10	11/15/2016 23:59	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Vinyl chloride	0.012	0.0020		mg/L	232977	1	11/15/2016 23:36	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/15/2016 23:36	NP
Surr: 4-Bromofluorobenzene	94.1	67-118		%REC	232977	1	11/15/2016 23:36	NP
Surr: 4-Bromofluorobenzene	95	67-118		%REC	232977	10	11/15/2016 23:59	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	232977	1	11/15/2016 23:36	NP
Surr: Dibromofluoromethane	104	81.7-124		%REC	232977	10	11/15/2016 23:59	NP
Surr: Toluene-d8	99.2	82.5-122		%REC	232977	1	11/15/2016 23:36	NP

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-1
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 11:42:00 AM
Lab ID:	1611903-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Surr: Toluene-d8	101	82.5-122		%REC	232977	10	11/15/2016 23:59	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 00:48	JS
Copper	0.00259	0.00200		mg/L	232823	1	11/17/2016 00:48	JS
Lead	BRL	0.00100		mg/L	232823	1	11/17/2016 00:48	JS
Zinc	0.303	0.0100		mg/L	232823	1	11/17/2016 00:48	JS
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R329923	1	11/10/2016 13:04	JW
Sulfate	57	1.0		mg/L	R329923	1	11/10/2016 13:04	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232877	1	11/16/2016 22:37	JS
Copper	BRL	0.00200		mg/L	232877	1	11/16/2016 22:37	JS
Lead	BRL	0.00100		mg/L	232877	1	11/16/2016 22:37	JS
Zinc	0.282	0.0100		mg/L	232877	1	11/16/2016 22:37	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	0.00070	0.00010		mg/L	232688	1	11/15/2016 16:03	SH
4,4´-DDE	0.00080	0.00010		mg/L	232688	1	11/15/2016 16:03	SH
4,4´-DDT	0.00042	0.00010		mg/L	232688	1	11/15/2016 16:03	SH
alpha-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 16:03	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 16:03	SH
beta-BHC	0.00033	0.000050		mg/L	232688	1	11/15/2016 16:03	SH
delta-BHC	0.000061	0.000050		mg/L	232688	1	11/15/2016 16:03	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/15/2016 16:03	SH
gamma-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 16:03	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 16:03	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/15/2016 16:03	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/15/2016 16:03	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/15/2016 16:03	SH
Surr: Decachlorobiphenyl	59.8	15.3-120		%REC	232688	1	11/15/2016 16:03	SH
Surr: Tetrachloro-m-xylene	85.8	23.4-131		%REC	232688	1	11/15/2016 16:03	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-2
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 2:12:00 PM
Lab ID:	1611903-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/16/2016 00:23	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/16/2016 00:23	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/16/2016 00:23	NP
Acetone	BRL	0.050		mg/L	232977	1	11/16/2016 00:23	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/16/2016 00:23	NP
Chloroform	0.014	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
cis-1,2-Dichloroethene	0.075	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/16/2016 00:23	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/16/2016 00:23	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Trichloroethene	0.055	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/16/2016 00:23	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/16/2016 00:23	NP
Surr: 4-Bromofluorobenzene	95.2	67-118		%REC	232977	1	11/16/2016 00:23	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	232977	1	11/16/2016 00:23	NP
Surr: Toluene-d8	100	82.5-122		%REC	232977	1	11/16/2016 00:23	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-2
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 2:12:00 PM
Lab ID:	1611903-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/16/2016 23:58	JS
Copper	BRL	0.00200		mg/L	232823	1	11/16/2016 23:58	JS
Lead	BRL	0.00100		mg/L	232823	1	11/16/2016 23:58	JS
Zinc	BRL	0.0100		mg/L	232823	1	11/16/2016 23:58	JS
ION SCAN SW9056A								
Nitrate	5.5	0.25		mg/L	R329923	1	11/10/2016 13:19	JW
Sulfate	69	1.0		mg/L	R329923	1	11/10/2016 13:19	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232877	1	11/16/2016 23:02	JS
Copper	BRL	0.00200		mg/L	232877	1	11/16/2016 23:02	JS
Lead	BRL	0.00100		mg/L	232877	1	11/16/2016 23:02	JS
Zinc	BRL	0.0100		mg/L	232877	1	11/16/2016 23:02	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232688	1	11/15/2016 16:21	SH
4,4´-DDE	BRL	0.00010		mg/L	232688	1	11/15/2016 16:21	SH
4,4´-DDT	BRL	0.00010		mg/L	232688	1	11/15/2016 16:21	SH
alpha-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 16:21	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 16:21	SH
beta-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 16:21	SH
delta-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 16:21	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/15/2016 16:21	SH
gamma-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 16:21	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 16:21	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/15/2016 16:21	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/15/2016 16:21	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/15/2016 16:21	SH
Surr: Decachlorobiphenyl	78.7	15.3-120		%REC	232688	1	11/15/2016 16:21	SH
Surr: Tetrachloro-m-xylene	79.1	23.4-131		%REC	232688	1	11/15/2016 16:21	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-4
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 3:52:00 PM
Lab ID:	1611903-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/16/2016 00:46	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/16/2016 00:46	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/16/2016 00:46	NP
Acetone	BRL	0.050		mg/L	232977	1	11/16/2016 00:46	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/16/2016 00:46	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/16/2016 00:46	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/16/2016 00:46	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/16/2016 00:46	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/16/2016 00:46	NP
Surr: 4-Bromofluorobenzene	91.4	67-118		%REC	232977	1	11/16/2016 00:46	NP
Surr: Dibromofluoromethane	101	81.7-124		%REC	232977	1	11/16/2016 00:46	NP
Surr: Toluene-d8	99.6	82.5-122		%REC	232977	1	11/16/2016 00:46	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TW-4
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 3:52:00 PM
Lab ID:	1611903-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 00:54	JS
Copper	0.166	0.00200		mg/L	232823	1	11/17/2016 00:54	JS
Lead	BRL	0.00100		mg/L	232823	1	11/17/2016 00:54	JS
Zinc	0.804	0.0100		mg/L	232823	1	11/17/2016 00:54	JS
ION SCAN SW9056A								
Nitrate	1.1	0.25		mg/L	R329923	1	11/10/2016 13:33	JW
Sulfate	150	10		mg/L	R329923	10	11/10/2016 20:25	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232877	1	11/16/2016 23:08	JS
Copper	0.150	0.00200		mg/L	232877	1	11/16/2016 23:08	JS
Lead	BRL	0.00100		mg/L	232877	1	11/16/2016 23:08	JS
Zinc	0.739	0.0100		mg/L	232877	1	11/16/2016 23:08	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232688	1	11/15/2016 16:40	SH
4,4´-DDE	BRL	0.00010		mg/L	232688	1	11/15/2016 16:40	SH
4,4´-DDT	BRL	0.00010		mg/L	232688	1	11/15/2016 16:40	SH
alpha-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 16:40	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 16:40	SH
beta-BHC	0.0059	0.00050		mg/L	232688	10	11/17/2016 00:53	SH
delta-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 16:40	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/15/2016 16:40	SH
gamma-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 16:40	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 16:40	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/15/2016 16:40	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/15/2016 16:40	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/15/2016 16:40	SH
Surr: Decachlorobiphenyl	67	15.3-120		%REC	232688	1	11/15/2016 16:40	SH
Surr: Tetrachloro-m-xylene	71.2	23.4-131		%REC	232688	1	11/15/2016 16:40	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-104D
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 3:00:00 PM
Lab ID:	1611903-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
1,1,2-Trichloroethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
1,1-Dichloroethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
1,1-Dichloroethene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
1,1-Dichloropropene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
1,2,4-Trichlorobenzene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
1,2-Dichloroethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
1,2-Dichloropropane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
1,4-Dioxane	BRL	150		mg/L	232977	1000	11/15/2016 16:52	NP
2-Butanone	320	50		mg/L	232977	1000	11/15/2016 16:52	NP
4-Methyl-2-pentanone	110	10		mg/L	232977	1000	11/15/2016 16:52	NP
Acetone	240	50		mg/L	232977	1000	11/15/2016 16:52	NP
Benzene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Carbon disulfide	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Carbon tetrachloride	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Chlorobenzene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Chloroethane	BRL	10		mg/L	232977	1000	11/15/2016 16:52	NP
Chloroform	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Chloromethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
cis-1,2-Dichloroethene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Cyclohexane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Ethylbenzene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Isobutyl Alcohol	BRL	200		mg/L	232977	1000	11/15/2016 16:52	NP
Isopropylbenzene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Methylene chloride	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Naphthalene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Styrene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Tetrachloroethene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Tetrahydrofuran	60	10		mg/L	232977	1000	11/15/2016 16:52	NP
Toluene	69	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
trans-1,2-Dichloroethene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Trichloroethene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Trichlorofluoromethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Vinyl chloride	BRL	2.0		mg/L	232977	1000	11/15/2016 16:52	NP
Xylenes, Total	21	5.0		mg/L	232977	1000	11/15/2016 16:52	NP
Surr: 4-Bromofluorobenzene	93.6	67-118		%REC	232977	1000	11/15/2016 16:52	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	232977	1000	11/15/2016 16:52	NP
Surr: Toluene-d8	102	82.5-122		%REC	232977	1000	11/15/2016 16:52	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-104D
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 3:00:00 PM
Lab ID:	1611903-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 01:01	JS
Copper	0.0507	0.00200		mg/L	232823	1	11/17/2016 01:01	JS
Lead	0.00829	0.00100		mg/L	232823	1	11/17/2016 01:01	JS
Zinc	0.0693	0.0100		mg/L	232823	1	11/17/2016 01:01	JS
ION SCAN SW9056A								
Nitrate	BRL	5.0		mg/L	R329923	20	11/10/2016 13:48	JW
Sulfate	21	20		mg/L	R329923	20	11/10/2016 13:48	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	BRL	0.00500		mg/L	232877	1	11/16/2016 23:14	JS
Copper	BRL	0.00200		mg/L	232877	1	11/16/2016 23:14	JS
Lead	BRL	0.00100		mg/L	232877	1	11/16/2016 23:14	JS
Zinc	BRL	0.0100		mg/L	232877	1	11/16/2016 23:14	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.00010		mg/L	232688	1	11/15/2016 16:58	SH
4,4´-DDE	BRL	0.00010		mg/L	232688	1	11/15/2016 16:58	SH
4,4´-DDT	BRL	0.00010		mg/L	232688	1	11/15/2016 16:58	SH
alpha-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 16:58	SH
alpha-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 16:58	SH
beta-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 16:58	SH
delta-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 16:58	SH
Dieldrin	BRL	0.00010		mg/L	232688	1	11/15/2016 16:58	SH
gamma-BHC	BRL	0.000050		mg/L	232688	1	11/15/2016 16:58	SH
gamma-Chlordane	BRL	0.000050		mg/L	232688	1	11/15/2016 16:58	SH
Heptachlor	BRL	0.000050		mg/L	232688	1	11/15/2016 16:58	SH
Methoxychlor	BRL	0.00050		mg/L	232688	1	11/15/2016 16:58	SH
Toxaphene	BRL	0.0030		mg/L	232688	1	11/15/2016 16:58	SH
Surr: Decachlorobiphenyl	57.2	15.3-120		%REC	232688	1	11/15/2016 16:58	SH
Surr: Tetrachloro-m-xylene	118	23.4-131		%REC	232688	1	11/15/2016 16:58	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	DUP-1
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 12:00:00 PM
Lab ID:	1611903-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
1,1,1-Trichloroethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
1,1,2-Trichloroethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
1,1-Dichloroethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
1,1-Dichloroethene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
1,1-Dichloropropene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
1,2,4-Trichlorobenzene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
1,2-Dichloroethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
1,2-Dichloropropane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
1,4-Dioxane	BRL	150		mg/L	232977	1000	11/15/2016 16:27	NP
2-Butanone	300	50		mg/L	232977	1000	11/15/2016 16:27	NP
4-Methyl-2-pentanone	100	10		mg/L	232977	1000	11/15/2016 16:27	NP
Acetone	220	50		mg/L	232977	1000	11/15/2016 16:27	NP
Benzene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Carbon disulfide	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Carbon tetrachloride	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Chlorobenzene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Chloroethane	BRL	10		mg/L	232977	1000	11/15/2016 16:27	NP
Chloroform	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Chloromethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
cis-1,2-Dichloroethene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Cyclohexane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Ethylbenzene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Isobutyl Alcohol	BRL	200		mg/L	232977	1000	11/15/2016 16:27	NP
Isopropylbenzene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Methylene chloride	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Naphthalene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Styrene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Tetrachloroethene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Tetrahydrofuran	57	10		mg/L	232977	1000	11/15/2016 16:27	NP
Toluene	69	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
trans-1,2-Dichloroethene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Trichloroethene	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Trichlorofluoromethane	BRL	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Vinyl chloride	BRL	2.0		mg/L	232977	1000	11/15/2016 16:27	NP
Xylenes, Total	21	5.0		mg/L	232977	1000	11/15/2016 16:27	NP
Surr: 4-Bromofluorobenzene	94.2	67-118		%REC	232977	1000	11/15/2016 16:27	NP
Surr: Dibromofluoromethane	101	81.7-124		%REC	232977	1000	11/15/2016 16:27	NP
Surr: Toluene-d8	101	82.5-122		%REC	232977	1000	11/15/2016 16:27	NP

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-106D
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 4:15:00 PM
Lab ID:	1611903-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/16/2016 01:10	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/16/2016 01:10	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/16/2016 01:10	NP
Acetone	BRL	0.050		mg/L	232977	1	11/16/2016 01:10	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/16/2016 01:10	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/16/2016 01:10	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/16/2016 01:10	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/16/2016 01:10	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/16/2016 01:10	NP
Surr: 4-Bromofluorobenzene	94.6	67-118		%REC	232977	1	11/16/2016 01:10	NP
Surr: Dibromofluoromethane	103	81.7-124		%REC	232977	1	11/16/2016 01:10	NP
Surr: Toluene-d8	100	82.5-122		%REC	232977	1	11/16/2016 01:10	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-106D
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 4:15:00 PM
Lab ID:	1611903-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 01:07	JS
Copper	0.00363	0.00200		mg/L	232823	1	11/17/2016 01:07	JS
Lead	BRL	0.00100		mg/L	232823	1	11/17/2016 01:07	JS
Zinc	0.202	0.0100		mg/L	232823	1	11/17/2016 01:07	JS
ION SCAN SW9056A								
Nitrate	BRL	2.5		mg/L	R329923	10	11/10/2016 21:24	JW
Sulfate	400	10		mg/L	R329923	10	11/10/2016 21:24	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232877	1	11/16/2016 23:20	JS
Copper	0.00313	0.00200		mg/L	232877	1	11/16/2016 23:20	JS
Lead	BRL	0.00100		mg/L	232877	1	11/16/2016 23:20	JS
Zinc	0.196	0.0100		mg/L	232877	1	11/16/2016 23:20	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/15/2016 22:47	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/15/2016 22:47	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/15/2016 22:47	SH
alpha-BHC	0.0071	0.00050		mg/L	232802	10	11/17/2016 20:07	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/15/2016 22:47	SH
beta-BHC	0.0021	0.00050		mg/L	232802	10	11/17/2016 20:07	SH
delta-BHC	0.0083	0.00050		mg/L	232802	10	11/17/2016 20:07	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/15/2016 22:47	SH
gamma-BHC	0.0040	0.00050		mg/L	232802	10	11/17/2016 20:07	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/15/2016 22:47	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/15/2016 22:47	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/15/2016 22:47	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/15/2016 22:47	SH
Surr: Decachlorobiphenyl	69.6	15.3-120		%REC	232802	1	11/15/2016 22:47	SH
Surr: Tetrachloro-m-xylene	74.2	23.4-131		%REC	232802	1	11/15/2016 22:47	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-107D
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 12:35:00 PM
Lab ID:	1611903-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/16/2016 01:33	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/16/2016 01:33	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/16/2016 01:33	NP
Acetone	BRL	0.050		mg/L	232977	1	11/16/2016 01:33	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/16/2016 01:33	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/16/2016 01:33	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/16/2016 01:33	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/16/2016 01:33	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/16/2016 01:33	NP
Surr: 4-Bromofluorobenzene	94.8	67-118		%REC	232977	1	11/16/2016 01:33	NP
Surr: Dibromofluoromethane	103	81.7-124		%REC	232977	1	11/16/2016 01:33	NP
Surr: Toluene-d8	102	82.5-122		%REC	232977	1	11/16/2016 01:33	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-107D
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 12:35:00 PM
Lab ID:	1611903-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 01:13	JS
Copper	0.00439	0.00200		mg/L	232823	1	11/17/2016 01:13	JS
Lead	BRL	0.00100		mg/L	232823	1	11/17/2016 01:13	JS
Zinc	0.0114	0.0100		mg/L	232823	1	11/17/2016 01:13	JS
ION SCAN SW9056A								
Nitrate	2.3	0.25		mg/L	R329923	1	11/10/2016 15:01	JW
Sulfate	140	10		mg/L	R329923	10	11/10/2016 21:39	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232877	1	11/16/2016 23:27	JS
Copper	0.00436	0.00200		mg/L	232877	1	11/16/2016 23:27	JS
Lead	BRL	0.00100		mg/L	232877	1	11/16/2016 23:27	JS
Zinc	BRL	0.0100		mg/L	232877	1	11/16/2016 23:27	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/15/2016 23:43	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/15/2016 23:43	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/15/2016 23:43	SH
alpha-BHC	BRL	0.000050		mg/L	232802	1	11/15/2016 23:43	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/15/2016 23:43	SH
beta-BHC	BRL	0.000050		mg/L	232802	1	11/15/2016 23:43	SH
delta-BHC	BRL	0.000050		mg/L	232802	1	11/15/2016 23:43	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/15/2016 23:43	SH
gamma-BHC	BRL	0.000050		mg/L	232802	1	11/15/2016 23:43	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/15/2016 23:43	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/15/2016 23:43	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/15/2016 23:43	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/15/2016 23:43	SH
Surr: Decachlorobiphenyl	33.3	15.3-120		%REC	232802	1	11/15/2016 23:43	SH
Surr: Tetrachloro-m-xylene	75.9	23.4-131		%REC	232802	1	11/15/2016 23:43	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-112
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 1:28:00 PM
Lab ID:	1611903-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/16/2016 01:56	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/16/2016 01:56	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/16/2016 01:56	NP
Acetone	BRL	0.050		mg/L	232977	1	11/16/2016 01:56	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/16/2016 01:56	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/16/2016 01:56	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/16/2016 01:56	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/16/2016 01:56	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/16/2016 01:56	NP
Surr: 4-Bromofluorobenzene	94.8	67-118		%REC	232977	1	11/16/2016 01:56	NP
Surr: Dibromofluoromethane	103	81.7-124		%REC	232977	1	11/16/2016 01:56	NP
Surr: Toluene-d8	101	82.5-122		%REC	232977	1	11/16/2016 01:56	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-112
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 1:28:00 PM
Lab ID:	1611903-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	0.0116	0.00500		mg/L	232823	1	11/17/2016 01:44	JS
Copper	0.0436	0.00200		mg/L	232823	1	11/17/2016 01:44	JS
Lead	BRL	0.00100		mg/L	232823	1	11/17/2016 01:44	JS
Zinc	0.965	0.0100		mg/L	232823	1	11/17/2016 01:44	JS
ION SCAN SW9056A								
Nitrate	0.63	0.25		mg/L	R329923	1	11/10/2016 15:16	JW
Sulfate	150	10		mg/L	R329923	10	11/10/2016 21:53	JW
Dissolved Metals by ICP/MS SW6020B					**(SW3005A)**			
Arsenic	0.0110	0.00500		mg/L	232877	1	11/16/2016 23:33	JS
Copper	0.0383	0.00200		mg/L	232877	1	11/16/2016 23:33	JS
Lead	BRL	0.00100		mg/L	232877	1	11/16/2016 23:33	JS
Zinc	0.927	0.0100		mg/L	232877	1	11/16/2016 23:33	JS
CHLORINATED PESTICIDES, TCL SW8081B					**(SW3510C)**			
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/16/2016 00:01	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/16/2016 00:01	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/16/2016 00:01	SH
alpha-BHC	0.00049	0.000050		mg/L	232802	1	11/16/2016 00:01	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 00:01	SH
beta-BHC	0.00099	0.000050		mg/L	232802	1	11/16/2016 00:01	SH
delta-BHC	0.00011	0.000050		mg/L	232802	1	11/16/2016 00:01	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/16/2016 00:01	SH
gamma-BHC	0.000068	0.000050		mg/L	232802	1	11/16/2016 00:01	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 00:01	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/16/2016 00:01	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/16/2016 00:01	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/16/2016 00:01	SH
Surr: Decachlorobiphenyl	20.6	15.3-120		%REC	232802	1	11/16/2016 00:01	SH
Surr: Tetrachloro-m-xylene	71.5	23.4-131		%REC	232802	1	11/16/2016 00:01	SH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-26
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 11:07:00 AM
Lab ID:	1611903-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
1,1,2,2-Tetrachloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
1,1,2-Trichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
1,1-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
1,1-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
1,1-Dichloropropene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
1,2,4-Trichlorobenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
1,2-Dichloroethane	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
1,2-Dichloropropane	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
1,4-Dioxane	BRL	0.15		mg/L	232977	1	11/16/2016 02:19	NP
2-Butanone	BRL	0.050		mg/L	232977	1	11/16/2016 02:19	NP
4-Methyl-2-pentanone	BRL	0.010		mg/L	232977	1	11/16/2016 02:19	NP
Acetone	BRL	0.050		mg/L	232977	1	11/16/2016 02:19	NP
Benzene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Carbon disulfide	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Carbon tetrachloride	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Chlorobenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Chloroethane	BRL	0.010		mg/L	232977	1	11/16/2016 02:19	NP
Chloroform	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Chloromethane	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
cis-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Cyclohexane	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Ethylbenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Isobutyl Alcohol	BRL	0.20		mg/L	232977	1	11/16/2016 02:19	NP
Isopropylbenzene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Methylene chloride	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Naphthalene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Styrene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Tetrachloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Tetrahydrofuran	BRL	0.010		mg/L	232977	1	11/16/2016 02:19	NP
Toluene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
trans-1,2-Dichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Trichloroethene	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Trichlorofluoromethane	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Vinyl chloride	BRL	0.0020		mg/L	232977	1	11/16/2016 02:19	NP
Xylenes, Total	BRL	0.0050		mg/L	232977	1	11/16/2016 02:19	NP
Surr: 4-Bromofluorobenzene	95.2	67-118		%REC	232977	1	11/16/2016 02:19	NP
Surr: Dibromofluoromethane	102	81.7-124		%REC	232977	1	11/16/2016 02:19	NP
Surr: Toluene-d8	100	82.5-122		%REC	232977	1	11/16/2016 02:19	NP
Total Metals by ICP/MS SW6020B				**(SW3005A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Nov-16

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	MW-26
Project Name:	BFEL Atlanta	**Collection Date:**	11/9/2016 11:07:00 AM
Lab ID:	1611903-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232823	1	11/17/2016 01:51	JS
Copper	0.0117	0.00200		mg/L	232823	1	11/17/2016 01:51	JS
Lead	BRL	0.00100		mg/L	232823	1	11/17/2016 01:51	JS
Zinc	0.155	0.0100		mg/L	232823	1	11/17/2016 01:51	JS
ION SCAN SW9056A								
Nitrate	3.0	0.25		mg/L	R329923	1	11/10/2016 15:31	JW
Sulfate	310	10		mg/L	R329923	10	11/10/2016 20:10	JW
Dissolved Metals by ICP/MS SW6020B				**(SW3005A)**				
Arsenic	BRL	0.00500		mg/L	232877	1	11/16/2016 23:39	JS
Copper	0.0103	0.00200		mg/L	232877	1	11/16/2016 23:39	JS
Lead	BRL	0.00100		mg/L	232877	1	11/16/2016 23:39	JS
Zinc	0.124	0.0100		mg/L	232877	1	11/16/2016 23:39	JS
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	BRL	0.00010		mg/L	232802	1	11/16/2016 00:20	SH
4,4´-DDE	BRL	0.00010		mg/L	232802	1	11/16/2016 00:20	SH
4,4´-DDT	BRL	0.00010		mg/L	232802	1	11/16/2016 00:20	SH
alpha-BHC	BRL	0.000050		mg/L	232802	1	11/16/2016 00:20	SH
alpha-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 00:20	SH
beta-BHC	0.00036	0.000050		mg/L	232802	1	11/16/2016 00:20	SH
delta-BHC	0.000055	0.000050		mg/L	232802	1	11/16/2016 00:20	SH
Dieldrin	BRL	0.00010		mg/L	232802	1	11/16/2016 00:20	SH
gamma-BHC	BRL	0.000050		mg/L	232802	1	11/16/2016 00:20	SH
gamma-Chlordane	BRL	0.000050		mg/L	232802	1	11/16/2016 00:20	SH
Heptachlor	BRL	0.000050		mg/L	232802	1	11/16/2016 00:20	SH
Methoxychlor	BRL	0.00050		mg/L	232802	1	11/16/2016 00:20	SH
Toxaphene	BRL	0.0030		mg/L	232802	1	11/16/2016 00:20	SH
Surr: Decachlorobiphenyl	38.4	15.3-120		%REC	232802	1	11/16/2016 00:20	SH
Surr: Tetrachloro-m-xylene	64.1	23.4-131		%REC	232802	1	11/16/2016 00:20	SH

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Amec Work Order Number 1611903

Checklist completed by Alexis Lodge 11/9/16
Signature Date

Carrier name: FedEx __ UPS __ Courier ✓ Client __ US Mail __ Other _____

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

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

Custody seals intact on sample bottles? Yes __ No __ Not Present __

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 1.3 Cooler #2 1.0 Cooler #3 1.2 Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

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

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

Water - pH acceptable upon receipt? Yes __ No ✓ Not Applicable __

Adjusted? AJ Checked by AJ

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 23-Nov-16

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611903

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611903-001A	TB-02	11/9/2016 9:30:00AM	Aqueous	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/15/2016
1611903-002A	TW-1	11/9/2016 11:42:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/15/2016
1611903-002B	TW-1	11/9/2016 11:42:00AM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611903-002C	TW-1	11/9/2016 11:42:00AM	Groundwater	Dissolved Metals by ICP/MS		11/15/2016 3:20:00 PM	11/16/2016
1611903-002D	TW-1	11/9/2016 11:42:00AM	Groundwater	ION SCAN			11/10/2016
1611903-002E	TW-1	11/9/2016 11:42:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/15/2016
1611903-003A	TW-2	11/9/2016 2:12:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/16/2016
1611903-003B	TW-2	11/9/2016 2:12:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/16/2016
1611903-003C	TW-2	11/9/2016 2:12:00PM	Groundwater	Dissolved Metals by ICP/MS		11/15/2016 3:20:00 PM	11/16/2016
1611903-003D	TW-2	11/9/2016 2:12:00PM	Groundwater	ION SCAN			11/10/2016
1611903-003E	TW-2	11/9/2016 2:12:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/15/2016
1611903-004A	TW-4	11/9/2016 3:52:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/16/2016
1611903-004B	TW-4	11/9/2016 3:52:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611903-004C	TW-4	11/9/2016 3:52:00PM	Groundwater	Dissolved Metals by ICP/MS		11/15/2016 3:20:00 PM	11/16/2016
1611903-004D	TW-4	11/9/2016 3:52:00PM	Groundwater	ION SCAN			11/10/2016
1611903-004E	TW-4	11/9/2016 3:52:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/15/2016
1611903-004E	TW-4	11/9/2016 3:52:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/17/2016
1611903-005A	MW-104D	11/9/2016 3:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/15/2016
1611903-005B	MW-104D	11/9/2016 3:00:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611903-005C	MW-104D	11/9/2016 3:00:00PM	Groundwater	Dissolved Metals by ICP/MS		11/15/2016 3:20:00 PM	11/16/2016
1611903-005D	MW-104D	11/9/2016 3:00:00PM	Groundwater	ION SCAN			11/10/2016
1611903-005E	MW-104D	11/9/2016 3:00:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/11/2016 12:00:00 PM	11/15/2016
1611903-006A	DUP-1	11/9/2016 12:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/15/2016
1611903-007A	MW-106D	11/9/2016 4:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/16/2016
1611903-007B	MW-106D	11/9/2016 4:15:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611903-007C	MW-106D	11/9/2016 4:15:00PM	Groundwater	Dissolved Metals by ICP/MS		11/15/2016 3:20:00 PM	11/16/2016
1611903-007D	MW-106D	11/9/2016 4:15:00PM	Groundwater	ION SCAN			11/10/2016
1611903-007E	MW-106D	11/9/2016 4:15:00PM	Groundwater	APPENDIX IX CHLORINATED PESTICID		11/14/2016 2:00:00 PM	11/15/2016
1611903-007E	MW-106D	11/9/2016 4:15:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/15/2016

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Lab Order: 1611903

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1611903-007E	MW-106D	11/9/2016 4:15:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/17/2016
1611903-008A	MW-107D	11/9/2016 12:35:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/16/2016
1611903-008B	MW-107D	11/9/2016 12:35:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611903-008C	MW-107D	11/9/2016 12:35:00PM	Groundwater	Dissolved Metals by ICP/MS		11/15/2016 3:20:00 PM	11/16/2016
1611903-008D	MW-107D	11/9/2016 12:35:00PM	Groundwater	ION SCAN			11/10/2016
1611903-008E	MW-107D	11/9/2016 12:35:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/15/2016
1611903-009A	MW-112	11/9/2016 1:28:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/16/2016
1611903-009B	MW-112	11/9/2016 1:28:00PM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611903-009C	MW-112	11/9/2016 1:28:00PM	Groundwater	Dissolved Metals by ICP/MS		11/15/2016 3:20:00 PM	11/16/2016
1611903-009D	MW-112	11/9/2016 1:28:00PM	Groundwater	ION SCAN			11/10/2016
1611903-009E	MW-112	11/9/2016 1:28:00PM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/16/2016
1611903-010A	MW-26	11/9/2016 11:07:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/15/2016 10:44:00 AM	11/16/2016
1611903-010B	MW-26	11/9/2016 11:07:00AM	Groundwater	Total Metals by ICP/MS		11/14/2016 7:30:00 PM	11/17/2016
1611903-010C	MW-26	11/9/2016 11:07:00AM	Groundwater	Dissolved Metals by ICP/MS		11/15/2016 3:20:00 PM	11/16/2016
1611903-010D	MW-26	11/9/2016 11:07:00AM	Groundwater	ION SCAN			11/10/2016
1611903-010E	MW-26	11/9/2016 11:07:00AM	Groundwater	TCL-CHLORINATED PESTICIDES		11/14/2016 2:00:00 PM	11/16/2016

AES, Inc.
3080 Presidential Drive
Atlanta GA 30340

pH Adjustment Sheet

AES Sample ID number	Test Requested	pH as Received	Required pH	Preservative Required	Lot # of Preservative	Amount Added mL or Pellets*	Final pH	Tech's Initials	Date	Time
160l903-005B	3005/6020	6	1	HNO3	66B 64	0.5 mL Pellets	1	AJ	11/9	8:26
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
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						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				

* Number of Pellets when adding NAOH

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611903

ANALYTICAL QC SUMMARY REPORT

BatchID: 232688

Sample ID: **MB-232688** Client ID: Units: **mg/L** Prep Date: **11/11/2016** Run No: **329934**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232688** Analysis Date: **11/12/2016** Seq No: **7170084**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	0.00010									
4,4´-DDE	BRL	0.00010									
4,4´-DDT	BRL	0.00010									
alpha-BHC	BRL	0.000050									
alpha-Chlordane	BRL	0.000050									
beta-BHC	BRL	0.000050									
delta-BHC	BRL	0.000050									
Dieldrin	BRL	0.000020									
gamma-BHC	BRL	0.000050									
gamma-Chlordane	BRL	0.000050									
Heptachlor	BRL	0.000050									
Methoxychlor	BRL	0.00050									
Surr: Decachlorobiphenyl	0.000309	0	0.0005		61.8	15.3	120				
Surr: Tetrachloro-m-xylene	0.000550	0	0.0005		110	23.4	131				

Sample ID: **MB-232688** Client ID: Units: **mg/L** Prep Date: **11/11/2016** Run No: **329694**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232688** Analysis Date: **11/11/2016** Seq No: **7171250**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toxaphene	BRL	0.0050									

Sample ID: **LCS-232688** Client ID: Units: **mg/L** Prep Date: **11/11/2016** Run No: **329934**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232688** Analysis Date: **11/12/2016** Seq No: **7170085**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001169	0.00010	0.0010		117	78.2	126				
Dieldrin	0.001172	0.00010	0.0010		117	74.4	125				
gamma-BHC	0.001201	0.000050	0.0010		120	65.6	131				

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611903

ANALYTICAL QC SUMMARY REPORT

BatchID: 232688

Sample ID: **LCS-232688** Client ID: Units: **mg/L** Prep Date: **11/11/2016** Run No: **329934**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232688** Analysis Date: **11/12/2016** Seq No: **7170085**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Heptachlor	0.001132	0.000050	0.0010		113	58.9	126				
Surr: Decachlorobiphenyl	0.000363	0	0.0005		72.5	15.3	120				
Surr: Tetrachloro-m-xylene	0.000591	0	0.0005		118	23.4	131				

Sample ID: **1611755-002DMS** Client ID: Units: **mg/L** Prep Date: **11/11/2016** Run No: **329934**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232688** Analysis Date: **11/12/2016** Seq No: **7170087**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001128	0.00010	0.0010		113	40.5	145				
Dieldrin	0.001198	0.00010	0.0010		120	47.8	143				
gamma-BHC	0.001219	0.000050	0.0010		122	52.5	146				
Heptachlor	0.001135	0.000050	0.0010		113	36.5	144				
Surr: Decachlorobiphenyl	0.000181	0	0.0005		36.2	15.3	120				
Surr: Tetrachloro-m-xylene	0.000563	0	0.0005		113	23.4	131				

Sample ID: **1611755-002DMSD** Client ID: Units: **mg/L** Prep Date: **11/11/2016** Run No: **329934**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232688** Analysis Date: **11/12/2016** Seq No: **7170088**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.001088	0.00010	0.0010		109	40.5	145	0.001128	3.60	23.6	
Dieldrin	0.001188	0.00010	0.0010		119	47.8	143	0.001198	0.831	20	
gamma-BHC	0.001184	0.000050	0.0010		118	52.5	146	0.001219	2.91	24.6	
Heptachlor	0.001086	0.000050	0.0010		109	36.5	144	0.001135	4.42	25.8	
Surr: Decachlorobiphenyl	0.000169	0	0.0005		33.8	15.3	120	0.0001811	0	0	
Surr: Tetrachloro-m-xylene	0.000570	0	0.0005		114	23.4	131	0.0005633	0	0	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611903

ANALYTICAL QC SUMMARY REPORT

BatchID: 232802

Sample ID: **MB-232802** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **330080**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232802** Analysis Date: **11/15/2016** Seq No: **7175895**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	0.00010									
4,4´-DDE	BRL	0.00010									
4,4´-DDT	BRL	0.00010									
alpha-BHC	BRL	0.000050									
alpha-Chlordane	BRL	0.000050									
beta-BHC	BRL	0.000050									
delta-BHC	BRL	0.000050									
Dieldrin	BRL	0.00010									
gamma-BHC	BRL	0.000050									
gamma-Chlordane	BRL	0.000050									
Heptachlor	BRL	0.000050									
Methoxychlor	BRL	0.00050									
Toxaphene	BRL	0.0050									
Surr: Decachlorobiphenyl	0.000290	0	0.0005		58.0	15.3	120				
Surr: Tetrachloro-m-xylene	0.000440	0	0.0005		88.0	23.4	131				

Sample ID: **LCS-232802** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **330080**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232802** Analysis Date: **11/15/2016** Seq No: **7175897**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.000811	0.00010	0.0010		81.1	78.2	126				
Dieldrin	0.000819	0.00010	0.0010		81.9	74.4	125				
gamma-BHC	0.000824	0.000050	0.0010		82.4	65.6	131				
Heptachlor	0.000807	0.000050	0.0010		80.7	58.9	126				
Surr: Decachlorobiphenyl	0.000244	0	0.0005		48.7	15.3	120				
Surr: Tetrachloro-m-xylene	0.000440	0	0.0005		88.0	23.4	131				

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611903

ANALYTICAL QC SUMMARY REPORT

BatchID: 232802

Sample ID: **1611903-007EMS** Client ID: **MW-106D** Units: **mg/L** Prep Date: **11/14/2016** Run No: **330080**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232802** Analysis Date: **11/15/2016** Seq No: **7175902**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.000936	0.00010	0.0010		93.7	40.5	145				
Dieldrin	0.000945	0.00010	0.0010	0.00003427	91.1	47.8	143				
Heptachlor	0.001077	0.000050	0.0010		108	36.5	144				
Surr: Decachlorobiphenyl	0.000386	0	0.0005		77.3	15.3	120				
Surr: Tetrachloro-m-xylene	0.000384	0	0.0005		76.8	23.4	131				

Sample ID: **1611903-007EMS** Client ID: **MW-106D** Units: **mg/L** Prep Date: **11/14/2016** Run No: **330272**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232802** Analysis Date: **11/17/2016** Seq No: **7178719**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
gamma-BHC	0.004959	0.00050	0.0010	0.003951	101	52.5	146				

Sample ID: **1611903-007EMSD** Client ID: **MW-106D** Units: **mg/L** Prep Date: **11/14/2016** Run No: **330080**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232802** Analysis Date: **11/15/2016** Seq No: **7175903**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.000898	0.00010	0.0010		89.8	40.5	145	0.0009365	4.21	23.6	
Dieldrin	0.000893	0.00010	0.0010	0.00003427	85.9	47.8	143	0.0009453	5.66	20	
Heptachlor	0.000998	0.000050	0.0010		99.9	36.5	144	0.001077	7.57	25.8	
Surr: Decachlorobiphenyl	0.000376	0	0.0005		75.1	15.3	120	0.0003865	0	0	
Surr: Tetrachloro-m-xylene	0.000369	0	0.0005		73.9	23.4	131	0.0003842	0	0	

Sample ID: **1611903-007EMSD** Client ID: **MW-106D** Units: **mg/L** Prep Date: **11/14/2016** Run No: **330272**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **232802** Analysis Date: **11/17/2016** Seq No: **7178720**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
gamma-BHC	0.004680	0.00050	0.0010	0.003951	72.9	52.5	146	0.004959	5.79	24.6	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611903

ANALYTICAL QC SUMMARY REPORT

BatchID: 232823

Sample ID: **MB-232823** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **330185**
SampleType: **MBLK** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232823** Analysis Date: **11/16/2016** Seq No: **7176237**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.00500									
Copper	BRL	0.00200									
Lead	BRL	0.00100									
Zinc	BRL	0.0100									

Sample ID: **LCS-232823** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **330185**
SampleType: **LCS** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232823** Analysis Date: **11/16/2016** Seq No: **7176238**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09883	0.00500	0.1000		98.8	80	120				
Copper	0.09813	0.00200	0.1000		98.1	80	120				
Lead	0.1074	0.00100	0.1000	0.0002250	107	80	120				
Zinc	0.09989	0.0100	0.1000		99.9	80	120				

Sample ID: **1611903-003BMS** Client ID: **TW-2** Units: **mg/L** Prep Date: **11/14/2016** Run No: **330185**
SampleType: **MS** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232823** Analysis Date: **11/17/2016** Seq No: **7176242**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09744	0.00500	0.1000	0.0002170	97.2	75	125				
Copper	0.09432	0.00200	0.1000	0.0003900	93.9	75	125				
Lead	0.1076	0.00100	0.1000	0.0001570	107	75	125				
Zinc	0.1016	0.0100	0.1000	0.005350	96.2	75	125				

Sample ID: **1611903-003BMSD** Client ID: **TW-2** Units: **mg/L** Prep Date: **11/14/2016** Run No: **330185**
SampleType: **MSD** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232823** Analysis Date: **11/17/2016** Seq No: **7176243**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09721	0.00500	0.1000	0.0002170	97.0	75	125	0.09744	0.236	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611903

ANALYTICAL QC SUMMARY REPORT

BatchID: 232823

Sample ID: **1611903-003BMSD** Client ID: **TW-2** Units: **mg/L** Prep Date: **11/14/2016** Run No: **330185**
SampleType: **MSD** TestCode: **Total Metals by ICP/MS SW6020B** BatchID: **232823** Analysis Date: **11/17/2016** Seq No: **7176243**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Copper	0.09431	0.00200	0.1000	0.0003900	93.9	75	125	0.09432	0.011	20	
Lead	0.1058	0.00100	0.1000	0.0001570	106	75	125	0.1076	1.69	20	
Zinc	0.1018	0.0100	0.1000	0.005350	96.4	75	125	0.1016	0.197	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611903

ANALYTICAL QC SUMMARY REPORT

BatchID: 232877

Sample ID: **MB-232877** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **329878**
SampleType: **MBLK** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **232877** Analysis Date: **11/15/2016** Seq No: **7169380**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.00500									
Copper	BRL	0.00200									
Lead	BRL	0.00100									
Zinc	BRL	0.0100									

Sample ID: **LCS-232877** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **329878**
SampleType: **LCS** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **232877** Analysis Date: **11/15/2016** Seq No: **7169381**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.09341	0.00500	0.1000		93.4	80	120				
Copper	0.09457	0.00200	0.1000		94.6	80	120				
Lead	0.09638	0.00100	0.1000		96.4	80	120				
Zinc	0.09216	0.0100	0.1000		92.2	80	120				

Sample ID: **1611755-004BMS** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **329878**
SampleType: **MS** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **232877** Analysis Date: **11/15/2016** Seq No: **7169383**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.08652	0.00500	0.1000	0.0004480	86.1	75	125				
Copper	0.2581	0.00200	0.1000	0.1798	78.3	75	125				
Lead	0.1013	0.00100	0.1000	0.001162	100	75	125				
Zinc	0.8024	0.0100	0.1000	0.7360	66.4	75	125				S

Sample ID: **1611755-004BMSD** Client ID: Units: **mg/L** Prep Date: **11/14/2016** Run No: **329878**
SampleType: **MSD** TestCode: **Dissolved Metals by ICP/MS SW6020B** BatchID: **232877** Analysis Date: **11/15/2016** Seq No: **7169384**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.08474	0.00500	0.1000	0.0004480	84.3	75	125	0.08652	2.08	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611903

ANALYTICAL QC SUMMARY REPORT

BatchID: 232877

Sample ID: **1611755-004BMSD** Client ID:
SampleType: **MSD** TestCode: **Dissolved Metals by ICP/MS SW6020B**
Units: **mg/L** Prep Date: **11/14/2016** Run No: **329878**
BatchID: **232877** Analysis Date: **11/15/2016** Seq No: **7169384**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Copper	0.2619	0.00200	0.1000	0.1798	82.1	75	125	0.2581	1.46	20	
Lead	0.09951	0.00100	0.1000	0.001162	98.3	75	125	0.1013	1.78	20	
Zinc	0.8101	0.0100	0.1000	0.7360	74.1	75	125	0.8024	0.955	20	S

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611903

ANALYTICAL QC SUMMARY REPORT

BatchID: 232977

Sample ID: **MB-232977** Client ID: Units: **mg/L** Prep Date: **11/15/2016** Run No: **329940**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232977** Analysis Date: **11/15/2016** Seq No: **7169722**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	0.0050									
1,1,2,2-Tetrachloroethane	BRL	0.0050									
1,1,2-Trichloroethane	BRL	0.0050									
1,1-Dichloroethane	BRL	0.0050									
1,1-Dichloroethene	BRL	0.0050									
1,1-Dichloropropene	BRL	0.0050									
1,2,4-Trichlorobenzene	BRL	0.0050									
1,2-Dichloroethane	BRL	0.0050									
1,2-Dichloropropane	BRL	0.0050									
1,4-Dioxane	BRL	0.15									
2-Butanone	BRL	0.050									
4-Methyl-2-pentanone	BRL	0.010									
Acetone	BRL	0.050									
Benzene	BRL	0.0050									
Carbon disulfide	BRL	0.0050									
Carbon tetrachloride	BRL	0.0050									
Chlorobenzene	BRL	0.0050									
Chloroethane	BRL	0.010									
Chloroform	BRL	0.0050									
Chloromethane	BRL	0.010									
cis-1,2-Dichloroethene	BRL	0.0050									
Cyclohexane	BRL	0.0050									
Ethylbenzene	BRL	0.0050									
Isobutyl Alcohol	BRL	0.20									
Isopropylbenzene	BRL	0.0050									
Methylene chloride	BRL	0.0050									
Naphthalene	BRL	0.0050									

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611903

ANALYTICAL QC SUMMARY REPORT

BatchID: 232977

Sample ID: **MB-232977** Client ID: Units: **mg/L** Prep Date: **11/15/2016** Run No: **329940**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232977** Analysis Date: **11/15/2016** Seq No: **7169722**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Styrene	BRL	0.0050									
Tetrachloroethene	BRL	0.0050									
Tetrahydrofuran	BRL	0.010									
Toluene	BRL	0.0050									
trans-1,2-Dichloroethene	BRL	0.0050									
Trichloroethene	BRL	0.0050									
Trichlorofluoromethane	BRL	0.0050									
Vinyl chloride	BRL	0.0020									
Xylenes, Total	BRL	0.0050									
Surr: 4-Bromofluorobenzene	0.04703	0	0.0500		94.1	67	118				
Surr: Dibromofluoromethane	0.04991	0	0.0500		99.8	81.7	124				
Surr: Toluene-d8	0.04983	0	0.0500		99.7	82.5	122				

Sample ID: **LCS-232977** Client ID: Units: **mg/L** Prep Date: **11/15/2016** Run No: **329940**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232977** Analysis Date: **11/15/2016** Seq No: **7169717**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.04278	0.0050	0.0500		85.6	65.3	137				
Benzene	0.04922	0.0050	0.0500		98.4	74.9	123				
Chlorobenzene	0.04750	0.0050	0.0500		95.0	73.9	124				
Toluene	0.05045	0.0050	0.0500		101	75	124				
Trichloroethene	0.04553	0.0050	0.0500		91.1	73.1	128				
Surr: 4-Bromofluorobenzene	0.04698	0	0.0500		94.0	67	118				
Surr: Dibromofluoromethane	0.05091	0	0.0500		102	81.7	124				
Surr: Toluene-d8	0.05085	0	0.0500		102	82.5	122				

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611903

ANALYTICAL QC SUMMARY REPORT

BatchID: 232977

Sample ID: **1611903-005AMS** Client ID: **MW-104D** Units: **mg/L** Prep Date: **11/15/2016** Run No: **329940**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232977** Analysis Date: **11/15/2016** Seq No: **7170944**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	46.76	5.0	50.00		93.5	60	150				
Benzene	49.02	5.0	50.00	0.2900	97.5	70.1	132				
Chlorobenzene	48.27	5.0	50.00		96.5	70.9	131				
Toluene	125.5	5.0	50.00	69.40	112	70.1	133				
Trichloroethene	46.11	5.0	50.00		92.2	70	136				
Surr: 4-Bromofluorobenzene	47.46	0	50.00		94.9	67	118				
Surr: Dibromofluoromethane	50.38	0	50.00		101	81.7	124				
Surr: Toluene-d8	50.29	0	50.00		101	82.5	122				

Sample ID: **1611903-005AMSD** Client ID: **MW-104D** Units: **mg/L** Prep Date: **11/15/2016** Run No: **329940**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232977** Analysis Date: **11/15/2016** Seq No: **7170945**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	44.20	5.0	50.00		88.4	60	150	46.76	5.63	17.7	
Benzene	47.48	5.0	50.00	0.2900	94.4	70.1	132	49.02	3.19	20	
Chlorobenzene	46.37	5.0	50.00		92.7	70.9	131	48.27	4.02	20	
Toluene	122.1	5.0	50.00	69.40	105	70.1	133	125.5	2.79	20	
Trichloroethene	44.92	5.0	50.00		89.8	70	136	46.11	2.61	20	
Surr: 4-Bromofluorobenzene	47.82	0	50.00		95.6	67	118	47.46	0	0	
Surr: Dibromofluoromethane	51.03	0	50.00		102	81.7	124	50.38	0	0	
Surr: Toluene-d8	50.98	0	50.00		102	82.5	122	50.29	0	0	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611903

ANALYTICAL QC SUMMARY REPORT

BatchID: R329923

Sample ID: **MB-R329923**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **329923**
SampleType: **MBLK**	TestCode: **ION SCAN SW9056A**			BatchID: **R329923**	Analysis Date: **11/10/2016**		Seq No: **7169094**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R329923**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **329923**
SampleType: **LCS**	TestCode: **ION SCAN SW9056A**			BatchID: **R329923**	Analysis Date: **11/10/2016**		Seq No: **7169092**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	4.992	0.25	5.000		99.8	90	110				
Sulfate	24.92	1.0	25.00		99.7	90	110				

Sample ID: **1611974-004CMS**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **329923**
SampleType: **MS**	TestCode: **ION SCAN SW9056A**			BatchID: **R329923**	Analysis Date: **11/10/2016**		Seq No: **7169120**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.122	0.25	5.000		102	90	110				
Sulfate	35.91	1.0	25.00	11.79	96.5	90	110				

Sample ID: **1611974-005CMS**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **329923**
SampleType: **MS**	TestCode: **ION SCAN SW9056A**			BatchID: **R329923**	Analysis Date: **11/10/2016**		Seq No: **7169123**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	6.250	0.25	5.000	0.9093	107	90	110				
Sulfate	43.27	1.0	25.00	19.02	97.0	90	110				

Sample ID: **1611974-004CMSD**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **329923**
SampleType: **MSD**	TestCode: **ION SCAN SW9056A**			BatchID: **R329923**	Analysis Date: **11/10/2016**		Seq No: **7169121**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.151	0.25	5.000		103	90	110	5.122	0.565	20	

Qualifiers:

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

Client: AMEC E&I, Inc. -Kennesaw
Project Name: BFEL Atlanta
Workorder: 1611903

ANALYTICAL QC SUMMARY REPORT

BatchID: R329923

Sample ID: **1611974-004CMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date: Run No: **329923**
BatchID: **R329923** Analysis Date: **11/10/2016** Seq No: **7169121**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	36.02	1.0	25.00	11.79	96.9	90	110	35.91	0.305	20	

Qualifiers:

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

Stipulation of Approval for Commercial Laboratory

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

Laboratory	Analytical Environmental Services, Inc. (AES) 3080 Presidential Drive Atlanta, GA 30340 (770) 457-8177
Accredited By:	State of Florida, Department of Health, Bureau of Laboratories; NELAP Recognized Accrediting Authority
Accreditation ID:	E87582
Scope:	Drinking Water – Microbiology, Primary Inorganic Contaminants, Secondary Inorganic Contaminants Non-Potable Water – Extractable Organics, General Chemistry, Metals, Microbiology, Pesticides-Herbicides-PCBs, Volatile Organics Solid and Chemical Materials – Extractable Organics, General Chemistry, Metals, Microbiology, Pesticides-Herbicides-PCBs, Volatile Organics Air and Emissions – Volatile Organics
Effective:	July 1, 2016
Expires:	June 30, 2017

Accredited By:	National Voluntary Laboratory Accreditation Program (NVLAP)
Accreditation ID:	102082-0
Scope:	Asbestos: PLM (bulk) and TEM (air)
Effective:	October 1, 2016
Expires:	September 30, 2017

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

Mehmet Yildirim

Mehmet Yildirim

Vice President of Operations
November 16th, 2016

FIELD SAMPLING FORMS

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-1B DEPTH TO PRODUCT: NA DATE: 11/8/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1245

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 26.62 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 32.54 _____

Arrived at: 1153 PURGE VOLUME: 5.92 x 0.163 = 2.89 gal WELL DIAMETER (Inches):

Initial PID = NA 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1219	0.5	5.26	22.17	0.456	68.0	2.01	238	400 ( )	
1224	1.0	5.31	23.13	0.459	24.6	1.73	231	400	26.77
1229	1.5	5.35	23.61	0.457	11.9	1.80	223	400	26.78
1234	2.0	5.42	23.63	0.457	4.8	1.72	222	400	26.78
1239	2.5	5.48	23.69	0.457	2.3	1.65	222	400	26.78
1244	3.0	5.	23.77	0.457	1.1	1.59	221	400	26.78
1245	Collect	MW-1B	Sample						

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Cool Cloudy		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER:	Nicholas McMillan	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-22 DEPTH TO PRODUCT: NA DATE: 8-Nov 2016

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1230

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: N/A DEPTH TO WATER: 21.23 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 28.98 NA

Arrived at: 1130 PURGE VOLUME: 3.8 gal WELL DIAMETER (Inches):

Initial PID = NM 2-inch

Bailing PID = NM

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO mg/L	ORP mV	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1145		3.98	17.10	0.768	299	2.48	349	500 (103)	
1155	1	4.03	17.63	0.778	112	~~0.774~~	375	500	~~21.33~~
1200	1.25	4.02	19.04	0.784	89.0	1.74	389	500	~~21.39~~
1205	1.5	4.01	19.34	0.783	56.7	~~0.784~~	390	500	21.42
1210	2.0	3.99	18.66	0.803	12.6	1.61	396	500	~~21.42~~
1215	2.5	3.94	18.65	0.806	9.8	1.61	400	500	21.42
1220	3.0	~~3.99~~	18.70	0.813	9.8	1.61	406	500	21.43
1225	3.5	3.99	18.72	0.813	12.1	~~0.813~~	407	500	21.43
1230	4.0	3.99	18.88	0.820	4.9	1.55	409	500	21.43
1230 → Sample Collection.									

COMMENTS: Sample Collection Time = 1230 hrs.

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	~~2~~ 3	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Clear, ~60F		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER:	Daniel Morris	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-25 DEPTH TO PRODUCT: _____ DATE: 11/10/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1102

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 28.53 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 29.72-28.53 = 1.19 x 0.163 = 0.2 x 3

Arrived at: 0950 PURGE VOLUME: 0.6 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1010	0	5.08	13.92	0.555	1.9	3.33	202	50 ( )	28.92
1020	0.125	4.91	14.24	0.556	0.5	2.96	204	50	28.93
1030	0.25	4.84	14.52	0.557	0.0	2.44	200	50	28.94
1040	0.375	4.77	15.00	0.557	0.1	2.39	200	50	29.03
1045	0.4375	4.71	15.31	0.558	0.0	2.31	201	50	29.08
1050	0.5	4.68	15.67	0.557	0.0	2.33	204	50	29.12
1055	0.5625	4.66	15.69	0.557	0.0	2.37	205	50	29.16
1100	0.625	4.64	15.73	0.558	0.0	2.43	206	50	29.16
COMMENTS:									

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
~~250~~500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
~~250~~500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	~~3~~ 2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Sunny + Cool, Temp 55°F		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER: Daniel Howard		OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-26 DEPTH TO PRODUCT:_____ DATE: 11/9/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1107

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER: 13.57 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 21.09 _____

Arrived at:_____ PURGE VOLUME: 7.52' x 0.163 x 3 = 3.68 gal WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1025		4.96	19.71	0.625	638	5.06	308	300 ( )	
1035	1.0	4.71	22.27	0.673	35.2	4.30	312	400	14.17
1045	2.25	4.82	22.24	0.685	9.5	2.78	314	400	14.38
1055	3.25	4.96	21.78	0.632	21.0	0.10	311	400	14.84
1100	3.75	4.97	21.74	0.647	5.4	0.04	311	400	14.82
1105	4.25	4.99	21.77	0.642	1.6	0.00	311	400	14.81
1107	Collected	Sample	MW-26						

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Cool Cloudy		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER:	Nicholas McMinn	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-101 DEPTH TO PRODUCT: N/A DATE: 11/8/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME:

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: DEPTH TO WATER: 18.21 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 27.70

Arrived at: PURGE VOLUME: 9.49 x 0.163 x 3 ≈ 4.64 WELL DIAMETER (inches):

Initial PID = 2-inch

Bailing PID =

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1403	0.25	4.42	22.34	0.313	113	1.05	304	500 ( )	
1411	0.75	4.20	23.58	0.304	53.1	1.01	315	500	19.03
1419	1.75	4.29	24.16	0.315	6.6	0.84	326	500	19.01
1427	2.75	4.35	24.38	0.312	0.9	0.84	330	500	19.02
1435	3.75	4.38	24.49	0.309	0.0	0.84	333	500	19.01
1443	4.75	4.40	24.78	0.307	0.2	0.86	330	500	19.01
1445	Collected Sample MW-101								

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Cool, Cloudy		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER:	Nicholas McMillan	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-102 DEPTH TO PRODUCT: N/A DATE: 11-8-16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1400

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 26.06 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 33.18

7.12 X .17 = 1.21 X 3 = 3.63

Arrived at: _____ PURGE VOLUME: 3.63 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1235	0.25	5.16	19.37	0.704	33.1	4.19	276.0	200 ( )	26.19
1240	0.5	5.12	20.01	0.714	22.2	3.58	277.0		26.19
1250	1.0	5.14	21.08	0.691	7.3	3.35	285.0		26.21
1300	1.5	5.19	21.89	0.668	3.4	2.98	288.0		26.22
1310	2.0	5.22	22.18	0.655	3.02	2.82	289.0		26.22
1320	2.5	5.27	22.42	0.625	0.90	2.78	285.0		26.23
1330	3.0	5.28	22.54	0.613	0.50	2.76	283.0		26.23
1340	3.5	5.31	22.65	0.601	0.40	2.74	281.0		26.23
1345	3.75	5.31	22.77	0.591	0.40	2.77	280.0		26.24
1350	4.0	5.32	22.81	0.593	0.30	2.75	279.0		26.24
1400	Collect	Sample							

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	3	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	WARM- HUMID- CLOUDY		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER:	EVER GUILLEN	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-104A DEPTH TO PRODUCT: NA DATE: 11/8/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1520

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: N/A DEPTH TO WATER: 16.00 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 39.43 N/A

Arrived at: 1300 PURGE VOLUME: 11.56 WELL DIAMETER (inches):

Initial PID = NM 2-inch

Bailing PID = NM

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1321		6.35	18.45	0.987	727	1.93	21	500 (103)	
1325	0.25	6.41	18.55	0.968	239	1.47	-5	500 (105)	16.11
1330	0.75	6.43	19.18	0.990	114	1.47	-25	500	16.15
1340	1.75	6.44	19.59	0.981	80.7	1.27	-46	500	16.19
1345	2.5	6.45	19.69	0.974	20.5	1.17	-46	500	16.20
1355	3.5	6.45	19.87	0.966	13.3	1.05	-50	500	16.20
1410	5.0	6.46	19.84	0.952	4.7	0.99	-54	500	16.23
1420	6.0	6.46	20.02	0.950	2.2	1.76	-56	500	16.23
1430	7.0	6.47	19.99	0.946	10.6	0.93	-57	500	16.23
1440	8.0	6.47	19.30	0.936	4.3	0.88	-58	500	16.24
1450	9.0	6.48	19.17	0.933	0.7	0.84	-59	500	16.24
1500	10.00	6.48	19.19	0.926	0.3	0.83	-59	500	16.24
1510	11.00	6.47	19.18	0.925	0.2	0.81	-59	500	16.24
1520	12.00	6.48	19.18	0.923	0.2	0.82	-60	500	16.24

COMMENTS: Sample Collection Time = 1520 hrs

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	82	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Clear, ~65F		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER:	Daniel Morris	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0164

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-104D DEPTH TO PRODUCT: N/A DATE: 9-Nov 2016

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1505

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: N/A DEPTH TO WATER: 19.67' DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 87.83' N/A

Arrived at: 0945 PURGE VOLUME: 31.37 gal WELL DIAMETER (inches):

Initial PID = NM 2-inch

Bailing PID = NM

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1000		6.24	17.37	2.87	7.4	3.38	69	200 ~~500~~ (104 ~~Full~~)	
1005	0.5	6.27	18.12	2.00	6.0	1.90	7	500 (128)	20.65
1015	2	6.19	18.67	2.53	47.3	1.67	6	500 (135)	25.45
1025	~~3.50~~	6.19	18.68	2.91	33.0	1.19	4	600 (185)	36.5
1035	5.50	6.21	19.29	2.92	15.1	1.09	3	600 (186)	46.75
1045	7.50	6.27	20.80	2.94	27.1	0.95	1	600	52.70
1055	9.50	6.24	20.00	2.95	42.5	6.52	-2	400	70.12
1105	--- PUMPED DRY --- ALLOW TO RECHARGE								
1215									56.35
1300									48.90
1340									42.72
1415									38.40
1500									34.31
				DTW					

increased rate
increased rate

COMMENTS: Collected Sample @ 1500 hrs
Collected DUP-1 for VOCs @ 1200 hrs

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	8 2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	Clear, 65F	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: Daniel Morris	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-105 DEPTH TO PRODUCT: — DATE: 11-8-16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1620

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 15.75 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 27.39 —

11.64 X .17 = 1.97 X 3 = 5.93

Arrived at: _____ PURGE VOLUME: 5.93 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1515	0.5	6.01	19.29	0.601	687	6.76	110	400 ( )	17.92
1520	1.0	6.02	19.37	~~0.600~~ 0.600	440	4.23	118	400	18.78
1525	1.5	6.07	19.88	0.602	113	2.55	127	400	19.13
1530	2.0	6.06	20.22	0.601	98.9	2.21	134	400	19.48
1535	2.5	6.06	21.15	0.599	88.5	2.42	131	400	19.48
1540	3.0	6.06	21.48	0.600	57.7	2.65	133	400	19.78
1545	3.5	6.05	21.17	0.599	42.6	2.38	132	400	20.32
1550	4.0	6.06	21.83	0.601	36.1	2.36	108	400	20.71
1555	4.5	6.09	20.12	0.596	27.6	2.08	112	400	21.37
1600	5.0	6.07	20.16	0.596	23.9	2.18	119	400	21.72
1605	5.5	6.06	20.20	0.596	24.6	2.09	118	400	21.82
1610	6.0	6.06	20.26	0.595	21.8	2.13	119	400	21.96
1620	Collect Sample								

COMMENTS: TURBIDITY HIGH – SAMPLED AFTER 3 WELL VOLUMES – TURBIDITY @ SAMPLING = 9.3 NTU

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
~~40 mL GL~~	~~3~~	~~HCL~~	~~8260~~	~~Site-Specific VOCs~~

GENERAL INFORMATION		
WEATHER:	WARM - HUMID - CLOUDY	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: EVER GUILLEN	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-106D DEPTH TO PRODUCT: _____ DATE: 11-9-16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1615

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: [redacted] 27.16 DEPTH TO PASSIVE DIFFUSION BAG (btoc) _____

TOTAL DEPTH: 72.98

45.82 x .17 = 7.78 x 3 = 23.36

Arrived at: _____ PURGE VOLUME: 23.36 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1412	0.5	6.29	21.04	1.07	1.8	5.07	224	500 ( )	27.98
1426	2.0	6.12	20.49	1.13	0.0	1.71	156	500	31.62
1441	5.0	6.15	20.84	1.09	0.0	1.52	172	800	40.01
1456	8.0	6.15	21.51	1.07	0.0	0.96	170	800	47.93
1511	11.0	6.13	21.20	1.08	0.0	1.26	168	800	52.87
1526	14.0	6.15	20.67	1.08	0.0	1.28	167	800	54.79
1541	17.0	6.16	20.71	1.07	0.0	1.86	162	800	56.96
1556	20.0	6.18	21.01	1.07	0.0	1.91	163	800	58.21
1611	23.0	6.17	20.96	1.08	0.0	1.72	160	800	59.79
1615	Collect	Sample							

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	3	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	WARM - HUMID - Clear	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: EVER GUILLEN	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-107D DEPTH TO PRODUCT: — DATE: 11-9-16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1235

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 23.35 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 49.96 —

26.61 X .17 = 4.52 X 3 = 13.57

Arrived at: _____ PURGE VOLUME: 13.57 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1015	0.5	5.60	18.65	0.498	513	4.97	210.0	400 ( )	25.58
1025	1.0	5.71	19.41	0.469	336	4.34	170.0	200	25.65
1045	2.0	5.80	20.19	0.465	45.9	4.78	155.0	200	25.65
1105	4.0	5.78	20.49	0.465	27.7	4.28	163.0	400	25.98
1125	6.0	5.87	20.40	0.466	19.3	4.68	168.0	400	26.37
1135	8.0	5.82	20.47	0.465	15.2	4.59	171.0	400	26.74
1155	10.0	5.79	20.42	0.465	8.1	4.37	178.0	400	26.85
1215	12.0	5.78	20.39	0.465	6.3	4.30	179.0	400	27.06
1225	13.0	5.79	20.37	0.465	5.5	4.23	180.0	400	27.39
1230	13.5	5.78	20.30	0.465	4.1	4.34	180.0	400	27.44
1235	collect	Sample							

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	12	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	WARM-HUMID-CLEAR	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: EVER GUILLEN		OBSERVER:

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-108 DEPTH TO PRODUCT: N/A DATE: 10-Nov 2016

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1320

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: N/A DEPTH TO WATER: 22.93 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 36.30 N/A

Arrived at: 1140 PURGE VOLUME: 6.5 WELL DIAMETER (inches):

Initial PID = NM 2-inch

Bailing PID = NM

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1200		4.45	16.78	0.764	800	2.57	386	200 (10%)	
1210	1.25	4.46	17.72	0.751	270	1.33	369	200 (10%)	23.06
1220	1.75	4.62	19.69	0.765	103	1.17	342	200	23.05
1230	2.25	4.66	19.58	0.760	61.1	1.04	331	200	23.05
1240	3.25	4.67	19.51	0.756	21.7	0.93	326	200	23.04
1250	4.25	4.72	19.62	0.755	19.7	0.90	320	200	23.04
1300	5.25	4.78	19.64	0.757	7.6	1.44	315	200	23.05
1310	6.25	4.80	19.69	0.757	6.4	1.02	312	200	23.10
1320	7.25	4.82	19.71	0.757	5.8	0.99	311	200	23.16

COMMENTS: Collected Sample @ 1320

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	12	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	Clear, ~65F	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: Daniel Morris		OBSERVER:

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-109 DEPTH TO PRODUCT: _____ DATE: 11/10/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1540

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: DUP-2 DEPTH TO WATER: 17.75 DEPTH TO PASSIVE DIFFUSION BAG (btoc) _____

TOTAL DEPTH: 33.53

Arrived at: _____ PURGE VOLUME: 15.78 x 0.163 x 3 = 7.72 gal WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1444		5.01	23.17	2.29	41.2	1.71	160	600 ( )	
1454	1.5	4.65	22.45	2.36	0.0	3.37	169	600	17.95
1504	3.0	4.65	22.95	2.38	0.0	2.60	175	600	17.98
1514	4.5	4.65	23.04	2.38	0.0	1.99	177	600	18.01
1524	6.0	4.66	23.04	2.38	0.0	1.57	177	600	18.01
1534	7.5	4.65	23.07	2.38	0.0	1.48	177	600	18.02
1538	7.9	4.64	23.08	2.38	0.0	1.44	177	600	18.02
1540	Collecting Sample MW-109 / DUP-								

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	12	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:		
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: Nick McMillan	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-110 DEPTH TO PRODUCT: - DATE: 11/9/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1141

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 29.49 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 78.95 _____

Arrived at: _____ PURGE VOLUME: 49.46 x 0.163 x 3 = 24.19 gal WELL DIAMETER (Inches):

Initial PID = _____ 2-inch

Balling PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 0934		4.59	19.73	0.765	3.1	1.44	288	700 ( )	
0944	2.0	4.74	20.68	0.764	0.0	0.60	209	200	34.28
0954	3.5	4.78	21.44	0.763	0.0	0.36	255	700	36.69
1004	5.5	4.80	21.51	0.763	0.0	0.19	239	700	36.32
1014	7.5	4.83	21.65	0.762	0.0	0.11	224	700	36.16
1024	10.0	4.87	21.66	0.762	0.0	0.06	212	700	36.12
1034	11.5	4.91	21.79	0.761	0.0	0.03	200	700	36.16
1044	14.0	4.94	21.87	0.761	0.0	0.00	191	600	36.02
1054	15.0	4.97	21.89	0.761	0.0	0.00	184	700	36.23
1104	16.75	5.02	21.93	0.761	0.0	0.00	177	600	36.18
1114	18.5	5.10	21.82	0.756	3.4	0.00	171	800	37.65
1124	21.0	5.09	21.92	0.757	7.1	0.00	168	800	37.67
1134	23.0	5.04	21.91	0.757	7.8	0.00	169	700	37.59
1139	24.2	5.02	21.96	0.757	8.0	0.00	169	700	37.56
1141	Collected Sample MW-110								
COMMENTS:									

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	12	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Cool Hazy		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER:	Nicholas McMillan	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-111 DEPTH TO PRODUCT: _____ DATE: 11/10/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1400

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: ~~24.40~~ 22.08 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 46.45 _____

Arrived at: _____ PURGE VOLUME: 24.37 x 0.163 x 3 = 11.92 gal WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1253		5.27	21.72	0.995	41.6	1.58	129	700 ( )	
1303	1.5	5.46	21.47	0.654	84.0	3.54	96	700	24.38
1313	3.0	5.54	21.90	1.00	13.9	3.61	89	700	24.64
1323	5.0	5.58	22.07	1.01	0.0	3.14	84	700	24.64
1333	6.5	5.60	22.18	1.01	1.6	2.55	83	700	24.68
1343	9.0	5.60	22.23	1.01	0.0	2.13	82	700	24.69
1353	11.0	5.61	22.19	1.01	0.0	1.81	83	700	24.69
1358	12.0	5.61	22.21	1.01	0.0	1.78	83	700	24.69
1400	Collect	Sample	four	MW-111					
COMMENTS:									

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	~~2~~ 3	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Warm, Hazy		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER:	Nicholas McMillan	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-112 DEPTH TO PRODUCT: _____ DATE: 11/9/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1328

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 18.36 DEPTH TO PASSIVE DIFFUSION BAG (btoc) _____

TOTAL DEPTH: 25.32

Arrived at: _____ PURGE VOLUME: 6.96 x 0.163 x 3 = 3.40 gal WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1251		5.71	23.33	0.572	57.5	1.96	235	400 ( )	18.50
1256	0.5	5.76	23.84	0.545	23.0	1.22	218	400	18.56
1301	1.0	5.78	24.06	0.539	22.8	1.09	215	400	18.61
1306	1.5	5.80	24.42	0.534	10.9	0.94	208	400	18.61
1311	2.0	5.84	24.87	0.532	6.4	0.91	198	400	18.61
1316	2.5	5.91	25.06	0.532	5.5	0.75	193	400	18.61
1321	3.0	5.94	25.21	0.530	4.3	0.62	189	400	18.61
1326	3.5	5.98	25.31	0.529	2.4	0.52	184	400	18.61
1328	Collected Sample MW-112								

COMMENTS: Missing lock

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	12	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	Cool, Cloudy, Breezy	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER:	Nicholas McMillan	OBSERVER:

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-113 DEPTH TO PRODUCT: N/A DATE: 10-Nov 2016

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1015

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: N/A DEPTH TO WATER: 38.80' DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 44.07 N/A

Arrived at: 0900 PURGE VOLUME: 6.5 gal WELL DIAMETER (inches):

Initial PID = NM 2-inch

Bailing PID = NM

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO mg/L	ORP mV	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 0925		~~18.57~~	18.35	2.71	90.0	2.55	321	~~700~~ (125)	
0935	1.75	3.40	19.73	2.68	252.6	1.69	353	~~500~~	31.01
0945	3.25	3.54	19.86	2.65	51.5	2.78	373	~~500~~	31.03
0955	4.5	3.57	20.09	2.64	9.8	1.35	381	~~500~~	31.05
1005	~~5.75~~	3.55	20.16	2.66	2.6	1.19	388	~~500~~	31.05
1015	~~6.75~~	3.59	20.65	2.64	0.7	1.10	387	700	31.06

COMMENTS: Collected sample @ 1015

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	12	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Clear, ~50F		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER:	Daniel Morris	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-114 DEPTH TO PRODUCT: N/A DATE: 10-Nov 16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1605

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 27.05' DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 46.17' N/A

Arrived at: 1350 PURGE VOLUME: 9.3 gal WELL DIAMETER (inches):

Initial PID = NM 2-inch

Bailing PID = NM

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1405		3.82	17.76	1.17	753	2.58	348	250 (114)	
1415	0.75	3.77	18.03	1.18	800+	1.65	358	250	27.15
1425	1.5	3.81	19.27	1.19	248	1.24	351	250	27.17
1435	2.5	3.82	19.49	1.20	47.1	1.23	355	250	27.19
1445	3.25	3.83	19.72	1.21	20.3	0.93	360	250	27.19
1455	4.00	3.83	19.89	1.22	12.4	0.85	365	250	27.19
1505	4.75	3.83	19.63	1.22	5.4	0.84	370	250	27.19
1515	5.50	3.82	19.75	1.23	4.3	0.72	373	250	27.20
1525	6.25	3.83	19.76	1.23	3.4	0.70	373	250	27.20
1535	7.00	3.83	19.75	1.23	4.4	0.71	373	250	27.20
1545	7.75	3.83	19.76	1.23	3.6	0.71	373	250	27.20
1555	8.5	3.83	19.76	1.23	3.3	0.71	373	250	27.20
1605	9.35	3.83	19.76	1.23	3.5	0.71	373	250	27.20
				DM				250	

COMMENTS: Collected Sample @ 1605 hrs

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	12	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	Clear, ~70F	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: Daniel Mortis	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-115 DEPTH TO PRODUCT: — DATE: 11-10-16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1020

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 16.58 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 22.21 —

5.63 x .17 = 0.95 x 3 = 2.87

Arrived at: _____ PURGE VOLUME: 2.87 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 920	0.25	3.69	16.83	1.28	3.6	1.47	408	200 ( )	16.03
925	0.5	3.69	17.28	1.27	2.2	1.16	415		16.03
930	0.75	3.69	17.49	1.27	1.4	1.05	419		16.03
935	1.0	3.68	17.97	1.27	0.0	0.90	422		16.03
940	1.25	3.69	18.03	1.27	0.0	0.83	425		16.03
945	1.5	3.69	18.14	1.27	0.0	0.79	427		16.03
950	1.75	3.69	18.22	1.26	0.0	0.75	428		16.03
955	2.0	3.69	18.34	1.26	0.0	0.70	429		16.03
1000	2.25	3.69	18.43	1.26	0.0	0.66	429		16.03
1005	2.50	3.69	18.45	1.26	0.0	0.64	430		16.03
1010	2.75	3.69	18.52	1.26	0.0	0.62	430		16.03
1015	3.0	3.69	18.54	1.26	0.0	0.60	431		16.03
1020	Collect Sample								

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	3	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	Cool - Humid - Clear	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: EVER GUILLEN	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-116 DEPTH TO PRODUCT: _____ DATE: 11-10-16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1540

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: ~~30.16~~ 30.35 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 33.55 —

3.39 x 0.17 = 0.57 x 3 = 1.72

Arrived at: _____ PURGE VOLUME: 1.72 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1505	0.25	4.04	19.82	1.81	127	0.93	355	200 ( )	32.29
1510	0.5	4.04	20.22	1.80	15.3	1.65	363	200	32.29
1515	0.75	4.02	20.34	1.81	7.0	1.14	366	200	32.29
1520	1.0	4.02	20.70	1.80	7.8	0.99	364	200	32.29
1525	1.25	4.03	20.99	1.80	5.9	1.00	362	200	32.29
1530	1.50	4.04	21.39	1.80	4.7	1.18	357	200	32.29
1535	1.75	4.04	21.55	1.79	4.1	1.16	356	200	32.29
1540	Collect	Sample							

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	~~3~~ 4	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	WARM - HUMID - CLEAR	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: EVER GUILLEN	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-119 DEPTH TO PRODUCT: — DATE: 11-10-16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1220

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 14.42 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 25.16 —

10.74 x .17 = 1.82 x 3 = 5.47

Arrived at: _____ PURGE VOLUME: 5.47 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1125	0.5	4.12	17.90	0.407	>1000	1.71	436	400 ( )	14.63
1130	1.0	4.08	18.22	0.403	>1000	1.55	413		14.63
1135	1.5	4.12	18.69	0.402	>1000	1.56	411		14.63
1140	2.0	4.16	18.81	0.404	720	1.48	408		14.64
1145	2.5	4.16	18.89	0.400	698	1.83	405		14.65
1150	3.0	4.11	18.96	0.402	646	1.56	411		14.65
1155	3.5	4.10	18.94	0.400	142	1.51	413		14.65
1200	4.0	4.10	18.97	0.400	72.1	1.52	416		14.65
1205	4.5	4.11	18.96	0.400	129.0	1.49	417		14.65
1210	5.0	4.10	18.90	0.401	87.2	1.39	423		14.65
1215	5.5	4.10	18.83	0.401	84.3	1.38	421		14.65
1220	Collect	Sample							

COMMENTS: TURBIDITY SPIKE @ END OF 3 WELL VOLUMES
FINAL TURBIDITY = 67.6

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
~~40 mL GL~~	~~3~~	~~HCL~~	~~8260~~	~~Site-Specific VOCs~~
40ml Vial	2	HCl	8260	Site Specific VOCs

GENERAL INFORMATION		
WEATHER:	Cool - Humid - Clear	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: EVER GUILLEN	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-119 DEPTH TO PRODUCT: — DATE: 11-11-16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1205

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 42.78 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 54.70 —

12.42 X 0.17 = 2.11 X 3 = 6.33

Arrived at: _____ PURGE VOLUME: 6.33 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1000	0.5 [redacted]	6.69	18.22	1.77	478	2.47	73	200 ( )	42.86
1010	1.0	6.79	17.90	1.70	162	2.36	50		42.86
1020	1.5	6.82	18.66	1.69	103	2.27	61		42.86
1030	2.0	6.84	20.57	1.69	76.9	1.24	43		42.86
1040	2.5	6.85	20.72	1.68	46.4	1.02	36		42.86
1050	3.0	6.87	20.88	1.69	13.7	0.91	30		42.86
1110	4.0	6.89	21.08	1.69	6.5	0.84	25		42.86
1130	5.0	6.92	21.20	1.68	0.0	0.75	20		42.86
1150	6.0	6.91	21.16	1.69	0.0	0.66	19		42.86
1155	6.25	6.91	21.15	1.69	0.0	0.65	19		42.86
1200	6.5	6.91	21.10	1.69	0.0	0.65	19		42.86
1205	Collect Sample								

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	COLD - Clear - DRY - WINDY	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: EVER GUILLEN	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-120 DEPTH TO PRODUCT: — DATE: 11-11-16

PURGE METHOD: Low Flow/Low Stress :Pump TIME:

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: DEPTH TO WATER: 45.30 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 65.75 —

20.45 X .17 = 3.47 X 3 = 10.42

Arrived at: PURGE VOLUME: 10.42 WELL DIAMETER (inches):

Initial PID = 2-inch

Bailing PID =

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1320	0.5	6.89	22.36	1.68	34.1	1.75	103	400 ( )	48.03
1325	1.0	6.94	21.51	1.69	43.7	1.17	98		48.13
1335	2.0	6.85	21.95	1.69	58.9	0.98	115		48.27
1345	3.0	6.80	22.31	1.76	14.8	0.55	113		48.39
1355	4.0	6.79	22.23	1.78	26.3	0.94	114		48.39
1415	5.0	6.82	22.19	1.75	9.4	1.91	114		48.39
1425	6.0	6.80	22.23	1.75	7.3	2.47	115		48.39
1435	7.0	6.79	22.39	1.77	6.8	2.41	116		48.39
1445	8.0	6.79	22.79	1.78	6.0	2.06	115		48.39
1455	9.0	6.79	22.93	1.78	4.5	1.36	112		48.39
1505	10.0	6.79	22.89	1.78	3.3	1.10	113		48.39
1510	10.5	6.79	22.94	1.78	3.6	1.12	113		48.39
1515	collect	Sample							

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	12	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	WARM - DRY - Clear - WINDY	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: EVER GUILLEN	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: MW-121 DEPTH TO PRODUCT:_____ DATE: 11/11/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME:_____

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER: 17.90 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 35.60 _____

Arrived at:_____ PURGE VOLUME: 17.7 x 0.163 x 3 = 8.66gal WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1107		5.31	20.60	0.925	0.6	2.66	235	400 ( )	
1117	1	5.57	22.83	0.766	0.0	1.59	211	400	20.34
1127	2.0	5.73	23.37	0.761	0.0	1.29	198	300	20.98
1137	2.75	5.94	23.59	0.624	0.0	1.22	179	400	21.65
1147	3.75	5.96	23.74	0.577	0.0	1.12	169	400	23.89
1157	4.75	5.95	23.36	0.589	0.0	0.98	172	400	25.58
1207	5.5	5.95	23.56	0.597	0.0	0.91	163	400	27.73
1217	6.25	5.89	23.63	0.583	0.0	0.87	165	400	30.14
1337	7.0	5.68	26.06	0.839	4.8	2.91	182	300	24.71
1347	7.75	5.68	25.18	0.833	0.0	5.33	180	300	25.63
1359	8.7	5.72	26.23	0.827	0.0	3.34	172	300	26.64
1401	Collect	Sample	MW-121						

COMMENTS: Dry at 1219. stopped pump to allow recharge
Resumed pumping at 1330

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:		
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: Nick McMillan		OBSERVER:

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: TW-1 DEPTH TO PRODUCT: _____ DATE: 11/9/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1142

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 16.51 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 25.04 ~~24.79~~ 16,51 = 8,53 x 0.04 = 0,34 X 3

Arrived at: 1020 PURGE VOLUME: 1.0 WELL DIAMETER (Inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1050	0	5.91	17.67	0.367	187	2.75	240	100 ( )	17.97
1100	0.25	6.01	18.01	0.361	108	2.00	212	100	18.35
1105	0.375	5.95	18.08	0.361	78.6	1.64	197	100	18.46
1110	0.5	5.94	18.14	0.360	56.5	1.42	184	100	18.55
1115	0.625	5.96	18.21	0.361	46.7	1.27	170	100	18.63
1120	0.75	5.97	18.28	0.361	33.4	1.19	160	100	18.69
1125	0.875	5.98	18.29	0.361	29.6	1.16	156	100	18.73
1130	1.0	5.99	18.33	0.361	27.5	1.10	148	100	18.77
1135	1.125	5.99	18.38	0.361	24.3	1.06	142	100	18.81
1140	1.25	6.00	18.37	0.361	21.4	1.06	138	100	18.82
COMMENTS:									

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Partly Sunny, Temp 65°F		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER: Daniel Howard		OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: TW-2 DEPTH TO PRODUCT: _____ DATE: 11/9/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1412

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 23.35 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 29.00-23.35 = 5.65 x 0.04 = 0.23

Arrived at: 1325 PURGE VOLUME: 0.7 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: ~~1340~~ 1340	0	5.82	21.72	0.351	5.4	1.99	165	100 ( )	24.07
1350	0.25	5.71	21.22	0.349	4.2	1.38	171	100	24.39
1355	0.375	5.66	21.04	0.345	3.7	1.26	173	100	24.55
1400	0.5	5.63	20.90	0.342	3.4	1.17	175	100	24.69
1405	0.625	5.63	20.83	0.342	3.7	1.10	178	100	24.77
1410	0.75	5.63	20.79	0.342	2.8	1.06	179	100	24.78

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 ~~500~~ mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
250 ~~500~~ mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Partly Sunny		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER: Daniel Howard		OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: TW-3 DEPTH TO PRODUCT: NA DATE: 11/10/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1332

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 27.12 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

1240 TOTAL DEPTH: 35.81 - 27.12 = 8.69 X 0.04 = 0.35 X3

Arrived at: ~~1340~~ PURGE VOLUME: 1.1 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME 1255	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: ~~1305~~	0	3.90	17.65	1.29	40.1	2.89	354	150 ( )	27.74
1305 ~~12~~	0.4	3.86	17.80	1.17	12.9	1.83	341	150	27.75
1310	0.6	3.85	17.87	1.11	8.2	1.60	343	150	27.74
1315	0.8	3.86	17.90	1.12	6.5	1.48	338	150	27.72
1320	1.0	3.86	17.94	1.10	5.4	1.45	260	150	27.72
1325	1.2	3.86	17.96	1.07	3.1	1.36	277	150	27.70
1330	1.4	3.87	18.01	1.05	1.4	1.30	288	150	27.70

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
~~250~~ ~~500~~ mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
~~250~~ ~~500~~ mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	Clear, Temp 65°F	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: Daniel Howard		OBSERVER:

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: TW-4 DEPTH TO PRODUCT: _____ DATE: 11/9/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1552

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 27.28 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 33.45 - 27.28 = 6.17 X 0.04 = 0.25 X 3

Arrived at: 1455 PURGE VOLUME: 0.75 WELL DIAMETER (Inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1515	0	4.75	19.54	0.328	13.4	2.73	228	100 ( )	28.05
1525	0.25	4.38	18.98	0.331	12.7	1.97	267	100	28.36
1530	0.375	4.34	18.81	0.332	10.7	1.87	279	100	~~28.~~ 28.44
1535	0.5	4.31	18.81	0.332	9.1	1.79	287	100	28.49
1540	0.625	4.31	18.78	0.332	9.2	1.74	294	100	28.50
1545	0.75	4.30	18.77	0.332	8.2	1.66	299	100	28.50
1550	0.875	4.30	18.79	0.332	8.0	1.63	303	100	28.50

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 ~~500~~ mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
250 ~~500~~ mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	Partly Sunny, Temp 68°F, slight breeze	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: Daniel Howard	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: TW-5 DEPTH TO PRODUCT: NA DATE: 11/10/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1512

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 22.00 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 32.09-22.00 = 10.09 x 0.04 = 0.4 x 3

Arrived at: 1425 PURGE VOLUME: 1.2 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1440	0	4.04	19.12	1.30	75.9	2.10	382	150 ( )	22.75
1450	0.4	4.04	18.83	1.27	29.6	1.42	347	150	22.80
1455	0.6	4.04	18.79	1.27	14.4	1.34	344	150	22.82
~~0417~~ 1500	0.8	4.03	18.74	1.26	9.7	1.26	343	150	22.80
1505	1.0	4.02	18.70	1.28	6.3	1.21	342	150	22.80
1510	1.2	4.02	18.67	1.26	2.5	1.16	342	150	22.80

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
~~250~~500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
~~250~~500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	Clear, Temp 70°F	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: Daniel Howard	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: TW-6 DEPTH TO PRODUCT: _____ DATE: 11/11/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1122

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 26.33 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 40.0-26.33=13.67*0.041=0.55x3

Arrived at: 1000 PURGE VOLUME: 1.7 WELL DIAMETER (Inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1025	0	4.37	14.99	0.995	56.4	3.58	269	125 ( )	26.76
1035	0.3	4.39	16.15	0.970	15.0	3.36	280	125	26.77
1045	0.6	4.44	16.52	0.962	7.9	2.01	290	125	26.75
1055	0.9	4.46	16.87	0.958	0.0	1.57	308	125	26.73
1600	1.05	4.47	16.90	0.957	0.3	1.54	309	125	26.73
1105	1.2	4.47	16.98	0.956	0.0	1.47	313	125	26.73
1110	1.35	4.47	16.65	0.964	0.0	1.47	317	125	26.73
1115	1.5	4.47	16.74	0.962	0.2	1.38	322	125	26.73
1121	1.7	4.48	16.92	0.960	0.0	1.34	328	125	26.73

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	28	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	Clear & Cool	Temp 55°F
SHIPPED VIA:	FedEx or (lab courier)	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: Daniel Howard	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: TW-7 DEPTH TO PRODUCT: _____ DATE: 11/11/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1338

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 21.89 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 32.38 - 21.89 = 10.49 x 0.04 = 0.42 x 3

Arrived at: 1205 PURGE VOLUME: 1.3 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1230	0	3.88	18.79	4.50	5.0	3.10	372	75 ( )	25.40
1240	0.2	3.86	19.10	4.35	19.4	1.71	334	75	27.31
1250	0.4	3.85	19.19	4.45	16.0	1.32	313	75	28.46
1300	0.6	3.92	19.26	4.41	14.5	1.34	300	75	28.85
1310	0.8	4.05	19.61	4.46	11.5	0.96	251	75	29.43
1315	0.9	4.06	19.77	4.46	11.7	0.94	248	75	29.55
1320	1.0	4.06	19.83	4.49	10.7	0.88	241	75	29.63
1325	1.1	4.08	19.92	4.54	10.5	0.84	230	75	29.76
1330	1.2	4.09	20.04	4.54	9.8	0.80	226	75	29.89
1335	1.3	4.09	20.13	4.52	10.0	0.81	225	75	29.97

COMMENTS: Solvent + Pesticide odor

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
~~250~~ 500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
~~250~~ 500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2 ~~3~~	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Clear, Temp 65°F		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER: Daniel Howard		OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: TW-8 DEPTH TO PRODUCT: N.A DATE: 11/14/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1012

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 20.85 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 29.24 - 20.85 = 8.39 x 0.04 = 0.34 x 3

Arrived at: 0855 PURGE VOLUME: 1.02 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 0925	0	5.72	15.34	1.55	45.4	2.35	238	150 ( )	21.55
0935	0.3	5.84	15.66	1.47	0.0	1.93	175	150	21.58
0940	0.45	5.88	15.71	1.47	0.0	1.75	153	150	21.58
0945	0.6	5.92	15.84	1.46	0.0	1.57	135	150	21.61
0950	0.75	5.94	15.86	1.46	0.0	1.43	124	150	21.62
0955	0.9	5.96	16.01	1.45	0.0	1.33	111	150	21.62
1000	1.05	5.98	15.92	1.45	0.0	1.26	100	150	21.63
1005	1.2	5.99	16.02	1.45	0.0	1.22	96	150	21.63
1010	1.35	5.99	16.02	1.45	0.0	1.20	91	150	21.63
COMMENTS:									

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
~~250~~ ~~500~~ mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
~~250~~ ~~500~~ mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	~~2~~ 3	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Clear & Cold, 45°F		
SHIPPED VIA:	FedEX (lab courier)		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER:	Daniel Howard	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: TW-9 DEPTH TO PRODUCT: NA DATE: 11/14/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1207

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: ~~19.34~~ 22.20 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: ~~30.18 - 19.34 = 10.84 x 0.04 = 0.43 x 3~~ 35.15 - 22.20 = 12.95 x 0.04 = 0.52 x 3

Arrived at: 1050 PURGE VOLUME: ~~4.3~~ 1.56 WELL DIAMETER (inches): 2-inch

Initial PID = _____

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1110	0	5.49	17.07	0.610	63.5	2.93	56	100 ( )	22.82
1120	0.25	5.42	17.38	0.586	65.3	1.62	83	100	22.85
1130	0.5	5.49	17.61	0.572	6.8	1.32	98	100	22.85
1135	0.625	5.51	17.74	0.570	1.6	1.26	102	100	22.84
1140	0.75	5.54	17.79	0.570	0.0	1.20	107	100	22.83
1145	0.875	5.56	17.89	0.571	0.0	1.13	111	100	22.83
1150	1.0	5.57	17.97	0.572	0.0	1.11	114	100	22.82
1155	1.125	5.59	18.09	0.573	0.0	1.08	118	100	22.82
1200	1.25	5.60	18.16	0.573	0.0	1.04	121	100	22.82
1205	1.375	5.60	18.27	0.573	0.0	1.02	124	100	22.82

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250~~500~~ mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
250~~500~~ mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Clear + Cool, Temp 55°F		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER: Daniel Howard		OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: TW-10 DEPTH TO PRODUCT: _____ DATE: 11/14/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1357

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 19.34 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 30.18 - 19.34 = 10.84 x 0.04 = 0.43 x 3

Arrived at: 1244 PURGE VOLUME: 1.3 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1310	0	3.80	19.09	1.06	78.0	2.75	305	150( )	19.62
1320	3	3.77	18.61	~~4.87~~ 1.07	66.9	1.83	273	150	19.62
1325	0.45	3.76	18.56	1.07	61.8	1.81	271	150	19.62
1330	0.6	3.76	18.56	1.07	59.7	1.82	270	150	19.62
1335	0.75	3.77	18.28	1.13	0.0	2.44	184	150	19.62
1340	0.9	3.76	18.27	1.12	0.0	2.05	194	150	19.62
1345	1.05	3.76	18.25	1.12	0.0	1.87	203	150	19.62
1350	1.25	3.77	18.26	1.12	0.0	1.82	211	150	19.62
1355	1.375	3.77	18.23	1.12	0.0	1.84	213	150	19.62
COMMENTS:									

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
~~250~~ 500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
~~250~~ 500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	Clear, Temp 64°F	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: Daniel Howard	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: TW-11 DEPTH TO PRODUCT: _____ DATE: 11/8/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1318

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 31.12 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 44.69 - 31.12 = 13.57 x 0.04 = 0.54 x 3

Arrived at: 1125 PURGE VOLUME: 1.6 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO mg/L	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1210	0	4.62	17.99	0.624	168	6.35	231	100 ( )	31.97
1220	0.25	4.42	17.73	0.629	25.8	4.91	246	100	32.02
1230	0.5	4.28	17.67	0.631	10.9	4.76	258	100	32.03
1240	0.75	4.29	17.65	0.632	3.1	4.50	270	100	32.03
1250	1.0	4.25	17.63	0.629	0.1	4.35	286	100	32.03
1255	1.125	4.25	17.64	0.626	0.0	4.28	293	100	32.03
1300	1.25	4.25	17.66	0.622	0.0	4.24	300	100	32.03
1305	1.375	4.26	17.64	0.621	0.3	4.22	305	100	32.03
1310	1.5	4.29	17.64	0.616	0.0	4.17	310	100	32.03
1315	1.625	4.31	17.63	0.613	0.0	4.15	312	100	32.03

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
~~40 mL GL~~	~~2~~	~~HCL~~	~~8260~~	~~Site-Specific VOCs~~ OL 1-4

GENERAL INFORMATION			
WEATHER:	Overcast, Temp 68°F		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER: Daniel Howard		OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: TW-12 DEPTH TO PRODUCT: _____ DATE: 11/8/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1548

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 35.00 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 44.90-35.00= 9.9x.04 = 0.4x3

Arrived at: 1430 PURGE VOLUME: 1.2 WELL DIAMETER (Inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: ~~1455~~	0	5.26	19.51	0.234	56.4	5.35	274	100 ( )	35.45
1505	0.25	5.00	19.25	0.212	22.7	4.58	274	100	35.71
1515	0.5	5.03	19.32	0.211	11.3	4.55	276	100	35.86
1520	0.625	5.07	19.20	0.214	8.8	4.68	270	100	35.95
1525	0.75	5.11	18.86	0.218	10.8	4.75	266	100	35.99
1530	0.875	5.15	18.89	0.219	9.8	4.73	263	100	36.08
1535	1.0	5.15	18.90	0.219	8.0	4.74	263	100	36.08
1540	1.125	5.18	18.88	0.220	6.6	4.72	263	100	36.11
1545	1.25	5.22	18.87	0.222	5.7	4.70	261	100	36.15

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
~~40 mL GL~~	~~3~~	~~HCL~~	~~8260~~	~~Site-Specific VOCs 0 L H~~

GENERAL INFORMATION		
WEATHER:	Partly Sunny, Temp 70°F	
SHIPPED VIA:	FedEx or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: Daniel Howard	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: OW-1 DEPTH TO PRODUCT: _____ DATE: 11/11/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: _____

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 21.97 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 42.21 _____

Arrived at: _____ PURGE VOLUME: 9.90 gal WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1504		5.46	22.16	1.68	<800	2.08	162	500 ( )	
1514	1.5	5.46	22.52	1.50	89.0	0.8	115	600	22.43
1524	3.0	5.69	22.60	1.32	19.7	0.66	84	600	22.44
1534	4.5	5.72	22.75	1.29	0.0	0.50	62	600	22.44
1544	6.25	5.89	22.62	1.26	0.0	0.42	45	600	22.48
1554	8.0	5.70	22.64	1.23	0.0	0.30	49	600	22.51
1604	9.5	5.71	22.69	1.25	0.0	0.24	45	600	22.51
1608	10.0	5.73	22.79	1.26	0.0	0.18	44	600	22.51
1610	Collect Sample OW-1								

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	12	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:		
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER: Nick McMillan		OBSERVER:

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: OW-2 DEPTH TO PRODUCT: _____ DATE: 11/14/16

PURGE METHOD: Low Flow/Low Stress :Pump TIME: _____

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: 22.45 DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: 42.54 _____

Arrived at: _____ PURGE VOLUME: 9.82 WELL DIAMETER (inches):

Initial PID = _____ 2-inch

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 0922		5.20	19.50	1.11	411	2.80	86	500 ( )	
0932	1.25	5.69	20.42	1.16	0.0	1.38	47	500	22.71
0942	2.5	5.87	21.21	1.16	671	0.96	28	500	22.72
0952	3.5	5.94	21.67	1.20	167	0.61	16	500	22.72
1002	4.75	5.99	21.96	1.20	55.7	0.60	8	500	22.72
1012	5.75	5.94	22.22	1.22	23.9	0.30	7	500	22.73
1022	6.5	5.97	22.15	1.23	10.4	0.17	6	500	22.73
1032	7.5	6.00	22.02	1.25	0.0	0.07	0	500	22.73
1042	8.5	6.02	22.27	1.27	0.0	0.06	-5	500	22.73
1052	9.5	6.03	22.47	1.27	0.0	0.02	-5	500	22.73
1055	10.0	6.05	22.52	1.28	0.0	0.00	-5	500	22.74
1056	Collect Sample OW-2								

COMMENTS: 0932: Horiba read 0.0 NTU but water is visibly turbid

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	2	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION		
WEATHER:	Cold. Hazy	
SHIPPED VIA:	FedEX or lab courier	
SHIPPED TO:	AES -Atlanta, GA	
SAMPLER:	Nicholas McMillan	OBSERVER:

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

GROUNDWATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: OW-3 DEPTH TO PRODUCT: N/A DATE: 14-Nov

PURGE METHOD: Low Flow/Low Stress :Pump TIME: 1155

SAMPLE METHOD: Pump per SESDPROC 301-R3 GRAB (x) COMPOSITE ( )

DUP./REP. OF: N/A DEPTH TO WATER: 22.81'

TOTAL DEPTH: 43.71'

DEPTH TO PASSIVE DIFFUSION BAG (btoc) N/A

Arrived at: 0940 PURGE VOLUME: 10.40'

Initial PID = NM

Bailing PID = NM

WELL DIAMETER (inches): 2-inch

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 0945		4.88	17.39	1.02	214	2.08	298	500 (110)	
0955	1.0	4.96	18.18	1.05	115	1.32	290	500 (103)	22.91
1005	2.25	5.00	18.42	1.08	83.9	1.25	287	500	22.95
1015	3.0	5.04	18.21	1.08	48.9	1.12	284	500	22.96
1025	3.75	5.03	19.11	1.09	24.3	1.07	279	500	22.96
1035	4.5	5.03	19.21	1.08	12.5	1.00	276	500	23.00
1045	5.25	5.02	19.30	1.09	1.1	0.97	272	500	23.00
1056	6.00	5.02	19.36	1.08	0.0	1.08	268	500	23.00
1105	6.75	5.04	19.49	1.11	0.0	1.06	266	500	23.00
1115	7.5	5.04	19.52	1.11	0.0	0.87	262	500	23.00
1125	8.25	5.03	19.40	1.11	0.0	0.85	263	500	23.00
1135	9.00	5.03	19.42	1.11	0.0	0.81	269	500	23.00
1145	9.75	5.03	19.49	1.11	0.0	0.80	259	500	23.00
1155	10.80	5.05	19.68	1.11	0.0	0.80	253	500	23.00

COMMENTS: Collected Sample @ 1155

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	Nitric acid	6020	Metals: Total Arsenic Lead Copper Zinc
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
40 mL GL	12	HCL	8260	Site-Specific VOCs

GENERAL INFORMATION			
WEATHER:	Clear, ~ 60F		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER:	Daniel Morris	OBSERVER:	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

WATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

LOCATION ID: SW-2010-5 DEPTH TO PRODUCT:_____ DATE: 11/15/16

PURGE METHOD: Low Flow/Low Stress : TIME: 1145

SAMPLE METHOD: Pump per SESDPROC 201-R3 SURFACE WATER GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at:_____ PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1143	NA	6.52	12.46	0.462	0.0	5.34	169	NA ( )	NA
COMMENTS:	Surface water								

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate

GENERAL INFORMATION			
WEATHER:	Cloud [illegible]		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER:	Nick McMillan	OBSERVER:	Daniel Howard

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

WATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

LOCATION ID: SW-2010-10 DEPTH TO PRODUCT:_____ DATE: 11/15/16

PURGE METHOD: Low Flow/Low Stress ; TIME: 1110

SAMPLE METHOD: Pump per SESDPROC 201-R3 SURFACE WATER GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at:_____ PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1108	NA	6.35	12.24	0.508	2.1	4.71	198	NA ( )	NA

COMMENTS: Surface water

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
250ml poly	1	HNO_3		Hardness

GENERAL INFORMATION			
WEATHER:	Cool & Sunny		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER: Nick McMillan		OBSERVER: Daniel Howard	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

WATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

LOCATION ID: SW-2010-11 DEPTH TO PRODUCT:_____ DATE: 11/15/16

PURGE METHOD: Low Flow/Low Stress : TIME: 1050

SAMPLE METHOD: Pump per SESDPROC 201-R3 SURFACE WATER GRAB (x) COMPOSITE ( )

DUP./REP. OF: DUP-3 DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at:_____ PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1041	NA	6.14	12.29	0.677	0.0	4.83	213	NA ( )	NA

COMMENTS: Collected DUP-3 (Time 1200)
Surface water

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate

GENERAL INFORMATION			
WEATHER:	Cool, Sunny		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER: Nick McMillan		OBSERVER: Daniel Howard	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

WATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

LOCATION ID: SW-2010-14 DEPTH TO PRODUCT:_____ DATE: 11/15/16

PURGE METHOD: Low Flow/Low Stress : TIME: 1023

SAMPLE METHOD: Pump per SESDPROC 201-R3 SURFACE WATER GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at:_____ PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1019	NA	6.44	11.76	0.626	0	5.16	193	NA ( )	NA

COMMENTS: Surface water

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate

GENERAL INFORMATION			
WEATHER:	Cool, Sunny		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER: Nick McMillan		OBSERVER: Daniel Howard	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

WATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

LOCATION ID: SW-2016-15 DEPTH TO PRODUCT:_____ DATE: 11/15/16

PURGE METHOD: Low Flow/Low Stress : TIME: 1009

SAMPLE METHOD: Pump per SESDPROC 201-R3 SURFACE WATER GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at:_____ PURGE VOLUME:_____ WELL DIAMETER (Inches):

Initial PID = _____

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial:	NA	6.38	11.55	0.626	2.9	6.35	185	NA ( )	NA
COMMENTS:	Surface water								

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
250 mL poly	1	HNO_3		Hardness

GENERAL INFORMATION			
WEATHER:	Cool, Sunny		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER: Nick Millan		OBSERVER: Daniel Howard	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

WATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

LOCATION ID: SW-2010-17 DEPTH TO PRODUCT:_____ DATE: 11/15/16

PURGE METHOD: Low Flow/Low Stress : TIME: 0955

SAMPLE METHOD: Pump per SESDPROC 201-R3 SURFACE WATER GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at:_____ PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial:	NA	5.80	11.33	0.636	85.0	7.68	184	NA ( )	NA
COMMENTS:	Surface water								

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate

GENERAL INFORMATION			
WEATHER:	Cool, Sunny, Smoky		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER:	Nicholas McMillon	OBSERVER:	Daniel Howard

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

WATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

LOCATION ID: SW-2014-20 DEPTH TO PRODUCT: _____ DATE: 11/15/16

PURGE METHOD: Low Flow/Low Stress : TIME: 1100

SAMPLE METHOD: Pump per SESDPROC 201-R3 SURFACE WATER GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____ DEPTH TO WATER: _____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: _____ _____

Arrived at: _____ PURGE VOLUME: _____ WELL DIAMETER (inches):

Initial PID = _____

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1158	NA	5.52	14.85	0.409	0.0	3.58	223	NA ( )	NA

COMMENTS: Surface water

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate
250ml poly	1	HNO_3		Hardness

GENERAL INFORMATION			
WEATHER:	Cool & Sunny		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER: Nick McMillan		OBSERVER: Daniel Howard	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

WATER FIELD SAMPLING REPORT

PROJECT NO: 6122-08-0154

Amec Foster Wheeler Environment & Infrastructure, Inc
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

LOCATION ID: SW-2014-21 DEPTH TO PRODUCT:_____ DATE: 11/15/16

PURGE METHOD: Low Flow/Low Stress : TIME: 1122

SAMPLE METHOD: Pump per SESDPROC 201-R3 SURFACE WATER GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at:_____ PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____

Bailing PID = _____

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	DO	ORP	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1122	NA	5.24	16.39	0.888	20.1	2.83	192	NA ( )	NA
COMMENTS:	Surface water								

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
500 mL PL	1	none	6020	Metals: DISSOLVED Arsenic Lead Copper Zinc
1 L GL Amber	2	none	8081A	Total organochlorine Pesticides
500 mL PL	1	none	9056	Nitrate and Sulfate

GENERAL INFORMATION			
WEATHER:	Cool + Sunny		
SHIPPED VIA:	FedEX or lab courier		
SHIPPED TO:	AES -Atlanta, GA		
SAMPLER: Nick McMinn		OBSERVER: Daniel Howard	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

APPENDIX B

EVALUATION OF ANNUAL AVERAGE FLOW NORMALIZED CONCENTRATIONS FOR THE UN-NAMED STREAM ON CSX PROPERTY

EVALUATION OF ANNUAL AVERAGE FLOW NORMALIZED CONCENTRATIONS FOR THE UNNAMED STREAM ON CSX PROPERTY

Georgia's Water Use Classifications and Water Quality Standards (391-3-6.03 (5) (e) (iv)) specify not-to-exceed in-stream concentrations applicable under "annual average or higher stream flow conditions" for a select list of chemical constituents. Two of these constituents, alpha-BHC and beta-BHC, have been detected in the unnamed tributary to Woodall Creek on CSX property at concentrations exceeding allowable in-stream concentrations. Therefore, Amec Foster Wheeler determined the annual average stream flow for Woodall Creek, the receiving stream for the unnamed stream on CSX property, at the Defoors Ferry United States Geological Survey (USGS) Gage for use in normalizing the measured in-stream sampling results to a long-term (30-year) annual average stream flow condition.

Determination of Annual Average Flow for Woodall Creek

The 30-year average flow for Woodall Creek was determined utilizing the USGS continuous stream flow record for Woodall Creek at Defoors Ferry, which 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 data 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 5.01 cubic feet per second (cfs).

Woodall Creek Defoors Ferry Gage 2010 – 2016

Sum of the Annual Average Flow – 29.31 cfs
Number of records – 7
Average Annual Flow 29.31 cfs / 7 = 4.19 cfs

Peachtree Creek Gage – 2010 - 2016

Sum of Annual Average Flow – 749.7 cfs
Number of Records – 7
Average Annual Flow 749.7 cfs / 7 = 107.11 cfs

Peachtree Creek Gage 1987 – 2016

Sum of Annual Average Flow – 3848.4 cfs
Number of Records – 30
Average Annual Flow 3848.4 cfs / 30 = 128.28 cfs

Information obtained from the USGS Surface Water Annual Statistics is included as **Attachment 1**. The long-term annual average flow for the Woodall Creek Gage adjusted to the 30 year base period for Peachtree Creek Gage is calculated as:

(4.19 / 107.11) * 128.28 = 5.01 cfs

Determination of Surface Water Concentration Normalization Factor

The stream flow in Woodall Creek, as measured at the Defoors Ferry Gage at the time of sampling on November 15, 2016 was 0.8 cfs (see **Attachment 2**). Normalized surface water analytical results for the unnamed stream surface water samples collected on November 15,

2016 were derived by multiplying the actual analytical sample results by the ratio of the concurrent instantaneous stream flow recorded at the Woodall Creek Defoors Ferry USGS Gage for the specific time of surface water sampling (0.84 cfs) divided by the long-term annual average stream-flow determined for the Woodall Creek Gage based on the above methodology (5.01 cfs). The flow normalized analytical results are presented on **Table B-1** along with measured surface water concentrations. Both the raw results and the flow normalized results from November 15, 2016 exceed allowable in-stream concentrations, except for beta-BHC at locations SW-2010-5 and SW-2010-10.

TABLE B-1: ANNUAL AVERAGE FLOW NORMALIZED SURFACE WATER ANALYTICAL RESULTS

Sample Location						SW-2010-5		SW2010-10		SW2010-11		SW2010-14		SW2010-15		SW2010-17		SW2014-20		SW2014-21	
Sample Date						11/15/2016		11/15/2016		11/15/2016		11/15/2016		11/15/2016		11/15/2016		11/15/2016		11/15/2016	
Distance Along Stream (ft)						735		1152		1222		1667		1761		2099		drainage feature located on west side of track and upstream of railroad culvert location SW-2010-11		drainage feature on west side of track and about 85 ft upstream of location SW2014-20	
PARAMETER, UNITS																					
Total Organochlorine Pesticides (ug/L)	**GA Instream**	**National AWQC**	**National AWQC Human Consumption of Water + Organism**	**National AWQC Human Consumption of Water**	**GA Instream Human Health**	Raw Result	Annual Average Flow Normalized Result[(1)]	Raw Result	Annual Average Flow Normalized Result[(1)]	Raw Result	Annual Average Flow Normalized Result[(1)]	Raw Result	Annual Average Flow Normalized Result[(1)]	Raw Result	Annual Average Flow Normalized Result[(1)]	Raw Result	Annual Average Flow Normalized Result[(1)]	Raw Result	Annual Average Flow Normalized Result[(1)]	Raw Result	Annual Average Flow Normalized Result[(1)]
	Ecological Exposure		**Human Health Exposure**																		
Dissolved Arsenic	0.15	0.15	0.000018	0.00014	0.01	0.00148 J	0.0002	0.00121 J	0.0002	0.000646 J	0.0001	0.001 J	0.0002	0.000886 J	0.0001	0.00114 J	0.0002	0.000316 J	0.0001	0.000312 J	0.0001
alpha-BHC	not established		0.0026	0.0049	0.0049	**0.2**	**0.034**	**0.23**	**0.039**	**0.35**	**0.059**	**0.41**	**0.069**	**0.37**	**0.062**	**0.47**	**0.079**	**0.54**	**0.091**	**0.38**	**0.064**
beta-BHC	not established		0.0091	0.017	0.017	**0.083**	0.014	**0.099**	0.017	**1.1**	**0.184**	**0.57**	**0.096**	**0.51**	**0.086**	**0.47**	**0.079**	**3**	**0.503**	**3.9**	**0.654**

Notes:

ug/L = micrograms per liter

1 - Results normalized by multiplying raw result by ratio of instantaneous flow in Woodall Creek at the time of sampling (0.84 cfs) divided by long-term annual average flow in Woodall Creek (5.01 cfs)

Bolded results exceed GA Instream Water Quality Criteria (GA EPD 2013)

ATTACHMENT 1

DATA FOR WOODALL CREEK 30-YEAR ANNUAL AVERAGE FLOW DETERMINATION

Woodall Creek at Defoors Ferry Rd - Atlanta-#02336313

7 years	Annual Discharge cfs
2010	4.52
2011	1.89
2012	1.95
2013	3.52
2014	10.3
2015	3.19
2016	3.94
average	4.187143
sum	29.31

Peachtree Creek - Atlanta #02336300

7 years	Annual Discharge cfs
2010	160.2
2011	85.2
2012	68.0
2013	135.1
2014	115.9
2015	98.0
2016	87.3
average	107.11
sum	750

Peachtree Creek - Atlanta #02336300

30 years	Annual Discharge cfs
1987	137.7
1988	78.7
1989	145
1990	189.8
1991	178.7
1992	128.5
1993	159.6
1994	154.8
1995	118.2
1996	193.9
1997	135.8
1998	166
1999	80.5
2000	95.3
2001	106.6
2002	92.3
2003	198.3
2004	145.8
2005	213
2006	106.9
2007	71.9
2008	67.8
2009	133.6
2010	160.2
2011	85.2
2012	68.0
2013	135.1
2014	115.9
2015	98.0
2016	87.3
count	30
average	128.28
sum	3848.4

Woodall Creek at Defoors Ferry Rd - Atlanta-#02336313 2009-2015

Sum of the Annual Average Flow	29.31 cfs
Number of Records	7
Average Annual Flow	4.19

Peachtree Creek - Atlanta #02336300 2009-2015

Sum of the Annual Average Flow	749.7 cfs
Number of Records	7
Average Annual Flow	107.11

Peachtree Creek - Atlanta #02336300 1986-2015 (30-year)

Sum of the Annual Average Flow	3848 cfs
Number of Records	30
Average Annual Flow	128.28

LONG TERM ANNUAL AVERAGE FLOW FOR WOODALL CREEK GAGE ADJUSTED TO 30-YEAR BASE PERIOD FOR PEACTHREE CREEK GAGE

(7 year Woodall Creek/7-year Peachtree Creek) x 30-year Peachtree Cree

4.19 / 107.11 x 128.28 = 5.01 cfs

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USGS 02336313 WOODALL CREEK AT DEFOORS FERRY RD, AT ATLANTA, GA

Available data for this site: Time-series: Annual statistics | GO

Fulton County, Georgia
Hydrologic Unit Code 03130001
Latitude 33°49'18", Longitude 84°26'20" NAD27
Drainage area 2.71 square miles
Contributing drainage area 2.71 square miles
Gage datum 756.2 feet above NAVD88

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Water Year	00060, Discharge, cubic feet per second
2006	3.50
2007	2.79
2008	2.98
2009	3.05
2010	4.52
2011	1.89
2012	1.95
2013	3.52

Water Year	00060, Discharge, cubic feet per second
2014	10.3
2015	3.19
** No Incomplete data have been used for statistical calculation	

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Title: Surface Water data for USA: USGS Surface-Water Annual Statistics
URL: https://waterdata.usgs.gov/nwis/annual?

Page Contact Information: Georgia Water Data Support Team
Page Last Modified: 2017-02-06 11:59:57 EST
0.29 0.23 caww01

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USGS 02336300 PEACHTREE CREEK AT ATLANTA, GA

Available data for this site: Time-series: Annual statistics | GO

Fulton County, Georgia Hydrologic Unit Code 03130001 Latitude 33°49'13.1", Longitude 84°24'27.5" NAD83 Drainage area 86.8 square miles Gage datum 763.96 feet above NGVD29	**Output formats** HTML table of all data Tab-separated data Reselect output format

Water Year	00060, Discharge, cubic feet per second
1959	74.5
1960	92.5
1961	120.2
1962	114.5
1963	142.4
1964	176.3
1965	120.0
1966	135.2
1967	163.3

Water Year	00060, Discharge, cubic feet per second
1968	143.3
1969	151.8
1970	122.8
1971	140.9
1972	120.8
1973	185.0
1974	144.2
1975	202.9
1976	159.6
1977	104.8
1978	122.3
1979	144.3
1980	166.5
1981	67.0
1982	128.4
1983	141.3
1984	201.1
1985	124.5
1986	73.9
1987	137.7
1988	78.7
1989	145.0
1990	189.8
1991	178.7
1992	128.5
1993	159.6
1994	154.8
1995	118.2
1996	193.9
1997	135.8
1998	166.0
1999	80.5
2000	95.3
2001	106.6

Water Year	00060, Discharge, cubic feet per second
2002	92.3
2003	198.6
2004	145.8
2005	213.0
2006	106.9
2007	71.9
2008	67.6
2009	133.6
2010	160.2
2011	85.2
2012	68.0
2013	135.1
2014	115.9
2015	98.0

** No Incomplete data have been used for statistical calculation

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Page Contact Information: Georgia Water Data Support Team
Page Last Modified: 2017-02-06 12:13:06 EST
0.54 0.41 caww01

ATTACHMENT 2

WOODALL CREEK DEFOORS FERRY GAGE DAILY FLOW DATA

(November 15, 2016)

Tuesday, November 15, 2016	2		2
Tuesday, November 15, 2016	1.9		1.9
Tuesday, November 15, 2016	1.8		1.8
Tuesday, November 15, 2016	1.8		1.8
Tuesday, November 15, 2016	1.6		1.6
Tuesday, November 15, 2016	1.5		1.5
Tuesday, November 15, 2016	1.5		1.5
Tuesday, November 15, 2016	1.4		1.4
Tuesday, November 15, 2016	1.3		1.3
Tuesday, November 15, 2016	1.3		1.3
Tuesday, November 15, 2016	1.2		1.2
Tuesday, November 15, 2016	1.1		1.1
Tuesday, November 15, 2016	1.1		1.1
Tuesday, November 15, 2016	1.1		1.1
Tuesday, November 15, 2016	1.1		1.1
Tuesday, November 15, 2016	1.1		1.1
Tuesday, November 15, 2016	1		1
Tuesday, November 15, 2016	1		1
Tuesday, November 15, 2016	1		1
Tuesday, November 15, 2016	0.95		0.95
Tuesday, November 15, 2016	1		1
Tuesday, November 15, 2016	0.95		0.95
Tuesday, November 15, 2016	0.95		0.95
Tuesday, November 15, 2016	0.95		0.95
Tuesday, November 15, 2016	0.87		0.87
Tuesday, November 15, 2016	0.87		0.87
Tuesday, November 15, 2016	0.87		0.87
Tuesday, November 15, 2016	0.87		0.87
Tuesday, November 15, 2016	0.87		0.87
Tuesday, November 15, 2016	0.8		0.8
Tuesday, November 15, 2016	0.8		0.8
Tuesday, November 15, 2016	0.8		0.8
Tuesday, November 15, 2016	0.8		0.8
Tuesday, November 15, 2016	0.8		0.8
Tuesday, November 15, 2016	0.8		0.8
Tuesday, November 15, 2016	0.8		0.8
Tuesday, November 15, 2016	0.73		0.73
Tuesday, November 15, 2016	0.8		0.8
Tuesday, November 15, 2016	0.73		0.73

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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

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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	Available Period
☐ All 8 Available Parameters for this site	
☐ 00010 Temperature, water	2007-10-01 2017-02-06
☐ 00045 Precipitation	2007-10-01 2017-02-06
☑ 00060 Discharge	2007-10-01 2017-02-06
☑ 00065 Gage height	2007-10-01 2017-02-06
☐ 00095 Specific cond at 25C	2007-10-01 2017-02-06
☐ 00300 Dissolved oxygen	2007-10-01 2017-02-06
☐ 00400 pH	2007-10-01 2017-02-06
☐ 63680 Turbidity, Form Neph	2007-10-01 2017-02-06

Output format

- ○ Graph
- ○ Graph w/ stats
- ○ Graph w/o stats
- ○ Graph w/ (up to 3) parms
- ◉ Table
- ○ Tab-separated

Days (1)

Summary of all available data for this site

Instantaneous-data availability statement

GO

-- or --

Begin date

2016-11-15

End date

2016-11-16

Date / Time	Dis-charge, ft3/s,	Gage height, feet,
11/15/2016 00:00 EST	2.0[P]	0.60[P]
11/15/2016 00:15 EST	1.9[P]	0.59[P]
11/15/2016 00:30 EST	1.8[P]	0.58[P]
11/15/2016 00:45 EST	1.8[P]	0.58[P]
11/15/2016 01:00 EST	1.6[P]	0.57[P]
11/15/2016 01:15 EST	1.5[P]	0.56[P]
11/15/2016 01:30 EST	1.5[P]	0.56[P]
11/15/2016 01:45 EST	1.4[P]	0.55[P]
11/15/2016 02:00 EST	1.3[P]	0.54[P]
11/15/2016 02:15 EST	1.3[P]	0.54[P]
11/15/2016 02:30 EST	1.2[P]	0.53[P]
11/15/2016 02:45 EST	1.1[P]	0.52[P]
11/15/2016 03:00 EST	1.1[P]	0.52[P]
11/15/2016 03:15 EST	1.1[P]	0.52[P]
11/15/2016 03:30 EST	1.1[P]	0.52[P]
11/15/2016 03:45 EST	1.1[P]	0.52[P]
11/15/2016 04:00 EST	1.0[P]	0.51[P]
11/15/2016 04:15 EST	1.0[P]	0.51[P]
11/15/2016 04:30 EST	1.0[P]	0.51[P]
11/15/2016 04:45 EST	0.95[P]	0.50[P]
11/15/2016 05:00 EST	1.0[P]	0.51[P]
11/15/2016 05:15 EST	0.95[P]	0.50[P]

Date / Time	Dis-charge, ft3/s,	Gage height, feet,
11/15/2016 05:30 EST	0.95[P]	0.50[P]
11/15/2016 05:45 EST	0.95[P]	0.50[P]
11/15/2016 06:00 EST	0.87[P]	0.49[P]
11/15/2016 06:15 EST	0.87[P]	0.49[P]
11/15/2016 06:30 EST	0.87[P]	0.49[P]
11/15/2016 06:45 EST	0.87[P]	0.49[P]
11/15/2016 07:00 EST	0.87[P]	0.49[P]
11/15/2016 07:15 EST	0.80[P]	0.48[P]
11/15/2016 07:30 EST	0.80[P]	0.48[P]
11/15/2016 07:45 EST	0.80[P]	0.48[P]
11/15/2016 08:00 EST	0.80[P]	0.48[P]
11/15/2016 08:15 EST	0.80[P]	0.48[P]
11/15/2016 08:30 EST	0.80[P]	0.48[P]
11/15/2016 08:45 EST	0.80[P]	0.48[P]
11/15/2016 09:00 EST	0.73[P]	0.47[P]
11/15/2016 09:15 EST	0.80[P]	0.48[P]
11/15/2016 09:30 EST	0.73[P]	0.47[P]
11/15/2016 09:45 EST	0.73[P]	0.47[P]
11/15/2016 10:00 EST	0.73[P]	0.47[P]
11/15/2016 10:15 EST	0.73[P]	0.47[P]
11/15/2016 10:30 EST	0.73[P]	0.47[P]
11/15/2016 10:45 EST	0.73[P]	0.47[P]
11/15/2016 11:00 EST	0.73[P]	0.47[P]
11/15/2016 11:15 EST	0.73[P]	0.47[P]
11/15/2016 11:30 EST	0.73[P]	0.47[P]
11/15/2016 11:45 EST	0.73[P]	0.47[P]
11/15/2016 12:00 EST	0.73[P]	0.47[P]

Date / Time	Dis-charge, ft3/s,	Gage height, feet,
11/15/2016 12:15 EST	0.73[P]	0.47[P]
11/15/2016 12:30 EST	0.73[P]	0.47[P]
11/15/2016 12:45 EST	0.73[P]	0.47[P]
11/15/2016 13:00 EST	0.73[P]	0.47[P]
11/15/2016 13:15 EST	0.73[P]	0.47[P]
11/15/2016 13:30 EST	0.73[P]	0.47[P]
11/15/2016 13:45 EST	0.73[P]	0.47[P]
11/15/2016 14:00 EST	0.67[P]	0.46[P]
11/15/2016 14:15 EST	0.67[P]	0.46[P]
11/15/2016 14:30 EST	0.67[P]	0.46[P]
11/15/2016 14:45 EST	0.67[P]	0.46[P]
11/15/2016 15:00 EST	0.67[P]	0.46[P]
11/15/2016 15:15 EST	0.67[P]	0.46[P]
11/15/2016 15:30 EST	0.67[P]	0.46[P]
11/15/2016 15:45 EST	0.67[P]	0.46[P]
11/15/2016 16:00 EST	0.67[P]	0.46[P]
11/15/2016 16:15 EST	0.67[P]	0.46[P]
11/15/2016 16:30 EST	0.67[P]	0.46[P]
11/15/2016 16:45 EST	0.67[P]	0.46[P]
11/15/2016 17:00 EST	0.67[P]	0.46[P]
11/15/2016 17:15 EST	0.67[P]	0.46[P]
11/15/2016 17:30 EST	0.67[P]	0.46[P]
11/15/2016 17:45 EST	0.67[P]	0.46[P]
11/15/2016 18:00 EST	0.67[P]	0.46[P]
11/15/2016 18:15 EST	0.67[P]	0.46[P]
11/15/2016 18:30 EST	0.67[P]	0.46[P]
11/15/2016 18:45 EST	0.67[P]	0.46[P]

Date / Time	Dis-charge, ft3/s,	Gage height, feet,
11/15/2016 19:00 EST	0.67[P]	0.46[P]
11/15/2016 19:15 EST	0.67[P]	0.46[P]
11/15/2016 19:30 EST	0.67[P]	0.46[P]
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APPENDIX C

RESPONSE TO EPD SEPTEMBER 22, 2016 COMMENTS ON STATUS REPORTS NOS. 6 THROUGH 9

RESPONSE TO GEORGIA ENVIRONMENTAL PROTECTION DIVISION SEPTEMBER 22, 2016 COMMENTS ON VRP STATUS REPORTS #6, #7, #8, #9
FORMER ESTECH GENERAL CHEMICAL SITE – ATLANTA, GEORGIA
2/8/2017

Comment #1: [Comment 1] It is indicated that limestone rip-rap would be placed over portions of the site where soil impacts exceed direct risk reduction standards (RRS). Please provide design specifications for EPD to review. A maintenance and monitoring plan to maintain the Type 5 RRS area and associated cover will need to be developed.

Response to Comment #1:
BFEL will provide EPD the specifications on the engineering controls for exposure barriers proposed for the Type 5 soil areas after CSX's review and approval of the proposed measures. A management plan for inspecting, maintaining and monitoring the rip-rap barrier on the CSX property adjacent to BFEL's eastern property boundary will be prepared after the proposed control measures are constructed.

Comment # 2: [Comment 3a] In order to address the vertical delineation requirements in accordance with Section 12-8-108(1) of the Act, BFEL proposed to sample well MW-CSX-03D to demonstrate delineation of pesticides in groundwater. EPD does not concur with the use of MW-CSX-03D to demonstrate vertical delineation of pesticide impacts to groundwater as this well is neither onsite nor in close proximity to the downgradient area of the highest pesticide impacts. EPD recommends that the final VRP CSR include vertical delineation data in closer proximity to the MW-111 and TW-8 well locations.

Response to Comment #2:
The table below shows the elevations of the screened interval of the wells in the TW-8 and MW-111 area with the total pesticide concentration. Well TW-8, screened in the residual soils, has the highest pesticide concentration of the site monitoring wells. Bedrock well MW-110, has some of the lowest pesticide concentrations at the site. We agree that the BHC pesticide concentrations in MW-110 are not below the Type 1 RRS concentrations and therefore do not show delineation. The Type 1 RRS for BHCs is detection limits and to achieve delineation, the pesticide concentrations would have to be non-detect. As indicated by the data in the table below, total pesticide concentrations are decreasing by an order of magnitude with depth. A vertical extent well would have to be installed deeper than well MW-110 and further into the bedrock. Because the well would be in a source area, to prevent carrying contamination deeper during drilling activities, the well would have to be constructed with three telescoping casings and at considerable cost. BFEL will like to defer installation of a deeper well near well MW-110 until groundwater remediation is implemented.

Monitoring Well	Screened Interval Elevation (ft, NGVD)	November 2016 Total Pesticide Concentrations (mg/L)
TW-8	880.3-870.3	0.45
MW-109	872.1-863.1	0.07
MW-111	864.3-855.3	0.016
MW-110	831.9-822.9	0.0026

Comment #3: [Comment 3b] According to the Response, monitoring well locations MW-105, MW-121, and MW-119 have been proposed as the designated "point of demonstration (POD)" monitoring location to evaluate whether groundwater concentrations are protective of the "point of exposure (POE)," in this case the stream. The following comments have been prepared based on these proposed POD monitoring locations:

- **Monitoring well MW-105 is on the other side of the stream, [i.e. beyond the point of exposure (POE)] and cannot be used to demonstrate that concentrations resulting from the onsite release to groundwater do not and/or will not impact the POE above established standards.**

- **While monitoring wells MW-121 and MW-119 are hydrologically located between the POE and the onsite point of release, additional information must be provided to explain how these wells will be used demonstrate compliance as the concentrations of the constituents of concern within these wells are less than those present in the corresponding downgradient surface water sample locations.**

Response to Comment #3:
BFEL proposes to use monitoring well MW-117 as a POD for MW-105. It is located between the release and the POE. Railroad infrastructure and operations prevent the physical access to a location closer to the west side of the stream.

Monitoring wells MW-119 and MW-120 are useful as POD wells to the stream based on the following factors:

- Monitoring wells MW-119 and MW-120 are hydrologically upgradient of surface water locations SW-2010-14 to SW-2010-17. The groundwater elevations in wells MW-119/ MW-120 (849.38 and 847.14 feet) and the surface water elevations (839.8-836.4 feet) in the nearby stream segment indicates the groundwater at the soil/rock interface discharges to the stream.
- As indicated on the table below, the elevations of the well screens in wells MW-119 and MW-120 are about the same elevation as the surface water elevation in the stream for sample locations SW-2010-14 to SW-2010-17.
- As indicated below, the total pesticide concentrations in the wells are higher than the stream concentrations.
- The terrain and railroad operations restrict where monitoring wells can be installed adjacent to the stream. The monitoring wells shown adjacent to the stream were installed in the few locations that are physically accessible to drilling equipment.

Monitoring Well and Surface Water Locations	Screened Interval Elevation (ft, NGVD)	November 2016 Total Pesticide Concentrations (mg/L)	November 2016 Total Dissolved Metals Concentrations (mg/L)
MW-119	853.3-838.3	0.0032	1.27
MW-120	836.1-826.1	0.0036	0.809

Monitoring Well and Surface Water Locations	Screened Interval Elevation (ft, NGVD)	November 2016 Total Pesticide Concentrations (mg/L)	November 2016 Total Dissolved Metals Concentrations (mg/L)
SW-2010-14	839.8-836.4 (surface water elevation)	0.0014	1.42
SW-2010-15	839.8-836.4 (surface water elevation)	0.0012	1.45
SW-2010-17	839.8-836.4 (surface water elevation)	0.0013	1.21

Comment #4. [Comment 4a] BFEL continues to propose to use the entire off-site area accessible to the Tilford Yard railyard workers as the offsite exposure domain (ED). The ED(s) must be defined and justified in order to establish an acceptable area averaging scenario, including, at a minimum, consideration of the following:

- **A remedy based on an area averaging may require the placement of an environmental covenant in order to maintain the exposure scenarios established as part of the proposed corrective action. Should the responsible party not own the parcels proposed for incorporation into the ED, the responsible party must designate said properties as qualifying properties, and provide documentation that the property owner(s) accepts the proposed area averaging cleanup approach that may result in soil contamination associated with the site remaining in place on their property at levels above risk reduction standards.**

- **If an offsite area averaging scenario has been accepted by the offsite property owner(s), the EDs must be clearly defined, including a description of the property use(s) for each parcel(s) incorporated into the ED.**

- **In addition, please note that when calculating the exposure point concentrations for the EDs, identification of high outliers in the statistical data set may be indicative of a "hot spot" or source area, and warrants either further investigation or incorporation into planned excavation/removal actions.**

Response to Comment #4

Figure C-1 shows the Tilford Yard exposure domain or domains for railroad workers. The figure clearly indicates which soil and groundwater sampling locations have been used to characterize the exposure domain(s). BFEL anticipates that an UEC for groundwater and soil will be applied to this parcel. A description of the property use for this off-site parcel will be provided along with assurances of acceptance by the current property owner. In addition, BFEL will evaluate the soil data sets for the exposure domain using a 10 times the cleanup criteria rule in order to identify potential hotspot concentrations for soil. These hotspots will be evaluated for corrective action separately as necessary to protect human health and the environment.

Comment #5: [Comment 4b] BFEL disagrees with EPD's interpretation and continues to propose utilizing the area averaging approach to demonstrate compliance for subsurface soil as well as surface soils (0-2 feet). As noted in the prior comments, area averaging should not be applied to subsurface soils as the exposure scenarios to subsurface soils, and resulting cleanup criteria, are not based on random exposure to these soils over the entire ED but rather specific exposure scenarios such as construction/utility worker and leaching based determinations. It has already been established that the POE is being impacted as the result of groundwater discharge to the stream. Therefore, a leaching-based concentration must be derived and applied to both surface and subsurface soils outside the Type 5 area. In the event that the criteria established in [4a] comment are met and the direct contact exposure pathway clean- up criteria for the offsite soils is also protective of the leaching-based exposure scenario, BFEL may use an area average approach for the direct contact exposure pathway using surface soil data but not subsurface soil data. Please note that additional soil data may be required should BFEL choose to continue to pursue an area average approach.

Response to Comment #5:
In accordance with the Georgia Voluntary Remediation Program Act (VRPA), Section 12-8-101(6), *the soil exposure domain for exposure of construction workers or underground utility workers is the impacted area of site soils from the ground surface down to the depth of exposure.* For the BFEL Atlanta site, the construction worker soil exposure domain is assumed to be 0 to 10 feet below ground surface (bgs). Per Section 12-8-101(14), the representative concentration is defined as *the average concentration to which a specified receptor is exposed over an exposure duration within a relevant exposure domain for soils… and consistent with United States Environmental Protection Agency* (USEPA) *guidance for determination of average exposure concentration.* For the BFEL Atlanta site, USEPA's ProUCL software has been used to calculate the representative concentration for construction workers potentially exposed to soil at 0 to 10 feet bgs. This approach is in accordance with current USEPA guidance for the determination of representative or reasonable maximum soil exposure point concentrations (*Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites*, OSWER Directive 9285.6-10, December 2002 and Section 4.4 of *Region 4 Human Health Risk Assessment Supplemental Guidance*, Technical Services Section, Superfund Division, EPA Region 4, January 2014). Per Section 12-8-108(3), Representative exposure concentrations: *Compliance with site-specific cleanup standards shall be determined on the basis of representative concentrations of constituents of concern in soil across each applicable soil exposure domain.* There is no language in the VRPA that indicates that the exposure domain for construction workers exposed to soil at depths of 0-10 feet should be calculated in a manner differing from the method used for site receptors that are assumed to be exposed to surface soils (0-2 feet bgs). Per EPD's comment regarding on-site and off-site exposure domains, the exposure domains for each receptor will be defined and representative concentrations calculated for each exposure domain. The subsequent comparisons to cleanup criteria will be based on direct contact scenarios and is separate from the consideration for leaching to groundwater. In addition, BFEL will evaluate the soil data sets for each exposure domain using a 10 times the cleanup criteria rule in order to identify potential hotspot concentrations for soil. These hotspots will be evaluated for corrective action separately as necessary to protect human health and the environment. Leaching for on-site and off-site exposure domains will be addressed through one or more groundwater UECs and corrective action. BFEL acknowledges EPD's comment that

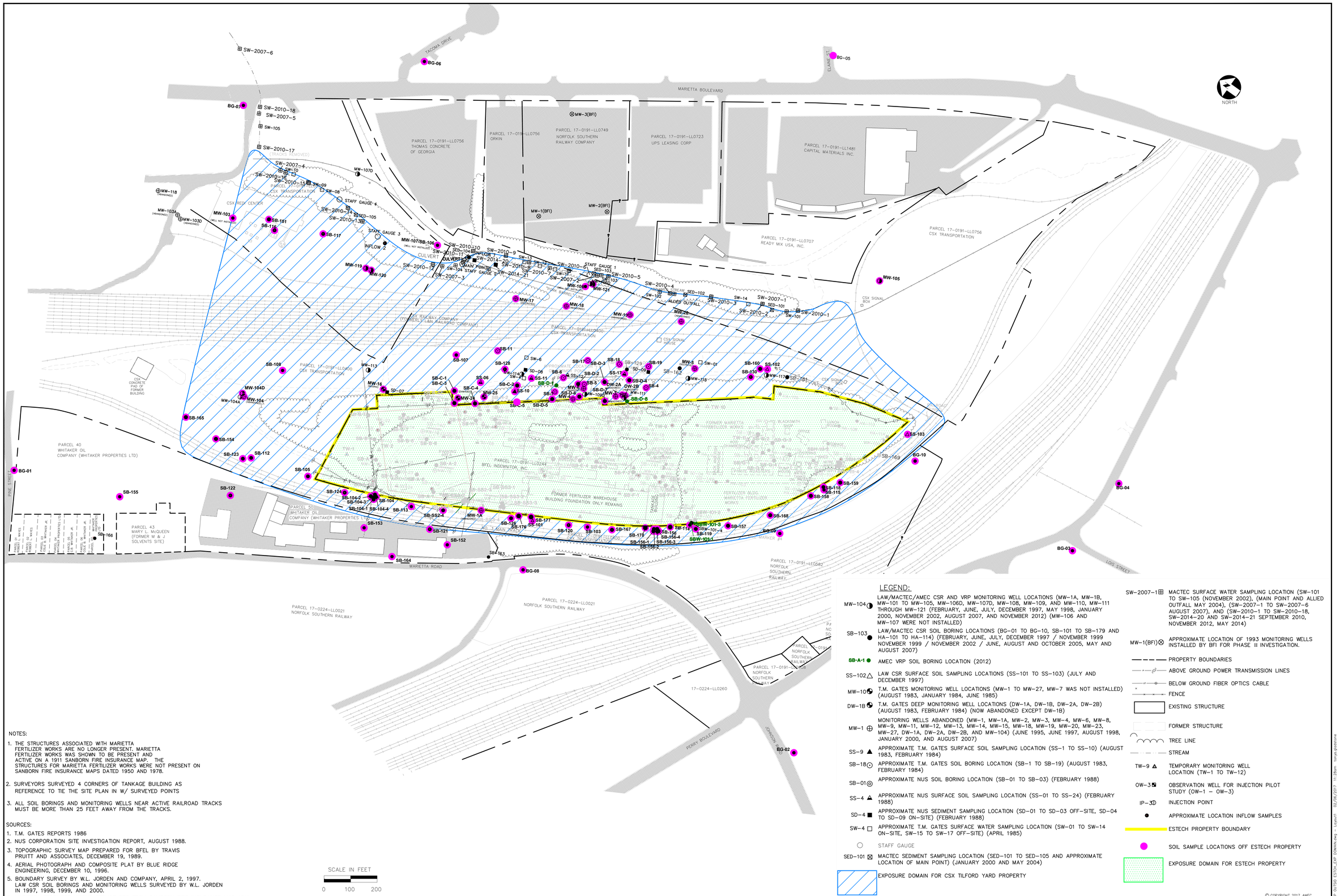
additional soil data may be required to establish representative concentrations for some exposure domains. The need to collect additional data will be considered for each exposure domain and may be addressed during remedial design.

[Comment 4c] This response is acceptable.
Noted

[Comments 5-8] Those responses are acceptable.
Noted

Responses to VRP Status Report #6, #7, #8 and #9:
EPD concurs with the proposed future actions and pilot testing presented in VRP Status Reports #6, #7, #8 and #9. EPD also shares with your concern that the proposed pilot testing and impacts from the adjacent M&J Solvents site will likely exceed the 5-year VRP implementation period (VRP Status Report #9). If the submittal of the final Compliance Status Report exceeds the 5-year time frame of February 8, 2017, EPD will issue a consent order to memorialize the revised schedule in compliance with the Act.

Response:
BFEL and their consultant would like to schedule a meeting with EPD to discuss the path forward for the Estech site.


TACOMA DRIVE
MARIETTA BOULEVARD
ELAINE ST
NORTH
PARCEL 17-0191-LL0756 THOMAS CONCRETE OF GEORGIA
PARCEL 17-0191-LL0756 ORKIN
PARCEL 17-0191-LL0749 NORFOLK SOUTHERN RAILWAY COMPANY
PARCEL 17-0191-LL0723 UPS LEASING CORP
PARCEL 17-0191-LL1481 CAPITAL MATERIALS INC.
PARCEL 17-0191-LL0707 READY MIX USA, INC.
PARCEL 17-0191-LL0756 CSX TRANSPORTATION
CSX RED CENTER
CSX SIGNAL BOX
CSX CONCRETE PAD OF FORMER BUILDING
PARCEL 40 WHITAKER OIL COMPANY (WHITAKER PROPERTIES LTD)
PARCEL 50 WHITAKER OIL COMPANY (WHITAKER PROPERTIES LTD)
PARCEL 43 MARY L. McQUEEN (FORMER M & J SOLVENTS SITE)
PARCEL 17-0191-LL0244 BFEL INDEMNITOR, INC.
FORMER FERTILIZER WAREHOUSE BUILDING FOUNDATION ONLY REMAINS
MARIETTA ROAD
PARCEL 17-0224-LL0021 NORFOLK SOUTHERN RAILWAY
PARCEL 17-0191-LL0582 NORFOLK SOUTHERN RAILWAY
17-0224-LL0260
PERRY BOULEVARD
JOHNSON CT
PINE STREET
LOG STREET
CULVERT
INFLOW 2
INFLOW 1
MAIN POINT
ALLIED OUTFALL
STAFF GAUGE 1
STAFF GAUGE 2
STAFF GAUGE 3
STAFF GAUGE 4
MW-107/SB-106 (WELL NOT INSTALLED)
MW-103D (WELL NOT INSTALLED)
MW-104D (WELL NOT INSTALLED)
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